

THE AGENCY'S BUDGET FOR 1978

GC(XXI)/582

Printed by the
International Atomic Energy Agency
in Austria - August 1977



INTERNATIONAL ATOMIC ENERGY AGENCY

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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
CINDA	Computer Index of Neutron Data
EURATOM	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
GFR	Germany, Federal Republic of
GS	General Service category (staff)
GSF	Gesellschaft für Strahlen- und Umweltforschung
IAEA	International Atomic Energy Agency
IIASA	International Institute for Applied Systems Analysis
ILO	International Labour Organisation
INIS	International Nuclear Information System
Joint FAO/IAEA Division	Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture
London Convention	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
M&O	Maintenance and Operatives Service (staff)
MHD	Magnetohydrodynamics
Monaco Laboratory	International Laboratory of Marine Radioactivity at Monaco
NEA	Nuclear Energy Agency (of the Organisation for Economic Co-operation and Development)
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
USA	United States of America
USSR	Union of Soviet Socialist Republics
WHO	World Health Organization

NOTE

All sums of money are expressed in United States dollars.

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 1978 and requests it to adopt the draft resolutions set forth in Annex VI.
2. The estimates are based on the plans for 1978 as set forth in the Agency's Programme for 1977-82 and Budget for 1977 [1]. Only changes in the plans for 1978, including the additional activities proposed, are described in the present document, which complements document GC(XX)/567. Where appropriate, cross references are made in the present document to document GC(XX)/567 in the form "567/..." - for example, "567/C.12 to C.33". Following the established pattern, the detailed plans for 1979-80 will be presented next year in the programme for 1979-84.

Format

3. In order to provide more complete information as to the total expected monetary resources available to the Agency to carry out its programme, "The Consolidated Budget" (see Table 1 in document GC(XX)/567) has been revised. The Agency's own resources and all extra-budgetary resources administered by the Agency for the execution of approved activities are shown in Tables 1 and 2. In addition, the programme activities have been re-arranged in order to give greater emphasis to the concept of programme budgeting.
4. The dollar amounts for extra-budgetary resources are tentative and represent the best estimates that could be made at this time. Some amounts are requests and some are reasonable expectations based on past experience. Several are yet subject to confirmation.
5. In response to comments made in the Board last year, justifications and additional information with regard to new posts and reclassifications of existing posts proposed for 1978 are presented in one place, immediately following the relevant manning table in Annex IV.
6. Apart from the above changes, the structure and presentation of individual programme budget estimates for 1978 are essentially the same as in document GC(XX)/567.

Programme trends

7. In the technical assistance programme the expected increase in 1978 in the number and size of UNDP projects in several countries will reflect the increased attention that is being paid to energy problems, including nuclear energy. Special attention will be given to the need to streamline procedures and ensure more efficient handling of requests (with the necessary flexibility) in order to be able to deliver the increased assistance expected from the Agency.
8. Within the general framework of the manpower development activities of the "Nuclear power and reactors" programme, the training of manpower for nuclear power programmes in developing countries will continue. In the current review of how this activity should be expanded in order to meet changing needs of developing countries the provision of training at the technician level for nuclear power plants will be considered. With regard to the energy data bank activities, the collection and up-dating of data and the development and adaptation of the necessary computer programmes will continue.
9. Under the "Nuclear safety and environmental protection" programme, increased attention will be given to the assessment of occupational exposures in nuclear fuel cycle facilities. The main part of the planned enlargement of this programme in 1978 will, however, be in the waste management area and particular attention will be paid to sea dumping and the disposal of radioactive waste in geological formations.
10. The recommendations of the Expert Committee convened in 1976 jointly by FAO, IAEA and WHO regarding unconditional clearance for five and provisional clearance for three food items are likely to represent a breakthrough in lengthy efforts to obtain international acceptance of the consumption of irradiated foodstuffs. The committee's recommendations and the report of an FAO/IAEA advisory group on the standardization of food irradiation were considered by the Codex Committee on Food Additives in May and June 1977. The latter adopted a Proposed Draft General Standard on Irradiated Foods accepting the recommendations of the above Expert Committee and a Code of Practice for the Operation of Radiation Facilities used for the Treatment of Foods, to be submitted to the Codex Alimentarius Commission of the Joint FAO/WHO Food Standards Programme for further processing at the Commission's next session in April 1978. The efforts under the Agency's "Food and agriculture" programme will be intensified in order to provide the data needed by the other bodies for their general acceptance of irradiated food.

[1] GC(XX)/567.

11. In addition to this work on food irradiation, the dosimetry activities in the "Life sciences" programme will be expanded to include assistance to Member States in high-dose radiation dosimetry.
12. In the "Physical sciences" programme, work on atomic and molecular data will continue in 1978 on a trial basis. Following the recommendations of the International Nuclear Data Committee the neutron nuclear data services will be expanded in order to enable the Agency to meet increasing demands for these services.
13. Some of the activities in the "Food and agriculture", "Life sciences" and "Physical sciences" programmes will continue to be linked with the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology [2] to which 11 countries in South-East Asia are party. It is planned to increase in 1978 the Agency's assistance to individual projects covered by this Agreement and in this way to make this co-operative mechanism more responsive to the needs of its Members.
14. The full implementation of safeguards in the non-nuclear-weapon States of EURATOM and the expected growth in the amount of nuclear material to be safeguarded in other countries, especially in nuclear fuel facilities, will contribute in 1978 to a substantial increase in the inspection workload. Adjustments have been made to speed up the development of improved safeguards techniques, equipment and procedures, including programmes and procedures for treating safeguards information. The assistance of Member States will facilitate this task. A new organizational structure for the Department of Safeguards is being worked out in 1977 and gradually implemented.

Manning table

15. For 1978, authority is requested to upgrade three P-5 posts, whose incumbents have reached the top of the grade, to a rank to be known as Principal Officer. The occupants of these posts, because of their specialized scientific, technical or other knowledge and ability, together with long experience in their field, are carrying out broader responsibilities than colleagues at the same level in other posts. These upgradings will be on grounds of personal merit and detailed information will be presented by the Director General to the Board of Governors on each case. Such an upgrading will automatically lapse upon the incumbent's leaving his post.

The Regular Budget for 1978

16. The total of the Regular Budget estimates for 1978 amounts to \$ 48 879 000.
17. The programme cost estimates for 1978 are based on an exchange rate of 18.50 Austrian schillings to the United States dollar; they can, therefore, be compared directly with the 1977 programme estimates which are also based on that rate. Because of the substantial decrease in the dollar exchange rate during recent months, however, the amount of \$ 2 100 000 has been included in part S of the Regular Budget – Adjustment of programme cost estimates – in order to compensate for an estimated average rate of exchange of 17.40 schillings to the dollar throughout 1978.
18. In order to make, for purposes of comparison, a more accurate presentation of the budgetary situation in 1977, the "1977 Adjusted Budget" column reflects monetary adjustments consistent with the changes made within the approved manning table for 1977. These changes represent shifts between programmes resulting from the continuing efforts to meet new manpower needs by the redeployment of existing staff. All changes are within the overall approved manning table posts for 1977.
19. It will be recalled that the budget for 1977 included detailed cost estimates totalling \$ 4 850 000 for the Agency's transfer to its Permanent Headquarters. Out of the total estimate of \$ 4 850 000, an amount of \$ 3 350 000 was approved in the 1977 budget and \$ 1 500 000 was projected for 1978. Due to certain delays in the construction work, however, it is now possible to defer the request for \$ 700 000 of the \$ 1 500 000 until 1979. Accordingly, the budget request for 1978 is \$ 800 000. The Board recommends that the cash surpluses in respect of 1975 and 1976 be used to meet the 1978 cost estimate for the transfer of the Agency to its Permanent Headquarters and thus avoid an additional assessment on Member States.
20. Taking into account the present construction schedule and the related dates when certain equipment is to be delivered, it is apparent that delays in the delivery of some items of equipment must be expected. The Board, recognizing this situation and in the interest of economies which could be made by adjusting funding in accordance with construction progress, endorsed under the existing circumstances and as an exception, the carry forward of any unused balances remaining under appropriation Section 9 "Transfer of the Agency to its Permanent Headquarters" in respect of the appropriations for 1977 and 1978. Such balances would be available only for the purpose of meeting the costs directly associated with the Agency's transfer; and, in addition, such balances would not be available for use after 1979.

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

21. Table 3 sets forth both the programme budget and the Regular Budget. The programme budget is the total of the programmatic and administrative activities, and it is the most valid indicator of the efforts of the Agency. The Regular Budget is the amount being requested for appropriation. It is the total of the programmatic budget plus the amount necessary to compensate for currency fluctuations. This year, as indicated above, the amount for currency fluctuations is \$ 2 100 000 since the 1977 Regular Budget is based on an exchange rate of 18.50 schillings to the dollar, whereas the 1978 Regular Budget is based on an estimated average rate of exchange of 17.40 schillings to the dollar.

22. The total of the programme budget for 1978 is directly comparable to the total of the programme budget for 1977 since both are based on an exchange rate of 18.50 schillings to the dollar. The increase in 1978 is \$ 3 278 000 or 7.5% over 1977 (see Table 3). This increase is a net amount consisting of 6.8% for price increases attributable to inflationary factors 6.6% for programme expansion, and a reduction of 5.9% for the expenses associated with the transfer of the Agency to its Permanent Headquarters.

23. The total of the Regular Budget for 1978 is not directly comparable to the total of the Regular Budget for 1977 since it is based on an exchange rate of 17.40 schillings to the dollar, whereas the 1977 Regular Budget was based on an 18.50 exchange rate. Because of this factor alone the increase in the Regular Budget is \$ 2 100 000 larger than the increase for the programme budget. Accordingly, the increase in the 1978 Regular Budget is \$ 5 378 000 or 12.3% over 1977 (see Table 3). This increase is a net amount consisting of 11.6% for price increases resulting from the combination of inflationary factors and a lower exchange rate for the dollar, 6.6% for programme expansion, and a reduction of 5.9% for the transfer to the Permanent Headquarters.

24. The Regular Budget estimates for 1978 will be funded by (1) estimated income of \$ 3 316 000, (2) cash surpluses in respect of 1975 and 1976 in a total amount of \$ 800 000 and (3) an assessment on Member States of \$ 44 763 000.

25. Assessment of Member States for 1978 is \$ 7 763 000 or 21% larger than the assessment for 1977. The increase of \$ 7 763 000 results from price increases of \$ 4 972 200 due to the combination of inflationary factors and currency fluctuations and \$ 2 790 800 for programme expansion.

Target for voluntary contributions to the General Fund

26. 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 1976, the Board decided to recommend an increase of \$0.5 million in the target – from \$5.5 million for 1976 to \$6 million for 1977.

27. During its deliberations in 1977 the Board recognized the needs of the developing countries for an increase of the voluntary contributions to the General Fund and accordingly recommends that the target for 1978 be established at \$ 7 million. The Board of Governors, in recommending this target, made a special appeal to Member States for additional voluntary contributions in the amount of \$ 500 000.

Working Capital Fund

28. The Board recommends that for 1978 the Agency's Working Capital Fund remain at the same level as for 1977, namely \$2 million. The recommendation is reflected in draft resolution C set forth in Annex VI. 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

29. In accordance with Article XVI of the Agency's relationship agreement with the United Nations [3], the budget will be reviewed by ACABQ, which will report on the administrative aspects thereof to the General Assembly of the United Nations. Consistent with a recommendation made by ACABQ, extra-budgetary resources available to the Agency are shown in Table 2 and Table 7.

[3] INFCIRC/11, Part 1.

REGULAR AND OPERATIONAL BUDGETS 1978

Table 1

Programme	Regular Budget	Operational Budget		Total
		Operating Fund I	Operating Fund II	
A. Technical assistance and training	2 066 000	—	7 350 000 ^a	9 416 000
B. Nuclear power and reactors	2 937 000	—	—	2 937 000
C. Nuclear safety and environmental protection	3 829 000	—	—	3 829 000
D. Nuclear explosions for peaceful purposes	285 000	—	—	285 000
E. Food and agriculture	2 744 000	—	—	2 744 000
F. Life sciences	2 091 000	—	—	2 091 000
G. Physical sciences	3 992 000	—	—	3 992 000
I. International Centre for Theoretical Physics	600 000	1 045 000	—	1 645 000
J. International Laboratory of Marine Radioactivity	646 000	110 000	—	756 000
K. Safeguards	10 891 000	—	—	10 891 000
L. Information and technical services	3 186 000	—	—	3 186 000
M. Policy-making organs	1 738 000	—	—	1 738 000
N. Executive management and technical programme planning	1 028 000	—	—	1 028 000
O. Administration	5 309 000	—	—	5 309 000
P. General services	4 537 000	—	—	4 537 000
Q. Service activities	100 000	—	—	100 000
R. Transfer of the Agency to its Permanent Headquarters	800 000	—	—	800 000
S. Adjustment of programme cost estimates	2 100 000	—	—	2 100 000
TOTAL	48 879 000	1 155 000	7 350 000^a	57 384 000
Sources of Funds				
Assessment on Member States	44 763 000	—	—	44 763 000
Voluntary contributions	—	1 155 000	7 350 000 ^a	8 505 000
Extrabudgetary resources	—	—	—	—
Miscellaneous income	3 316 000	—	—	3 316 000
Transfer of cash surplus	800 000	—	—	800 000
TOTAL	48 879 000	1 155 000	7 350 000^a	57 384 000

^a The Board of Governors, in recommending a target of \$7 million for voluntary contributions to the General Fund for 1978, made a special appeal to Member States for additional voluntary contributions in the amount of \$500 000.

EXTRABUDGETARY RESOURCES 1978
(excluding contributions in kind)^a

Table 2

Programme	Extrabudgetary Resources							Total
	FAO	UNDP	SIDA	GFR	USA	USSR	Other ^b	
A.	—	4 000 000	1 000 000	—	450 000	25 000	100 000	5 575 000
B.	—	—	—	—	—	—	—	—
C.	—	—	—	—	—	—	103 000	103 000
D.	—	—	—	—	—	—	—	—
E.	600 000	—	—	375 000	50 000	—	55 000	1 080 000
F.	—	—	—	—	35 000	—	142 000	177 000
G.	—	—	—	—	—	—	—	—
I.	—	—	—	—	—	—	—	—
J.	—	—	—	—	—	—	35 000	35 000
K.	—	—	—	—	500 000	331 000	—	831 000
L.	—	—	—	—	—	—	—	—
M.	—	—	—	—	—	—	—	—
N.	—	—	—	—	—	—	—	—
O.	—	—	—	—	—	—	—	—
P.	—	—	—	—	—	—	—	—
Q.	—	—	—	—	—	—	—	—
R.	—	—	—	—	—	—	—	—
S.	—	—	—	—	—	—	—	—
TOTAL	600 000	4 000 000	1 000 000	375 000	1 035 000	356 000	435 000	7 801 000

Sources of Funds		
Assessment on Member States		—
Voluntary contributions		—
Extrabudgetary resources		7 801 000
Miscellaneous income		—
Transfer of cash surplus		—
TOTAL		7 801 000

^a In addition to the above indicated cash resources, cost-free experts and consultants, contributions in kind, stipends for fellowships and training courses are provided by Member States.

^b Made up of \$280 000 from UNEP, \$100 000 from Canada and \$55 000 from Belgium (see Table 7 for additional details).

THE REGULAR BUDGET

By Programme

Table 3

	1977	Price	Programme		Transfer to		Total change		1978	
	Budget	increase	increase		Permanent	Headquarters			Estimate	
	\$	\$	%	\$	%	\$	%	\$	%	\$
A Technical assistance and training (Regular Budget)	1 867 000	132 200	7.1	66 800	3.6	—	—	199 000	10.7	2 066 000
B Nuclear power and reactors										
Regular programme	2 585 000	169 000	6.5	183 000	7.1	—	—	352 000	13.6	2 937 000
International Conference on Nuclear Power and its Fuel Cycle	403 000	—	—	(403 000)	(100.0)	—	—	(403 000)	(100.0)	—
C. Nuclear safety and environmental protection	3 326 000	187 800	5.6	315 200	9.5	—	—	503 000	15.1	3 829 000
D Nuclear explosions for peaceful purposes	260 000	17 800	6.8	7 200	2.8	—	—	25 000	9.6	285 000
E. Food and agriculture	2 512 000	162 800	6.5	69 200	2.7	—	—	232 000	9.2	2 744 000
F. Life sciences	1 944 000	124 200	6.4	22 800	1.2	—	—	147 000	7.6	2 091 000
G Physical sciences	3 613 000	251 400	7.0	127 600	3.5	—	—	379 000	10.5	3 992 000
I International Centre for Theoretical Physics										
Regular Budget	600 000	28 800	4.8	(28 800)	(4.8)	—	—	—	—	600 000
Operating Fund I	1 045 000	—	—	—	—	—	—	—	—	1 045 000
Sub-total	1 645 000	28 800	1.8	(28 800)	(1.8)	—	—	—	—	1 645 000
J. International Laboratory of Marine Radioactivity										
Regular Budget	610 000	26 900	4.4	9 100	1.5	—	—	36 000	5.9	646 000
Operating Fund I	110 000	—	—	—	—	—	—	—	—	110 000
Sub-total	720 000	26 900	3.7	9 100	1.3	—	—	36 000	5.0	756 000
K Safeguards	7 951 000	580 200	7.3	2 359 800	29.7	—	—	2 940 000	37.0	10 891 000
L. Information and technical services	2 905 000	236 200	8.1	44 800	1.6	—	—	281 000	9.7	3 186 000
M. Policy-making organs	1 614 000	107 400	6.7	16 600	1.0	—	—	124 000	7.7	1 738 000
N. Executive management and technical programme planning	915 000	59 300	6.5	53 700	5.8	—	—	113 000	12.3	1 028 000
O. Administration	4 709 000	420 500	8.9	179 500	3.8	—	—	600 000	12.7	5 309 000
P General services	4 177 000	432 700	10.3	(72 700)	(1.7)	—	—	360 000	8.6	4 537 000
Q Service activities	160 000	10 000	6.3	(70 000)	(43.8)	—	—	(60 000)	(37.5)	100 000
R Transfer of the Agency to its Permanent Headquarters	3 350 000	—	—	—	—	(2 550 000)	(76.1)	(2 550 000)	(76.1)	800 000
Sub-total Regular Budget	43 501 000	2 947 200	6.8	2 880 800	6.6	(2 550 000)	(5.9)	3 278 000	7.5	46 779 000
Operating Fund I	1 155 000	—	—	—	—	—	—	—	—	1 155 000
	44 656 000	2 947 200	6.6	2 880 800	6.4	(2 550 000)	(5.7)	3 278 000	7.3	47 934 000
S Adjustment of programme cost estimates	—	2 100 000	—	—	—	—	—	2 100 000	—	2 100 000
TOTAL Regular Budget and Operating Fund I	44 656 000	5 047 200	11.3	2 880 800	6.4	(2 550 000)	(5.7)	5 378 000	12.0	50 034 000
Source of funds										
Regular Budget										
Programme budget	43 501 000	2 947 200	6.8	2 880 800	6.6	(2 550 000)	(5.9)	3 278 000	7.5	46 779 000
Adjustment of programme cost estimates	—	2 100 000	—	—	—	—	—	2 100 000	—	2 100 000
Total Regular Budget	43 501 000	5 047 200	11.6	2 880 800	6.6	(2 550 000)	(5.9)	5 378 000	12.3	48 879 000
Operating Fund I	1 155 000	—	—	—	—	—	—	—	—	1 155 000
	44 656 000	5 047 200	11.3	2 880 800	6.4	(2 550 000)	(5.7)	5 378 000	12.0	50 034 000
Regular Budget										
Less Miscellaneous income	3 151 000	75 000	2.4	90 000	2.8	—	—	165 000	5.2	3 316 000
Transfer of cash surplus	3 350 000	—	—	—	—	(2 550 000)	(76.1)	(2 550 000)	(76.1)	800 000
Assessment on Member States	37 000 000	4 972 200	13.5	2 790 800	7.5	—	—	7 763 000	21.0	44 763 000

THE REGULAR BUDGET

By item of expenditure

Table 4

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977				1978 Estimate
			Price	Programme	Transfer to Permanent Headquarters	Total	
Salaries and wages							
Established posts	19 347 382	22 400 000	1 639 000	1 298 000	—	2 937 000	25 337 000
Consultants	479 289	649 300	36 300	66 400	—	102 700	752 000
Overtime	121 727	144 200	8 000	2 000	—	10 000	154 200
Temporary assistance	733 529	900 400	56 900	144 400	—	201 300	1 101 700
Sub-total	20 681 927	24 093 900	1 740 200	1 510 800	—	3 251 000	27 344 900
Common staff costs							
Travel	760 405	991 800	82 700	80 200	—	162 900	1 154 700
Meetings							
Conferences, symposia, seminars	660 173	1 205 000	69 000	(192 000)	—	(123 000)	1 082 000
Technical committees, advisory groups	615 745	1 202 500	45 600	39 400	—	85 000	1 287 500
Representation and hospitality							
Scientific and technical contracts	1 443 166	1 976 000	108 700	32 600	—	141 300	2 117 300
Scientific supplies and equipment	1 049 884	924 000	87 000	144 000	—	231 000	1 155 000
Common services, supplies and equipment	4 533 734	8 017 000	367 900	730 100	(2 550 000)	(1 452 000)	6 565 000
Other items of expenditure	288 772	380 500	6 000	138 300	—	144 300	524 800
Transfer of costs:							
Linguistic services	(419 160)	(857 000)	(37 100)	(24 900)	—	(62 000)	(919 000)
Printing and publishing services	(79 965)	(107 000)	(8 000)	35 000	—	27 000	(80 000)
Adjustment of programme cost estimates							
	—	—	2 100 000	—	—	2 100 000	2 100 000
TOTAL: Regular Budget and Operating Fund I	35 398 024	44 656 000	5 047 200	2 880 800	(2 550 000)	5 378 000	50 034 000
Source of funds							
Regular Budget	34 269 923	43 501 000	5 047 200	2 880 800	(2 550 000)	5 378 000	48 879 000
Operating Fund I	1 128 101	1 155 000	—	—	—	—	1 155 000
TOTAL	35 398 024	44 656 000	5 047 200	2 880 800	(2 550 000)	5 378 000	50 034 000

THE REGULAR BUDGET

Summary of Income

Table 5

Item	1976 Actual	1977 Adjusted budget	Increase or (decrease) over 1977	1978 Estimate
Assessed contributions on Member States	32 591 252	37 000 000	7 763 000	44 763 000
Transfer of cash surplus	—	3 350 000	(2 550 000)	800 000
Miscellaneous income				
(a) Attributable to specific programmes				
Publications of the Agency	452 395	450 000	40 000	490 000
INIS publications including microfiches	204 759	225 000	—	225 000
CINDA publications	28 745	35 000	(2 000)	33 000
Advertising	23 159	17 000	3 000	20 000
Laboratory income	29 906	20 000	—	20 000
Sale of surplus property	13 311	30 000	20 000	50 000
Sale of computer	—	—	270 000	270 000
IAEA/UNIDO joint services arrangement				
Computer services	189 438	325 000	(87 000)	238 000
Printing services	103 205	160 000	(60 000)	100 000
Other services	130 927	120 000	10 000	130 000
Amounts recoverable under safeguards agreements from non-member States	12 240	15 000	5 000	20 000
UNDP programme support cost	435 246	560 000	(70 000)	490 000
SIDA programme support cost	45 784	—	30 000	30 000
Reimbursable services for AGRIS	34 776	50 000	(10 000)	40 000
Sub-total	1 703 891	2 007 000	149 000	2 156 000
(b) Not attributable to specific programmes				
Investment and interest income	706 605	420 000	20 000	440 000
Refund from the United Nations				
Joint Staff Pension Fund	163 323	120 000	10 000	130 000
Refund of Value Added Tax	377 411	465 000	(5 000)	460 000
Other	251 166	139 000	(9 000)	130 000
Sub-total	1 498 505	1 144 000	16 000	1 160 000
Total miscellaneous income	3 202 396	3 151 000	165 000	3 316 000
TOTAL	35 793 648	43 501 000	5 378 000	48 879 000

THE OPERATIONAL BUDGET

Summary of Income, Allocations and Expenditures

Table 6

Item	General Fund			Operating Fund I			Operating Fund II		
	1976 Actual	1977 Budget	1978 Estimate	1976 Actual	1977 Budget	1978 Estimate	1976 Actual	1977 Budget	1978 Estimate
INCOME									
Voluntary contributions of Member States	5 043 839	6 000 000	7 000 000 ^a	—	—	—	—	—	—
Special contributions of Member States									
Italy	—	—	—	350 000	350 000	350 000	—	—	—
Monaco	—	—	—	77 217	87 000	87 000	—	—	—
Others	—	—	—	35 280	—	—	60 000	—	—
Direct contributions for special projects									
UNESCO	—	—	—	232 500	302 000	305 000	—	—	—
UNDP	—	—	—	184 500	180 000	180 000	—	—	—
SIDA	—	—	—	265 671	200 000	100 000	—	—	—
Others	—	—	—	14 350	—	—	—	—	—
Investment and interest income	112 917	100 000	100 000	—	—	—	—	—	—
Assessed programme costs	—	—	—	—	—	—	234 507	250 000	250 000
Miscellaneous income	—	—	—	57 640	36 000	133 000	22 786	—	—
Additions to unobligated balance	—	—	—	(89 073)	—	—	(1 165 077)	—	—
Savings in prior years' operations	—	—	—	16	—	—	—	—	—
Transfers from General Fund to Operating Fund II	5 156 756	6 100 000	7 100 000	1 128 101	1 155 000	1 155 000	(847 784)	250 000	250 000
	(5 156 756)	(6 100 000)	(7 100 000)	—	—	—	5 156 756	6 100 000	7 100 000
TOTAL	—	—	—	1 128 101	1 155 000	1 155 000	4 308 972	6 350 000	7 350 000
ALLOCATIONS AND EXPENDITURES									
Operating Fund I.									
Trieste Centre	—	—	—	1 009 087	1 045 000	1 045 000	—	—	—
Monaco Laboratory	—	—	—	119 014	110 000	110 000	—	—	—
Operating Fund II									
Technical assistance									
Experts and equipment	—	—	—	—	—	—	3 086 690	4 300 000	5 000 000
Fellowships and training	—	—	—	—	—	—	1 222 282	2 050 000	2 350 000
TOTAL	—	—	—	1 128 101	1 155 000	1 155 000	4 308 972	6 350 000	7 350 000

^a The Board of Governors, in recommending a target of \$7 million for voluntary contributions to the General Fund for 1978, made a special appeal to Member States for additional voluntary contributions in the amount of \$500 000.

EXTRABUDGETARY RESOURCES 1976–1978
(excluding contributions in kind)^a

Table 7

Programmes	1976 Actual	1977 Estimate	1978 Estimate
A. Technical assistance and training			
UNDP	3 002 000	3 500 000	4 000 000
UNEP	—	44 000	—
SIDA	374 000	657 000	1 000 000
Canada	—	100 000	100 000
Soviet Union	22 000	25 000	25 000
United States of America	—	425 000	450 000
Sub-total	3 398 000	4 751 000	5 575 000
B. Nuclear power and reactors			
International Bank for Reconstruction and Development	40 000	—	—
UNEP	28 000	8 000	—
United States of America	117 000	38 000	—
Sub-total	185 000	46 000	—
C. Nuclear safety and environmental protection			
UNEP	23 000	292 000	103 000
United States of America	—	55 000	—
Sub-total	23 000	347 000	103 000
E. Food and agriculture			
FAO	451 000	448 000	600 000
Belgium	—	55 000	55 000
Federal Republic of Germany	300 000	509 000	375 000
United States of America	63 000	53 000	50 000
Sub-total	814 000	1 065 000	1 080 000
F. Life sciences			
UNEP	—	140 000	142 000
United States of America	33 000	76 000	35 000
Sub-total	33 000	216 000	177 000
J. International Laboratory of Marine Radioactivity			
UNEP	38 000	90 000	35 000
K. Safeguards			
Soviet Union	—	331 000	331 000
United States of America	174 000	459 000	500 000
Sub-total	174 000	790 000	831 000
TOTAL	4 665 000	7 305 000	7 801 000

^a In addition to the above indicated cash resources, cost-free experts and consultants, contributions in kind, stipends for fellowships and training courses are provided by Member States.

THE PROGRAMME BUDGET

A. TECHNICAL ASSISTANCE AND TRAINING

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table A.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 086 398	1 212 000	87 000	56 000	143 000	1 355 000
Consultants	33 795	35 000	2 500	(7 500)	(5 000)	30 000
Overtime	1 383	1 200	100	200	300	1 500
Temporary assistance	18 494	6 500	500	1 500	2 000	8 500
Sub-total	1 140 070	1 254 700	90 100	50 200	140 300	1 395 000
Common staff costs	324 340	364 100	25 300	16 400	41 700	405 800
Travel	27 498	55 000	3 800	(13 800)	(10 000)	45 000
Representation and hospitality	1 232	1 200	100	(100)	—	1 200
Transfer of costs:						
Linguistic services	136 146	148 000	9 000	13 000	22 000	170 000
Printing and publishing services	34 093	38 000	3 500	500	4 000	42 000
Data processing services	1 301	6 000	400	600	1 000	7 000
Other	4 308 972	6 350 000	a	a	1 000 000	7 350 000
	5 973 652	8 217 000	132 200	66 800	1 199 000	9 416 000
Source of funds:						
Regular Budget	1 664 680	1 867 000	132 200	66 800	199 000	2 066 000
Operating Fund II	4 308 972	6 350 000	a	a	1 000 000	7 350 000
	5 973 652	8 217 000	132 200 ^b	66 800 ^b	1 199 000	9 416 000

^a Since the total change of \$ 1 million is largely due to the raising of the target for voluntary contributions to the General Fund no distribution between price and programme increases for 1978 has been made.

^b Excluding the pro-rating of the total change in respect of Operating Fund II from 1977 to 1978.

SUMMARY OF MANPOWER

Table A.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	7	7	7	1	8
P-4	11	11	11	—	11
P-3	2	3	4	—	4
P-2	3	3	2	—	2
Sub-total	24	25	25	1	26
GS	35	36	36	2	38
TOTAL	59	61	61	3	64

CHANGES IN COSTS AND MANPOWER

Costs

- A.1. As will be seen from Table A.1 above, the cost of this programme under the Regular Budget is expected to increase by \$ 199 000 as a result of price increases of \$132 200 and a programme increase of \$66 800.
- A.2. A programme increase of \$ 72 400 is foreseen in respect of salaries for established posts and common staff costs due to the addition of one P-5 post and two GS posts and, to some extent, due to the fact that posts for which recruitment had been delayed in 1977 will be filled for the full year in 1978. The requirement for consultants' services will be reduced by \$ 7500. An additional amount of \$ 1700 will be needed for temporary assistance and overtime. Taking into account actual requirements in 1976, a programme reduction of \$ 13 800 is foreseen in respect of travel. With regard to the allocation of service costs, increases of \$ 13 500 for linguistic, printing and publishing services and \$ 600 for data processing services are foreseen.
- A.3. The increase of \$ 1 million in the Operational Budget is attributable to an increase in the target for voluntary contributions from \$ 6 million for 1977 to \$ 7 million for 1978. The Board of Governors, in recommending this target for 1978, made a special appeal to Member States for additional voluntary contributions in the amount of \$ 500 000.
- A.4. As can be seen from Table 7, Extrabudgetary Resources, it is expected that UNDP will place an amount of \$ 4 million at the Agency's disposal for 1978, and it is also hoped that an amount of \$ 1 million will be available from SIDA for technical assistance in 1978. An amount of \$ 25 000 is foreseen for special fellowships to be financed from the funds contributed for that purpose by the Government of the USSR, and an amount of \$ 100 000 will be available in 1978 from a special contribution offered by the Canadian Government to finance technically sound assistance projects for which no funds are available under the Operational Budget. The United States Government will contribute \$ 450 000 for the financing of technical assistance experts.

Manpower

- A.5. As will be seen from Table A.2 above, the addition of one Professional post and two GS posts is foreseen for 1978. Detailed justifications are provided in Annex IV.

THE PROGRAMME

OBJECTIVE

- A.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

- A.7. In 1978 the activities under this programme will continue as outlined in 567/C.12 to C.33.

B. NUCLEAR POWER AND REACTORS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table B.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 009 313	1 117 000	57 000	71 000	128 000	1 245 000
Consultants	97 347	119 000	7 700	(16 700)	(9 000)	110 000
Overtime	1 064	—	—	—	—	—
Temporary assistance	24 256	15 800	400	(11 000)	(10 600)	5 200
Sub-total	1 131 980	1 251 800	65 100	43 300	108 400	1 360 200
Common staff costs	301 727	336 000	16 800	21 200	38 000	374 000
Travel	43 716	76 000	5 300	(20 300)	(15 000)	61 000
Meetings						
Conferences, symposia, seminars	61 769	284 000	8 000	(156 000)	(148 000)	136 000
Technical committees, advisory groups	114 592	186 000	6 000	(44 000)	(38 000)	148 000
Representation and hospitality	9 485	7 600	400	(200)	200	7 800
Scientific and technical contracts	136 909	101 000	5 000	13 000	18 000	119 000
Scientific supplies and equipment	1 326	—	—	—	—	—
Common services, supplies and equipment	5 416	3 600	400	—	400	4 000
Transfer of costs:						
Linguistic services	101 277	100 000	6 000	14 000	20 000	120 000
Printing and publishing services	343 686	408 000	38 000	(56 000)	(18 000)	390 000
Data processing services	109 520	234 000	18 000	(19 000)	(1 000)	233 000
To Other: PNE	—	—	—	(16 000)	(16 000)	(16 000)
Total	2 361 403	2 988 000	169 000	(220 000)	(51 000)	2 937 000
Regular programme	2 361 403	2 585 000	169 000	183 000	352 000	2 937 000
International Conference on nuclear power and its fuel cycle	—	403 000	—	(403 000)	(403 000)	—
TOTAL	2 361 403	2 988 000	169 000	(220 000)	(51 000)	2 937 000

SUMMARY OF MANPOWER

Table B.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	11	11	11	—	11
P-4	12	14	14	—	14
P-3	3	4	4	—	4
P-2	2	2	2	—	2
Sub-total	29	32	32	—	32
GS	14	16	16	—	16
TOTAL	43	48	48	—	48

CHANGES IN COSTS

B.1. As will be seen from Table B.1 above, it is expected that the cost of this programme will decrease in 1978 by \$ 51 000 as a result of price increases of \$ 169 000 and a programme reduction of \$ 220 000. The latter is mainly due to the fact that the 1977 budget included the cost of convening the International Conference on Nuclear Power and its Fuel Cycle, for which no funds will be required in 1978.

B.2. A programme increase of \$ 92 200 in respect of salaries for established posts and common staff costs reflects the additional cost in 1978 of posts for which funds were provided in 1977 only for part of the year. The programme decrease of \$ 16 700 in respect of consultants' services is the net result of the termination of the Study of regional nuclear fuel cycle centres for which no further provision is made, partly offset by increased requirements in two other sub-programmes, "Nuclear materials resources, exploration, evaluation, supply and demand", and "Technology of nuclear power plants of proven types".

B.3. A programme reduction in respect of temporary assistance (\$ 11 000) and travel (\$ 20 300) is also related to the Study of regional nuclear fuel cycle centres. The programme decrease of \$ 156 000 for Conferences, symposia and seminars reflects a reduction in respect of the cost of the International Conference on Nuclear Power and its Fuel Cycle (\$ 233 000) which is partly offset by an increase in the number of meetings planned for 1978. The programme decrease of \$ 44 000 in respect of Technical committees and advisory groups is attributable to a reduction by four in the number of meetings planned for 1978.

B.4. Increased requirements for research contracts mainly in the "Advanced nuclear power technology and reactor physics" sub-programme result in a programme increase of \$ 13 000.

B.5. Programme decreases are foreseen in respect of printing and publishing services (\$ 56 000) and data processing services (\$ 19 000). The latter is attributable to the termination of the Study of regional nuclear fuel cycle centres. A programme increase of \$ 14 000 is expected in respect of linguistic services requirements. The support which staff of the Division of Nuclear Power and Reactors render to the "Nuclear explosions for peaceful purposes" programme, estimated to be about quarter of a professional man-year, is reflected as a reduction of \$ 16 000 in this programme.

THE PROGRAMME

OBJECTIVE

B.6. The objective is to provide integrated assistance to Member States in the planning and implementation of national nuclear power programmes, including fuel cycle services, and to help in improving the reliability of nuclear power plants by:

- (a) Giving interested Member States technical and economic advice in connection with their programmes;
- (b) Collecting and disseminating evaluated and systematized information on nuclear power requirements and on proven and new nuclear technologies, and
- (c) Assessing the role of nuclear power, compared to other energy options, in meeting world energy demands within the constraints imposed by financing, environmental factors and manpower availability.

CHANGES IN THE ORIGINAL PROGRAMME

B.7. Detailed information on the activities planned for 1978 is provided in 567/I.12 to I.164. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

*Nuclear materials resources, exploration, evaluation, supply and demand
(567/I.25 to I.41)*

B.8. Pursuant to the setting up in 1977 of a standing committee on natural fission reactors, the scientific follow-up of the OKLO phenomenon will include the preparation of recommendations for investigation and identification of additional natural reactors as well as relevant material bearing on uranium ore deposit formation and radioactive waste storage in selected geological formations (I.33).

*Nuclear power project implementation
(567/I.81 to I.103)*

B.9. In order to reflect the interest shown by some countries in the future potential of alternative energy sources, such as solar and geothermal sources, it is envisaged that the Agency should acquire some experience in these fields by keeping abreast of the relevant world developments. This would be done by collating information issued by a few recognized and experienced organizations such as the International Energy Agency, IIASA, Energy Research and Development Administration, etc. This would require no additional staff, but some consultant services would be needed to review the information and carry out some missions.

B.10. Recent experience gained, for example, from the major training courses on Nuclear Power Project Planning and Implementation and the activities of field experts has clearly indicated that there is an urgent need for the Agency to devote more attention to the development of manpower for nuclear power programmes in developing Member States. An effort was made during 1976 and is continuing in 1977 to define more clearly the Agency's role in this context, and an advisory group discussed this in 1977. It is expected that in 1977 and 1978, as a result, there will be a restructuring of training courses and advisory missions so that the available resources can be better utilized to meet the needs of developing Member States for nuclear manpower development (I.99).

SUB - PROGRAMMES

Summary of manpower and costs by sub-programme

Table B.3

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Energy forecasts and power economics	8.5	3.0	584 000	8.5	3.5	606 000
Nuclear materials resources, exploration, evaluation, supply and demand	5.0	2.5	455 000	5.0	2.5	439 000
Fuel cycle technology	4.3	2.5	437 000	4.3	2.5	446 000
Nuclear power project implementation	4.0	2.0	380 000	6.0	3.0	655 000
Technology of nuclear power plants of proven types	6.0	4.0	396 000	4.0	2.0	375 000
Advanced nuclear power technology and reactor physics	4.2	2.0	333 000	4.2	2.5	416 000
Sub-total	32.0	16.0	2 585 000	32.0	16.0	2 937 000
International conference on nuclear power and its fuel cycle	-	-	403 000	-	-	-
TOTAL	32.0	16.0	2 988 000	32.0	16.0	2 937 000

Energy forecasts and power economics

Summary by programme components

Table B.4

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Energy forecasts and power economics	8.5	3.5	447 300	-	-	5 700	453 000
Linguistic and publishing services	-	-	-	-	-	19 000	19 000
Data processing services	-	-	-	-	-	150 000	150 000
Transfers to other programmes for direct support	-	-	-	-	-	(16 000)	(16 000)
TOTAL	8.5	3.5	447 300	-	-	158 700	606 000

Nuclear materials resources, exploration, evaluation, supply and demand

Summary by programme components

Table B.5

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear materials resources, exploration, evaluation, supply and demand	5.0	2.5	274 300	30 300	34 000	9 400	348 000
Linguistic, printing and publishing services	—	—	—	—	—	61 000	61 000
Data processing services	—	—	—	—	—	30 000	30 000
TOTAL	5.0	2.5	274 300	30 300	34 000	100 400	439 000

Fuel cycle technology

Summary by programme components

Table B.6

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Fuel element technology	2.3	1.3	128 000	66 800	10 000	4 200	209 000
Fuel reprocessing and recycling	2.0	1.2	115 500	7 200	10 000	2 300	135 000
Linguistic, printing and publishing services	—	—	—	—	—	69 000	69 000
Data processing services	—	—	—	—	—	33 000	33 000
TOTAL	4.3	2.5	243 500	74 000	20 000	108 500	446 000

Nuclear power project implementation

Summary by programme components

Table B.7

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Survey of nuclear power in developing countries	1.0	0.4	53 000	—	—	3 000	56 000
Nuclear power planning studies and guidelines for project implementation	5.0	2.6	270 100	46 700	5 000	28 200	350 000
Linguistic, printing and publishing services	—	—	—	—	—	229 000	229 000
Data processing services	—	—	—	—	—	20 000	20 000
TOTAL	6.0	3.0	323 100	46 700	5 000	280 200	655 000

Technology of nuclear power plants of proven types

Summary by programme components

Table B.8

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear power plant operating experience	0.8	0.8	48 000	—	2 000	1 000	51 000
Nuclear power plant systems technology and reliability	2.0	0.8	98 900	53 100	10 000	5 000	167 000
Quality assurance for nuclear power plants	0.8	0.3	47 700	—	—	4 300	52 000
Nuclear heat applications	0.4	0.1	24 800	7 700	3 000	3 500	39 000
Linguistic, printing and publishing services	—	—	—	—	—	66 000	66 000
TOTAL	4.0	2.0	219 400	60 800	15 000	79 800	375 000

Advanced nuclear power technology and reactor physics

Summary by programme components

Table B.9

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
New power reactor technology	1.4	1.0	78 400	43 300	—	2 300	124 000
Advanced reactor concepts	0.7	0.3	32 500	8 200	15 000	1 300	57 000
Reactor physics	1.4	1.0	77 800	13 900	30 000	1 300	123 000
Advanced energy conversion	0.7	0.2	37 900	6 800	—	1 300	46 000
Linguistic, printing and publishing services	—	—	—	—	—	66 000	66 000
TOTAL	4.2	2.5	226 600	72 200	45 000	72 200	416 000

C. NUCLEAR SAFETY AND ENVIRONMENTAL PROTECTION

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table C.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 055 850	1 317 000	70 000	47 000	117 000	1 434 000
Consultants	135 797	118 000	8 300	79 700	88 000	206 000
Overtime	3 387	—	—	12 500	12 500	12 500
Temporary assistance	333	2 300	200	100	300	2 600
Sub-total	1 195 367	1 437 300	78 500	139 300	217 800	1 655 100
Common staff costs	315 220	396 000	20 100	14 000	34 100	430 100
Travel	73 023	96 000	6 700	—	6 700	102 700
Meetings						
Conferences, symposia, seminars	53 464	81 000	15 000	16 000	31 000	112 000
Technical committees, advisory groups	251 391	581 000	16 000	74 000	90 000	671 000
Representation and hospitality	10 840	10 700	500	900	1 400	12 100
Scientific and technical contracts	205 177	285 000	14 000	11 000	25 000	310 000
Scientific supplies and equipment	11 011	10 000	1 000	4 000	5 000	15 000
Common services, supplies and equipment	3 001	50 000	5 000	(50 000)	(45 000)	5 000
Transfer of costs:						
Linguistic services	240 631	157 000	9 000	62 000	71 000	228 000
Printing and publishing services	319 654	250 000	24 000	44 000	68 000	318 000
Data processing services	12	—	—	—	—	—
To Other: PNE	(26 000)	(28 000)	(2 000)	—	(2 000)	(30 000)
Total	2 652 791	3 326 000	187 800	315 200	503 000	3 829 000

SUMMARY OF MANPOWER

Table C.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	16	16	16	—	16
P-4	11	14	14	—	14
P-3	4	3	3	—	3
Sub-total	32	34	34	—	34
GS	24	25	25	—	25
TOTAL	56	59	59	—	59

CHANGES IN COSTS

C.1. As will be seen from Table C.1 above, it is expected that the cost of this programme will increase by \$ 503 000 as a result of price increases of \$ 187 800 and a programme increase of \$ 315 200.

An amount of \$ 61 000 in respect of salaries and common staff costs represents the additional cost in 1978 of posts for which the 1977 budget had provided funds only for part of the year due to deliberate delays in the recruitment of staff.

C.2. A programme increase of \$ 79 700 in respect of consultants' services will be required mainly in the "Waste Management" sub-programme, for the review of sea-dumping operations and the drafting of procedures and specifications, and in the "Nuclear Safety" sub-programme. In the "Radiological Safety" sub-programme an amount of \$ 12 500 has been included for overtime required for the week-end oncall system of the radiological protection services for the Agency's laboratories and staff, particularly the Safeguards Analytical Laboratory, which was initiated during 1976.

C.3. It is planned to hold four symposia in 1978 while only three were foreseen in the 1977 budget; the programme increase of \$ 16 000 is attributable to the additional symposium. The programme increase of \$ 74 000 in respect of Technical committees and advisory groups is attributable to an increase in the number of meetings from 16 in the 1977 budget to 25 in the 1978 estimates, while the number of Scientific advisory group and Technical review committee meetings on nuclear safety standards will remain constant. An increase of \$ 900 in hospitality funds will be required for the additional meetings.

C.4. In 1978 the "Nuclear safety" sub-programme will require an amount of \$ 15 000 for scientific and technical contracts, for which no funds had been provided previously, resulting in a net programme increase of \$ 11 000. A programme increase of \$ 4000 in respect of scientific supplies and equipment is required for the radiation protection services, in particular for the processing of films used in monitoring radiation workers in the categories B-5 and B-6 at the Agency's Laboratory.

C.5. Of the programme reduction of \$ 50 000 in respect of common services, supplies and equipment half the amount is for charges for rental and supplies of photocopying equipment required mainly for the "Nuclear Safety" sub-programme. These charges are now allocated to the programme within the Printing and publishing services, thus representing part of the programme increase of \$ 44 000 for that item. The shift has already been reflected in the actual 1976 requirements. The balance of the reduction in respect of common services, supplies and equipment is due to the fact that the 1977 budget provided for the production of a training film, while in the 1978 estimates no such provision is made.

C.6. A programme increase of \$ 62 000 in respect of the allocation of linguistic services costs is required in the "Nuclear safety" sub-programme for the translation of the safety codes and guides.

C.7. It is expected that an amount of \$ 103 000 will be made available by UNEP in 1978 for the financing of studies of the radiation doses to the population from the peaceful use of atomic energy, including nuclear industry.

THE PROGRAMME

OBJECTIVE

C.8. 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

C.9. Detailed information on the activities planned for 1978 is provided in 567/J.13 to J.144. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1978.

Radiological safety (567/J.13 to J.74)

C.10. With regard to transport, a technical committee will be convened to bring up to date the manual of advisory material on the application of the IAEA transport regulations. The convening of the technical committee proposed for this purpose in 1976 was postponed as it was felt that the time was not then ripe for this work. In accordance with recommendations put forward at the international seminar on transport packaging, this committee will also look into the preparation of explanatory material aimed at demonstrating to the public the level of safety achieved by application of the regulations. The services of consultants will also be required to implement the recommendations of an advisory group on the Agency's role in initiating and co-ordinating work in Member States on the application of the regulatory requirements to the transport of irradiated fuel and other high activity consignments.

C.11. An advisory group will be convened to consider the appraisal of radiological safety programmes in nuclear facilities. The purpose of this meeting is to prepare guidance on methods of reviewing radiological safety programmes as

a whole in order to ascertain the effectiveness of those programmes in meeting their objectives and the extent of their optimization in the light of cost/benefit analysis to ensure that all radiation doses are kept as low as is reasonably achievable.

C.12. Instructional films appear to have a very useful part to play as a complement to the manuals of guidance. It is proposed to continue the series by preparing a film on early medical management procedures to be undertaken for persons involved in radiation accidents.

C.13. With the help of a consultant, special problems of shielding design and materials will be reviewed and guidance will be prepared on the determination of the optimum shielding for enclosures and containers for various types of sources.

C.14. Increased attention will be given to the assessment of occupational exposure in nuclear fuel cycle facilities and to the identification of those operations in which the highest doses are received as a basis for possible recommendations concerning additional measures that could be taken to keep such doses as low as is reasonably achievable.

C.15. The advisory group on design, maintenance and testing of ventilation and air filtering systems planned for 1977 (J.57) will be replaced by a small group of consultants which will meet in either 1977 or 1978 to prepare recommendations on the subject.

C.16. The preparation of recommendations on the safe handling of tritium and on the radiological safety aspects of the operation of selected types of betatrons (J.32) will be deferred until 1979.

C.17. Research directions for 1978 have been established based upon results achieved to date and a programme review carried out jointly by the Agency and IIASA (J.51). Work on risk estimation will continue with emphasis shifting to risk comparisons between nuclear and non-nuclear energy systems and cost-effectiveness studies of their risk reduction measures. An attitude formation model has been successfully applied in a pilot study on attitudes towards nuclear power, thus providing a methodology to identify the relative importance of specific factors underlying attitudes and indicating which factors differentiate between groups in favour of, and against, nuclear power. This measuring procedure has been revised and will be applied to allow comparisons of the determinants of attitudes toward nuclear power and several non-nuclear energy systems. Pending results of this replication, the procedure will be made available to Member States and the joint project on risk assessment will co-ordinate its use and the data analysis. A theoretical reconciliation of attitude formation and decision-making models will be undertaken in order to provide a decision methodology for the practical use of attitude measures. Research will be started on the informational basis of attitude formation, i.e. the extent to which technical information is reflected in the cognitive structures underlying attitudes and the role of the news media in attitude formation.

Waste management
(567/J.75 to J.121)

C.18. Increased attention will be given to the disposal of radioactive waste into geological formations (J.87). In 1978, projects, practices and trends in geological disposal will come under review (Technical Committee). Work on methodologies for the safety assessment of potential geological repositories, considering the characteristics of the geological environment and waste products will be initiated (Advisory Group).

C.19. A code of practice and guidelines will be developed for the management of wastes arising from both uranium refining and uranium enrichment operations (J.89), including the production of UF₆ (Advisory Groups), as a continuation of the development of such codes for the front end of the nuclear fuel cycle.

C.20. Efforts will continue in the area of gaseous waste treatment in 1978. There will be a review of methods and techniques for radioiodine removal (Technical Committee) and the removal and storage of krypton-85 (Technical Committee). Work will be initiated on the formulation of guides for radioactive particulate filtration, including filter testing methods (Advisory Group).

C.21. Following the recommendations of seven consultants, the Agency will first review in 1977 the oceanographic basis for its Definition and Recommendations pertinent to the London Convention (Advisory Group), followed by a review of its Definition and Recommendations (Advisory Group). The results of these reviews, after approval by the Board of Governors, will be submitted to the Secretariat of the London Convention in 1978.

C.22. For 1978, co-ordinated research on the environmental benefits of waste heat from nuclear facilities is planned.

C.23. In accordance with a decision by the Board of Governors in February 1977 the Agency will undertake a more active role relevant to the various aspects of dumping radioactive waste at sea. Work will be initiated on the preparation of solidification and packaging specifications (Advisory Group) and the definition of de minimis quantities of radioactivity for which there would be no dumping restrictions (Advisory Group).

SUB-PROGRAMMES

Summary of manpower and costs by sub-programme

Table C.3

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Radiological safety	13.4	12.4	1 178 000	13.4	12.4	1 256 000
Waste management	10.3	5.3	1 045 000	10.3	5.3	1 203 000
Nuclear safety	10.3	7.3	1 103 000	10.3	7.3	1 370 000
TOTAL	34.0	25.0	3 326 000	34.0	25.0	3 829 000

Radiological safety

Summary by programme components

Table C.4

Programme component	Man-years		1978 Cost estimates				
	P	GS					
			Staff	Meetings	Contracts	Other	Total
Radiological safety standards	2.5	1.5	147 500	70 000	35 000	8 500	261 000
Radiological protection of workers	3.0	1.5	154 000	68 000	40 000	12 000	274 000
Radiological protection of the general public and the environment	2.5	1.2	125 500	12 000	50 000	2 500	190 000
Joint IAEA/IIASA research project on risk assessment	1.0	4.0	97 300	-	20 000	1 700	119 000
Radiological safety features of nuclear facilities	1.5	0.8	78 500	21 000	-	500	100 000
Radiological protection services for the Agency's laboratories and staff	2.3	3.0	152 000	-	-	15 000	167 000
Emergency assistance in the event of radiation accidents	0.6	0.4	32 000	-	-	-	32 000
Linguistic, printing and publishing services	-	-	-	-	-	143 000	143 000
Transfers to other programmes for direct support	-	-	-	-	-	(30 000)	(30 000)
TOTAL	13.4	12.4	786 800	171 000	145 000	153 200	1 256 000

Waste management

Summary by programme components

Table C.5

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Treatment and disposal of radioactive wastes	5.0	3.0	279 000	222 000	80 000	11 000	592 000
Nuclear energy and environmental impact	3.4	2.0	225 200	73 000	70 000	8 600	376 800
Decommissioning of nuclear facilities	1.9	0.3	104 200	28 000	—	2 000	134 200
Linguistic, printing and publishing services	—	—	—	—	—	100 000	100 000
TOTAL	10.3	5.3	608 400	323 000	150 000	121 600	1 203 000

Nuclear safety

Summary by programme components

Table C.6

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Advisory missions and safety evaluations of nuclear reactors including nuclear merchant ships	3.0	2.2	169 300	—	15 000	61 000	245 300
Standards for nuclear safety	5.3	4.4	416 700	261 000	—	5 000	682 700
Exchange of information and training	1.0	0.2	51 000	28 000	—	6 000	85 000
Nuclear reactor safety research and development	1.0	0.5	53 000	—	—	1 000	54 000
Linguistic, printing and publishing services	—	—	—	—	—	303 000	303 000
TOTAL	10.3	7.3	690 000	289 000	15 000	376 000	1 370 000

D. NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table D.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	43 612	67 000	6 000	7 000	13 000	80 000
Consultants	4 228	17 000	100	(2 100)	(2 000)	15 000
Overtime	209	300	-	100	100	400
Temporary assistance	3 442	800	100	3 100	3 200	4 000
Sub-total	51 491	85 100	6 200	8 100	14 300	99 400
Common staff costs	13 020	20 100	2 100	2 100	4 200	24 300
Travel	1 808	5 700	300	-	300	6 000
Meetings						
Technical committees, advisory groups	9 133	26 000	1 000	(5 000)	(4 000)	22 000
Representation and hospitality	-	1 100	100	-	100	1 200
Common services, supplies and equipment	-	1 000	100	-	100	1 100
Transfer of costs:						
Linguistic services	29 440	35 000	2 000	(2 000)	-	35 000
Printing and publishing services	23	28 000	2 000	(12 000)	(10 000)	18 000
From Other	54 000	58 000	4 000	16 000	20 000	78 000
Total	158 915	260 000	17 800	7 200	25 000	285 000

SUMMARY OF MANPOWER

Table D.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
P-5	1	1	1	-	1
P-4	-	1	1	-	1
Sub-total	1	2	2	-	2
GS	1	1	1	-	1
TOTAL	2	3	3	-	3

CHANGES IN COSTS

D.1. As will be seen from Table D.1. above, it is expected that the cost of this programme will increase by \$ 25 000, of which \$ 17 800 will be required to cover salary and other price increases and \$ 7 200 is a programme increase. A programme increase of \$ 9 100 in respect of salaries and common staff costs represents the additional cost in 1978 of a post for which the 1977 budget had provided funds only for part of the year. An increase of \$ 3 200 in the funds required for overtime and temporary assistance is partly offset by a reduction of \$ 2 100 in funds for consultants. There will be a programme decrease of \$ 5 000 in respect of Technical committees and advisory groups; the number of meetings will be reduced by one, but there will be a need for interpretation into more than one working language in 1978.

D.2. As regards the allocation of costs, it is foreseen that there will be programme reductions in respect of linguistic services (\$2000) and printing and publishing services (\$12 000), but an increase of \$16 000 in respect of the services provided by other programmes. In addition to the services provided by the Divisions of Nuclear Safety and Environmental Protection, External Relations and the Legal Division totalling one man-year, quarter of a man-year will be provided by the Division of Nuclear Power and Reactors in 1978.

THE PROGRAMME

OBJECTIVE

D.3. The objective is to promote the exchange of information on peaceful uses of nuclear explosions, to develop procedures for their use, to study the economic and health and safety aspects involved and to respond to requests for PNE-related services.

THE ORIGINAL PROGRAMME

D.4. Detailed information on the activities planned for 1978 is provided in 567/M.5 to M.13.

E. FOOD AND AGRICULTURE

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table E.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	470 792	534 000	28 000	41 000	69 000	603 000
Consultants	22 881	22 000	1 500	6 500	8 000	30 000
Overtime	80	500	—	(200)	(200)	300
Temporary assistance	1 336	2 000	100	400	500	2 500
Sub-total	495 089	558 500	29 600	47 700	77 300	635 800
Common staff costs	140 554	160 500	8 500	12 000	20 500	181 000
Travel	35 923	26 500	2 000	5 500	7 500	34 000
Meetings						
Conferences, symposia, seminars	31 310	61 000	12 000	(12 000)	—	61 000
Technical committees, advisory groups	34 067	65 000	3 000	(9 000)	(6 000)	59 000
Representation and hospitality	2 331	3 900	300	300	600	4 500
Scientific and technical contracts	395 421	352 000	18 000	55 000	73 000	425 000
Common services, supplies and equipment	1 483	600	100	—	100	700
Transfer of costs:						
Linguistic services	80 519	87 000	5 000	5 000	10 000	97 000
Printing and publishing services	172 229	224 000	21 000	(14 000)	7 000	231 000
Data processing services	11 765	15 000	1 300	5 700	7 000	22 000
Laboratory services	750 350	958 000	62 000	(27 000)	35 000	993 000
Total	2 151 041	2 512 000	162 800	69 200	232 000	2 744 000

SUMMARY OF MANPOWER

Table E.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	-(1) ^a	-(1)	-(1)	-	-(1)
P-5	7(2)	7(2)	7(2)	-	7(2)
P-4	5(4)	6(4)	6(3)	-(1)	6(4)
P-3	1(-)	1(-)	1(-)	-	1(-)
P-2	-(-)	-(-)	1(-)	-	1(-)
Sub-total	13(7)	14(7)	15(6)	-(1)	15(7)
GS	8(7)	8(7)	8(7)	-	8(7)
TOTAL	21(14)	22(14)	23(13)	-(1)	23(14)

^(a) FAO staff in brackets

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

Table E.3

	Budget 1976-77	Estimates 1978-79*
Salaries and common staff costs for Professional staff	641 800	536 000
Consultants	70 800	50 000
Duty travel	38 400	26 500
Contractual services and equipment	377 700	387 500
Meetings	a	a
Publications	51 300	50 000
TOTAL	1 180 000^b	1 050 000

^a The cost of meetings is included under Salaries and common staff costs and Contractual services on the basis of CCAQ's expenditure classification.

^b Was reduced by FAO to \$894 860.

CHANGES IN COSTS

- E.1. As will be seen from Table E.1 above, it is expected that the cost of this programme will increase by \$ 232 000 of which \$ 162 800 will be required to cover salary and other price increases and \$ 69 200 will be a programme increase.
- E.2. A programme increase of \$53 000 in respect of salaries for established posts and common staff costs is foreseen as the result of the transfer in the adjusted manning table for 1977 of one P-2 post from the laboratory to the "Soil fertility, irrigation and crop production" sub-programme in an effort to meet additional manpower requirements by the redeployment of existing staff. This increase is also partly due to the additional cost in 1978 of posts for which funds were provided only for part of the year in the 1977 budget. Further programme increases are foreseen in respect of consultants' services (\$6500) and travel (\$5500).
- E.3. There will be a programme reduction of \$12 000 in respect of Conferences, symposia and seminars. Although three meetings are planned for 1978, the same number as was included in the 1977 budget, the financial requirements under the Regular Budget will be lower because of higher contributions from other sources (FAO and GSF). The programme decrease of \$9000 in respect of Technical committees and advisory groups reflects a reduction in the number of meetings from four in the 1977 budget to three in the estimates for 1978. A programme increase of \$55 000 is foreseen in respect of scientific and technical contracts.
- E.4. As regards the allocation of service costs, it is foreseen that small programme increases in respect of linguistic services (\$5000) and data processing services (\$5700) will by far be offset by programme reductions in respect of printing and publishing services (\$14 000) and laboratory services (27 000).
- E.5. The contribution by FAO towards the financing of the Joint FAO/IAEA Division's activities during 1978-79 will be \$1 050 000 as shown in Table E.3.
- E.6. The support of the Federal Republic of Germany for activities relating to nitrogen residues and protein development will continue in 1978. Contributions to the Joint Fertilizer Project in an amount of about \$160 000, to the Joint Protein Programme in an amount of about \$190 000, and to the tsetse fly project in an amount of \$25 000 are expected for that year. It is also expected that the United States of America will continue to support the tsetse fly project by a contribution of \$50 000 in 1978, and that in addition the Belgian Government will support this project by a contribution of about \$55 000.

THE PROGRAMME

OBJECTIVE

E.7. 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 an alarmingly low level. The situation has been aggravated in the past few years by cost increases and the scarcity of most agricultural commodities. The programme aims at employing nuclear techniques when necessary in combination with other advanced methods to increase agricultural production, to improve food quality and to protect crops, livestock and food from pests, disease and spoilage in the most economic way. Special attention will be paid to the protection and conservation of the environment.

CHANGES IN THE ORIGINAL PROGRAMME

E.8. Detailed information on the activities planned for 1978 is provided in 567/D.9 to D.127. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1978.

Soil fertility, irrigation and crop production
(567/D.11 to D.37)

E.9. A training course on the use of nitrogen-15 in research on soil-plant relationships is planned for 1978 (D.23). Such courses help scientists in developing countries to learn the methodology involved in the use of nitrogen-15 labelled fertilizers and are of direct relevance to the Division's research contract and technical assistance programmes to study the efficient use of fertilizers by agricultural crops for increasing production.

Animal production and health
(567/D.59 to D.73)

E.10. Two groups of consultants, working in conjunction with each other, are planned for 1978. They will advise the Agency on the use of nuclear techniques in improving fish production through culture. The justification is that fish

like ruminants can utilize feeds that are not used by humans and, in the process, provide highly nutritious and palatable food. Because of this, fish culture has expanded in many countries of the world and is especially important in those less developed countries that are protein-deficient.

Chemical residues and pollution
(567/D.94 to D.112)

E.11. A new co-ordinated research programme (D.95) on atmospheric pollutant-agriculture interactions is foreseen, which, as in the case of other programmes, will be kept in line with the Agency's technical assistance projects and FAO-UNDP environmental quality criteria programmes.

Food preservation
(567/D.113 to D.127)

E.12. In 1976 an Expert Committee, jointly convened by FAO, the Agency and WHO in Geneva, recommended unconditional clearance for five and provisional clearance for three food items. This is being followed by a submission to the Codex Alimentarius Commission of the Joint FAO/WHO Food Standards Programme. In the light of this development, efforts will continue to be directed (D.124) towards a general acceptance of irradiated foods and, eventually, food irradiation as a process, emphasis being placed on radiolysis studies on components of chemically related food products.

SUB - PROGRAMMES

Summary of manpower and costs by sub-programme

Table E.4

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	P	Man-years GS	Costs	P	Man-years GS	Costs
Soil fertility, irrigation and crop production	4.2 (0.2) ^(a)	1.7 (1.2)	573 000	4.2 (0.2)	1.7 (1.2)	667 000
Plant breeding and genetics	2.2 (1.2)	1.6 (1.2)	445 000	2.2 (2.2)	1.6 (1.2)	560 000
Animal production and health	1.2 (1.1)	0.7 (1.1)	202 000	1.2 (1.1)	0.7 (1.1)	216 000
Insect and pest control	2.1 (1.2)	1.3 (1.2)	784 000	2.1 (1.2)	1.3 (1.2)	775 000
Chemical residues and pollution	1.2 (2.1)	2.3 (0.2)	163 000	1.2 (2.1)	2.3 (0.2)	207 000
Food preservation	4.1 (0.2)	0.4 (2.1)	345 000	4.1 (0.2)	0.4 (2.1)	319 000
TOTAL	15.0 (6.0)	8.0 (7.0)	2 512 000	15.0 (7.0)	8.0 (7.0)	2 744 000

^(a) FAO staff in brackets

Soil fertility, irrigation and crop production

Summary by programme components

Table E.5

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
The use of isotopes and radiation in studies on plant nutrition and fertilizer application	1.4 (0.1) ^a	0.5 (0.4)	73 800	20 000	50 000	3 800	147 600
The use of isotopes and radiation in studies of soil-water regimes	1.4 (—)	0.6 (0.4)	69 000	—	20 000	2 200	91 200
The use of isotopes and radiation in studies of ion and water movement in soils	1.4 (0.1)	0.6 (0.4)	68 000	—	15 000	2 200	85 200
Costs of meetings not attributable to an individual programme component	—	—	—	28 000	—	—	28 000
Linguistic, printing and publishing services	—	—	—	—	—	90 000	90 000
Data processing services	—	—	—	—	—	5 000	5 000
Laboratory services	—	—	—	—	—	220 000	220 000
TOTAL	4.2 (0.2)	1.7 (1.2)	210 800	48 000	85 000	323 200	667 000

^a FAO staff in brackets.

Plant breeding and genetics

Summary by programme components

Table E.6

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Grain protein improvement through nuclear technique	0.8 (0.7) ^a	0.6 (0.4)	44 800	5 000	15 000	1 800	66 600
Crop improvement through induced mutations	0.7 (0.8)	0.5 (0.4)	41 000	—	33 000	3 200	77 200
Development of technology for induced mutations	0.7 (0.7)	0.5 (0.4)	40 000	—	27 000	3 200	70 200
Linguistic, printing and publishing services	—	—	—	—	—	90 000	90 000
Data processing services	—	—	—	—	—	6 000	6 000
Laboratory services	—	—	—	—	—	250 000	250 000
TOTAL	2.2 (2.2)	1.6 (1.2)	125 800	5 000	75 000	354 200	560 000

^a FAO staff in brackets

Animal production and health
Summary by programme components

Table E.7

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Isotope techniques in animal nutrition and physiology	0.6 (0.5) ^(a)	0.3 (0.6)	40 400	28 000	40 000	3 600	112 000
Nuclear techniques in animal parasitology and disease control	0.6 (0.6)	0.4 (0.5)	41 400	—	30 000	2 600	74 000
Linguistic, printing and publishing services	—	—	—	—	—	30 000	30 000
TOTAL	1.2 (1.1)	0.7 (1.1)	81 800	28 000	70 000	36 200	216 000

(a) FAO staff in brackets.

Insect and pest control
Summary by programme components

Table E.8

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Development of the sterile-male technique against plant-feeding insects	0.8 (0.4) ^(a)	0.5 (0.5)	43 200	—	20 000	2 400	65 600
Development of the sterile insect technique against the tsetse fly and other biting flies	0.7 (0.4)	0.5 (0.5)	38 700	—	30 000	4 000	72 700
Use of isotopes and radiation in insect pest management	0.6 (0.4)	0.3 (0.2)	40 700	—	30 000	2 000	72 700
Linguistic, printing and publishing services	—	—	—	—	—	38 000	38 000
Data processing services	—	—	—	—	—	3 000	3 000
Laboratory services	—	—	—	—	—	523 000	523 000
TOTAL	2.1 (1.2)	1.3 (1.2)	122 600	—	80 000	572 400	775 000

(a) FAO staff in brackets.

Chemical residues and pollution

Summary by programme components

Table E.9

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Isotope-aided studies of the origin, fate and biological significance of chemical residues in food and agriculture	0.6 (0.8) ^(a)	1.1 (0.1)	40 300	19 000	20 000	2 500	81 800
Isotope tracer-aided studies of chemical residues-micro-biological interactions involving aquatic ecosystems	0.3 (0.8)	0.6 (0.1)	22 000	—	20 000	1 100	43 100
Collection and dissemination of comparative information on the fate and significance of foreign substances (including radioactive substances) in food and agriculture	0.3 (0.5)	0.6 (—)	22 000	—	20 000	100	42 100
Linguistic, printing and publishing services	—	—	—	—	—	35 000	35 000
Data processing services	—	—	—	—	—	5 000	5 000
TOTAL	1.2 (2.1)	2.3 (0.2)	84 300	19 000	60 000	43 700	207 000

(a) FAO staff in brackets.

Food preservation

Summary by programme components

Table E.10

Programme component	P	Man-years GS	1978 Cost estimates				Total
			Staff	Meetings	Contracts	Other	
Technological and economic feasibility of food irradiation	2.4 (0.1) ^(a)	0.2 (1.1)	112 300	20 000	32 000	2 300	166 600
Public health acceptance and regulatory aspects of the process of food irradiation	1.7 (0.1)	0.2 (1.0)	79 200	—	23 000	2 200	104 400
Linguistic, printing and publishing services	—	—	—	—	—	45 000	45 000
Data processing services	—	—	—	—	—	3 000	3 000
TOTAL	4.1 (0.2)	0.4 (2.1)	191 500	20 000	55 000	52 500	319 000

(a) FAO staff in brackets.

F. LIFE SCIENCES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table F.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	552 639	581 000	32 000	10 000	42 000	623 000
Consultants	28 724	28 500	2 000	17 000	19 000	47 500
Overtime	48	300	—	100	100	400
Temporary assistance	535	1 700	100	—	100	1 800
Sub-total	581 946	611 500	34 100	27 100	61 200	672 700
Common staff costs	164 988	177 000	7 500	3 000	10 500	187 500
Travel	28 808	22 000	1 500	8 500	10 000	32 000
Meetings						
Conferences, symposia, seminars	46 048	62 000	13 000	(7 000)	6 000	68 000
Technical committees, advisory groups	32 353	57 000	4 500	(11 500)	(7 000)	50 000
Representation and hospitality	2 817	5 500	300	(500)	(200)	5 300
Scientific and technical contracts	349 039	387 000	19 000	60 000	79 000	466 000
Common services, supplies and equipment	1 783	—	—	2 500	2 500	2 500
Transfer of costs:						
Linguistic services	38 248	60 000	2 000	(21 000)	(19 000)	41 000
Printing and publishing services	158 066	232 000	21 000	(32 000)	(11 000)	221 000
Data processing services	25 098	15 000	1 300	8 700	10 000	25 000
Laboratory services	247 500	315 000	20 000	(15 000)	5 000	320 000
TOTAL	1 676 694	1 944 000	124 200	22 800	147 000	2 091 000

SUMMARY OF MANPOWER

Table F.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	5	5	5	—	5
P-4	7	7	7	—	7
P-3	1	1	1	—	1
P-2	1	1	1	—	1
Sub-total	15	15	15	—	15
GS	10	10	10	—	10
TOTAL	25	25	25	—	25

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 \$ 147 000 as a result of salary and other price increases of \$ 124 200 and a programme increase of \$ 22 800. An amount of \$ 13 000 in respect of salaries for established posts and common staff costs represents the additional cost in 1978 of posts for which funds were provided in the 1977 budget only for part of the year. In the light of the actual requirements in 1976, a programme increase is foreseen for travel (\$ 8 500). A programme increase of \$ 17 000 is foreseen in respect of consultants' services.

F.2. A programme reduction of \$7000 in respect of conferences, symposia and seminars reflects a reduction in the number of meetings from three in the 1977 budget to two in the 1978 estimates. The programme reduction of \$11 500 in respect of technical committees and advisory groups is attributable to a reduction in the number of meetings planned from six in 1977 to five in 1978. Funds for hospitality will be reduced by \$500. There will be a programme increase of \$ 60 000 in respect of scientific and technical contracts. The amount of \$ 2500 foreseen for common services, supplies and equipment is for the acquisition of a special calculator and miscellaneous items for which no provision was made in the 1977 budget.

F.3. As regards the allocation of service costs, there will be programme reductions in respect of linguistic services (\$21 000), printing and publishing services (\$32 000) and laboratory services (\$15 000). An increase of \$8700 is foreseen in respect of data processing services in view of programme requirements.

F.4. The Government of the United States of America is continuing to support the activities under the "Instrumentation requirements for nuclear medicine in developing countries" component by a special contribution of about \$35 000 in 1978. It is expected that \$142 000 will be made available by UNEP for the "Health-related environmental research" sub-programme.

THE PROGRAMME

OBJECTIVE

F.5. The objective is to foster the development of methods and techniques for the application of radioisotopes in medicine, biology and health-related environmental research and to promote techniques for improving accuracy in radiation dosimetry. This programme is the subject of periodic consultations 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 applications have become routine.

CHANGES IN THE ORIGINAL PROGRAMME

F.6. Detailed information on the activities planned for 1978 is provided in 567/E.10 to E.108. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

Medical applications
(567/E.12 to E.38)

F.7. Subject to the availability of funds, increased support for the training of instrument maintenance personnel will be provided in 1978 (E.17). An advisory group will be convened in 1978 to provide guidance as to which new in-vitro techniques and applications should be given emphasis in the research contract programme (E.23).

Dosimetry for intentional radiation applications
(567/E.39 to E.61)

F.8. In view of the increasing use of ionizing radiation in industrial processes and food preservation, a new activity relating to high dose radiation dosimetry will be initiated. Its objectives will be to advise Member States on the application of techniques for dosimetry in the high dose range, to establish recommendations concerning suitable methods for accurate dosimetry of gamma- and electron radiation in this range, and to organize dose comparisons.

Health-related environmental research
(567/E.93 to E.108)

F.9. Research on synergistic effects will be promoted, preferably within the frame of co-ordinated research programmes.

SUB - PROGRAMMES

Summary of manpower and costs by sub-programme

Table F.3

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	P	Man-years GS	Costs	P	Man-years GS	Costs
Medical applications	3.2	2.2	895 000	3.2	2.2	914 000
Dosimetry for intentional radiation applications	4.3	4.3	405 000	4.3	4.3	449 000
Radiation biology	4.3	2.3	485 000	4.3	2.3	505 000
Health-related environmental research	3.2	1.2	159 000	3.2	1.2	223 000
TOTAL	15.0	10.0	1 944 000	15.0	10.0	2 091 000

Medical applications

Summary by programme components

Table F.4

Programme component	Man-years		1978 Cost Estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Instrumentation requirements for nuclear medicine in developing countries	0.7	0.7	44 500	9 000	57 500	6 500	117 500
Technical improvement of in vitro assay procedures with radioactive agents	1.0	0.5	59 500	9 000	67 500	1 500	137 500
Technical improvement of in vivo procedures with radioactive agents	1.0	0.6	60 500	—	44 500	3 000	108 000
Activation analysis of elements of biological significance	0.5	0.4	33 000	38 000	38 500	1 500	111 000
Linguistic, printing and publishing services	—	—	—	—	—	115 000	115 000
Data processing services	—	—	—	—	—	20 000	20 000
Laboratory services	—	—	—	—	—	305 000	305 000
TOTAL	3.2	2.2	197 500	56 000	208 000	452 500	914 000

Dosimetry for intentional radiation applications

Summary by programme components

Table F.5

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Network of Secondary Standards Dosimetry Laboratories (SSDLs)	1.5	1.5	95 300	10 000	24 000	5 900	135 200
Dose comparison services	1.5	1.5	95 400	—	15 000	4 000	114 400
Dose comparison development	1.3	1.3	83 400	—	29 000	2 000	114 400
Linguistic, printing and publishing services	—	—	—	—	—	65 000	65 000
Data processing services	—	—	—	—	—	5 000	5 000
Laboratory services	—	—	—	—	—	15 000	15 000
TOTAL	4.3	4.3	274 100	10 000	68 000	96 900	449 000

Radiation biology

Summary by programme components

Table F.6

Programme component	P	Man-years GS	1978 Cost estimates				
			Staff	Meetings	Contracts	Other	Total
Radiation sterilization of medical products and biological tissues	0.7	0.2	40 100	11 000	25 000	2 500	78 600
Radiation attenuation of infective agents for the preparation of vaccines	0.6	0.2	24 700	—	29 000	2 000	55 700
Modification of cellular radiosensitivity	1.1	0.7	69 600	30 000	40 000	2 800	142 400
Radiosensitivity of pathogens in wastes	0.5	0.2	22 600	—	12 000	—	34 600
Comparative biological hazards of low-level radiation and other major environmental pollutants	1.4	1.0	80 200	—	49 000	2 500	131 700
Linguistic, printing and publishing services	—	—	—	—	—	62 000	62 000
TOTAL	4.3	2.3	237 200	41 000	155 000	71 800	505 000

Health-related environmental research

Summary by programme components

Table F.7

Programme component	P	Man-years GS	1978 Cost estimates				
			Staff	Meetings	Contracts	Other	Total
Nuclear methods in environmental research	2.0	0.7	101 300	11 000	23 000	3 600	138 900
Comparative body burdens of radioactive and non-radioactive pollutants	1.2	0.5	50 100	—	12 000	2 000	64 100
Linguistic, printing and publishing services	—	—	—	—	—	20 000	20 000
TOTAL	3.2	1.2	151 400	11 000	35 000	25 600	223 000

G. PHYSICAL SCIENCES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table G.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	802 284	906 000	60 000	36 000	96 000	1 002 000
Consultants	48 868	92 000	6 500	41 500	48 000	140 000
Overtime	219					
Temporary assistance	15 299	12 500	900	10 600	11 500	24 000
Sub-total	866 670	1 010 500	67 400	88 100	155 500	1 166 000
Common staff costs	239 519	272 400	17 400	11 100	28 500	300 900
Travel	20 890	45 000	3 200	(9 700)	(6 500)	38 500
Meetings						
Conferences, symposia, seminars	50 700	116 000	18 000	11 000	29 000	145 000
Technical committees, advisory groups	66 980	107 000	6 000	4 000	10 000	117 000
Representation and hospitality	5 003	8 300	400	(700)	(300)	8 000
Scientific and technical contracts	197 699	218 000	11 000	40 000	51 000	269 000
Scientific supplies and equipment	26 934	27 000	2 000	(14 000)	(12 000)	15 000
Common services, supplies and equipment	10 544	800	—	(200)	(200)	600
Other items of expenditure	—	—	—	1 000	1 000	1 000
Transfer of costs:						
Linguistic services	85 049	74 000	3 000	(11 000)	(8 000)	66 000
Printing and publishing services	197 405	305 000	29 000	26 000	55 000	360 000
Data processing services	56 864	73 000	6 000	4 000	10 000	83 000
Laboratory services	1 275 881	1 356 000	88 000	(22 000)	66 000	1 422 000
TOTAL	3 100 138	3 613 000	251 400	127 600	379 000	3 992 000

SUMMARY OF MANPOWER

Table G.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	5	6	6	—	6
P-4	10	10	10	—	10
P-3	5	5	5	1	6
P-2	2	2	2	—	2
P-1	1	1	1	—	1
Sub-total	24	25	25	1	26
GS	16	17	17	—	17
TOTAL	40	42	42	1	43

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 \$ 379 000 in 1978, of which \$ 251 400 will be required to cover salary and other price increases and \$ 127 600 will be a programme increase.

G.2. The programme increase of \$47 100 in respect of salaries for established posts and common staff costs is due to the addition of one P-3 post for the "Nuclear data" sub-programme and to the additional cost in 1978 of posts for which funds were provided in the 1977 budget only for part of the year.

G.3. Programme increases in respect of consultants' services (\$ 41 500) and temporary assistance (\$ 10 600) are due partly to the additional requirements in the "Nuclear Data" sub-programme, (in support of the "Atomic and molecular data" component) and the "Plasma physics and controlled fusion research" component of the "Physics" sub-programme.

G.4. Although the number of meetings planned for 1978 will be the same as for 1977, a programme increase is foreseen in respect of Conferences, symposia and seminars (\$11 000) and Technical committees and advisory groups (\$4 000). Programme decreases are foreseen in respect of travel (\$9 700) and hospitality (\$700). The programme increase of \$40 000 in respect of scientific and technical contracts is attributable mainly to the "Physics" and "Industrial applications and chemistry" sub-programmes. The programme reduction of \$14 000, foreseen in respect of scientific supplies and equipment, concerns the provision for nuclear targets. An amount of \$1000 under "Other items of expenditure" is for training.

G.5. As regards the allocation of service costs, programme reductions are foreseen in respect of linguistic services (\$11 000) and laboratory services (\$22 000), while there will be increased requirements for printing and publishing services (\$26 000) and data processing services (\$4000).

G.6. It is expected that the income from the sale of CINDA publications, produced under the "Nuclear data" sub-programme, will be \$33 000 in 1978.

Manpower

G.7. As will be seen from Table G.2 above, the addition of one Professional post is foreseen for 1978. Detailed justifications are provided in Annex IV.

THE PROGRAMME

OBJECTIVE

G.8. 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 regard to water and raw material resources and to education and training in nuclear science and techniques.

CHANGES IN THE ORIGINAL PROGRAMME

G.9. Detailed information on the activities planned for 1978 is provided in 567/F.12 to F.110. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

Physics (567/F.14 to F.37)

G.10. At the Regional Seminar on the Utilization of Research Reactors, held at Bandung (Java) in August 1976, it was recommended that similar seminars be held every 18–24 months. There is an urgent need to encourage co-operation between research institutions in this region, the interchange of ideas and information and the initiation of scientific programmes. An advisory group to deal with these matters is planned for 1978. The advisability of initiating a co-ordinated research programme in the utilization of research reactors in this region will be explored.

Nuclear data (567/F.89 to F.110)

G.11. The Seminar on the Development of Nuclear Theory and Computer Programmes for Applications planned for 1977 will be postponed until 1978 so that it can be combined with a Seminar on Reactor Theory and Associated Computer Codes which will be sponsored by the Trieste Centre and the Italian Nuclear Energy Commission. In accordance with recommendations of the International Nuclear Data Committee, it is planned to expand the neutron nuclear data services (maintaining data libraries and sending out data sets in reply to data requests received). An additional P-3 post is proposed for this purpose (F.99).

SUB - PROGRAMMES

Summary of manpower and costs by sub-programme

Table G.3

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Physics	4.3	2.3	389 000	4.3	2.3	559 000
Industrial applications and chemistry	5.2	2.2	1 356 000	5.2	2.2	1 381 000
Isotope hydrology	4.2	3.2	923 000	4.2	3.2	939 000
Nuclear data	11.3	9.3	945 000	12.3	9.3	1 113 000
TOTAL	25.0	17.0	3 613 000	26.0	17.0	3 992 000

Physics

Summary by programme components

Table G.4

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear physics	1.1	0.5	58 000	—	25 000	2 000	85 000
Utilization of research reactors	1.1	0.5	55 000	13 000	40 000	5 500	113 500
Plasma physics and controlled fusion research	2.1	1.3	130 500	62 000	35 000	4 000	231 500
Linguistic, printing and publishing services	—	—	—	—	—	129 000	129 000
TOTAL	4.3	2.3	243 500	75 000	100 000	140 500	559 000

Industrial applications and chemistry

Summary by programme components

Table G.5

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Materials testing and analysis	1.0	1.1	71 200	15 000	34 000	1 300	121 500
Production and industrial use of radioactive sources	2.1	1.1	118 700	9 500	30 000	2 200	160 400
Chemistry	2.1	—	101 100	—	30 000	6 000	137 100
Linguistic, printing and publishing services	—	—	—	—	—	41 000	41 000
Laboratory services	—	—	—	—	—	921 000	921 000
TOTAL	5.2	2.2	291 000	24 500	94 000	971 500	1 381 000

Isotope hydrology

Summary by programme components

Table G.6

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Precipitation	0.6	1.2	34 000	—	—	—	34 000
Surface water	1.1	1.0	62 500	48 000	20 000	4 000	134 500
Groundwater	2.5	1.0	139 000	16 000	35 000	7 500	197 500
Linguistic, printing and publishing services	—	—	—	—	—	62 000	62 000
Data processing services	—	—	—	—	—	10 000	10 000
Laboratory services	—	—	—	—	—	501 000	501 000
TOTAL	4.2	3.2	235 500	64 000	55 000	584 500	939 000

Nuclear data

Summary by programme components

Table G.7

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Neutron nuclear data	9.2	5.2	463 000	50 000	10 000	23 600	546 600
Non-neutron nuclear data (Nuclear structure and decay data, charged particle and photonuclear data)	2.0	2.0	98 000	18 000	10 000	4 300	130 300
Atomic and molecular data	1.1	2.1	135 900	18 000	—	2 700	156 600
Costs of meetings not attributable to an individual programme component	—	—	—	12 500	—	—	12 500
Linguistic, printing and publishing services	—	—	—	—	—	194 000	194 000
Data processing services	—	—	—	—	—	73 000	73 000
TOTAL	12.3	9.3	696 900	98 500	20 000	297 600	1 113 000

H. THE LABORATORY

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table H.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 515 345	1 770 000	96 000	(21 000)	75 000	1 845 000
Overtime	4 584	4 500	300	2 700	3 000	7 500
Temporary assistance	6 431	1 000	100	17 400	17 500	18 500
Sub-total	1 526 360	1 775 500	96 400	(900)	95 500	1 871 000
Common staff costs	452 400	531 000	28 500	(6 000)	22 500	553 500
Travel	8 485	10 000	700	800	1 500	11 500
Scientific and technical contracts	10 999	15 500	500	—	500	16 000
Scientific supplies and equipment	300 367	244 000	20 000	(10 000)	10 000	254 000
Common services, supplies and equipment	288 211	625 000	90 000	39 000	129 000	754 000
Other items of expenditure	250	1 000	—	—	—	1 000
Transfer of costs:						
Linguistic services	3 206	8 000	500	(500)	—	8 000
Printing and publishing services	28 919	15 000	1 400	(1 400)	—	15 000
Data processing services	13 528	28 000	2 000	1 000	3 000	31 000
Laboratory services	(2 632 725)	(3 253 000)	(240 000)	(22 000)	(262 000)	(3 515 000)
TOTAL	—	—	—	—	—	—

SUMMARY OF MANPOWER

Table H.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
P-5	4	5	4	—	4
P-4	14	13	14	—	14
P-3	5	5	5	—	5
P-2	5	5	4	—	4
P-1	2	2	2	—	2
Sub-total	30	30	29	—	29
GS	59	60	60	—	60
M&O	24	24	24	—	24
TOTAL	113	114	113	—	113

CHANGES IN COSTS

H.1. As will be seen from Table H.1 above, the cost of laboratory services is allocated to the programmes for which they are provided. The total cost of laboratory services is expected to increase by \$ 262 000 in 1978, of which \$240 000 will be required to cover salary and other price increases and \$ 22 000 is a programme increase.

H.2. A programme reduction of \$27 000 in respect of salaries for established posts and common staff costs is attributable to the transfer in the adjusted manning table for 1977 of one P-2 post to the "Food and agriculture" programme. Programme increases are foreseen in respect of overtime (\$2700) and temporary assistance (\$17 400). The latter is mainly attributable to the requirement for guard services at the Safeguards Analytical Laboratory. Further programme increases are foreseen in respect of travel (\$ 800) and common services, supplies and equipment (\$ 39 000); the latter amount is for the installation of an emergency power supply and electrical distribution board required for the extension of the Laboratory. A programme decrease of \$ 10 000 is foreseen in respect of scientific supplies and equipment.

H.3. As regards the allocation of service costs, programme decreases are foreseen in respect of linguistic services (\$500) and printing and publishing services (\$1400), and an increase in respect of data processing services (\$1000) is foreseen.

H.4. It is expected that the income from laboratory services will be \$20 000 in 1976.

THE PROGRAMME

OBJECTIVE

H.5. 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

H.6. In 1978 the activities under this programme will continue as outlined in 567/G.9 to G.55.

Summary of manpower and costs by laboratory sub-programmes

Table H.3

Sub-programme	1977 Adjusted Budget				1978 Estimate			
	P	Man-years		Costs	P	Man-years		Costs
		GS	M&O			GS	M&O	
Metrology								
Provision of an intercomparison service for radionuclide calibrations and related matters to institutes in Member States	2.1	4.3	1.6	220 000	2.1	4.5	1.6	252 000
Assistance to Member States in the assay of neutron fluences	1.0	1.2	0.6	77 000	1.0	1.1	0.7	89 000
Provision of assistance to the Department of Safeguards	—	0.3	0.1	11 000	—	0.2	—	5 000
Sub-total	3.1	5.8	2.3	308 000	3.1	5.8	2.3	346 000
Chemistry								
The establishment and provision of analytical quality control samples of nuclear interests to institutes in Member States	2.4	3.5	1.4	210 000	2.4	3.5	1.4	220 000
Provision of assistance in analytical chemistry to other sections of the Agency, other United Nations organizations and Member States	1.4	3.4	1.4	202 000	1.4	3.4	1.4	213 000
Provision of assistance to the agricultural section of the Laboratory in chemical matters	0.4	1.5	0.5	38 000	0.4	1.5	0.5	40 000
Sub-total	4.2	8.4	3.3	450 000	4.2	8.4	3.3	473 000
Isotope hydrology	4.1	9.7	—	430 000	4.1	9.7	—	470 000
Medical applications and dosimetry	2.1	5.6	1.0	248 000	2.1	5.6	1.0	290 000
Agriculture	8.3	10.4	10.6	737 000	8.3	10.4	10.6	788 000
Electronics and workshop services								
For the general Laboratory	2.1	7.7	2.4	305 000	2.1	8.1	2.5	346 000
For the Department of Safeguards	0.1	1.4	0.4	60 000	0.1	1.0	0.3	35 000
Sub-total	2.2	9.1	2.8	365 000	2.2	9.1	2.8	381 000
Safeguards Analytical Laboratory	5.0	11.0	4.0	515 000	5.0	11.0	4.0	617 000
Construction								
For the general Laboratory	—	—	—	162 000	—	—	—	68 000
For safeguards needs	—	—	—	38 000	—	—	—	82 000
TOTAL	29.0	60.0	24.0	3 253 000	29.0	60.0	24.0	3 515 000

Laboratory services: Breakdown of costs by programme

Table H.4

	1976 Actual obligations	1977 Adjusted budget	1978 Estimate
Food and agriculture	750 350	958 000	993 000
Life sciences	247 500	315 000	320 000
Physical sciences	1 275 881	1 356 000	1 422 000
Safeguards	358 994	624 000	780 000
TOTAL	2 632 725	3 253 000	3 515 000

Apportionment of total laboratory costs to relevant sub-programmes

Table H.5

Sub-programme	1977 Adjusted Budget				1978 Estimate			
	P	Man-years GS	M&O	Costs	P	Man-years GS	M&O	Costs
Food and agriculture								
Soil fertility, irrigation and crop production	2.2	2.6	2.7	230 000	2.2	2.6	2.7	220 000
Plant breeding and genetics	2.2	2.4	2.9	240 000	2.2	2.4	2.9	250 000
Insect and pest control	4.6	7.0	6.0	488 000	4.6	7.0	6.0	523 000
Sub-total	9.0	12.0	11.6	958 000	9.0	12.0	11.6	993 000
Life sciences								
Medical applications	2.3	6.7	1.3	300 000	2.3	6.7	1.3	305 000
Dosimetry for intentional radiation applications ^(a)	—	—	—	15 000	—	—	—	15 000
Sub-total	2.3	6.7	1.3	315 000	2.3	6.7	1.3	320 000
Physical sciences								
Industrial applications and chemistry	8.0	16.4	6.1	896 000	8.0	16.9	6.1	921 000
Isotope hydrology	4.4	11.6	0.5	460 000	4.4	11.6	0.5	501 000
Sub-total	12.4	28.0	6.6	1 356 000	12.4	28.5	6.6	1 422 000
Safeguards	5.3	13.3	4.5	624 000	5.3	12.8	4.5	780 000
TOTAL	29.0	60.0	24.0	3 253 000^(b)	29.0	60.0	24.0	3 515 000^(c)

(a) Staff included in Life sciences programme.

(b) Including \$200 000 for an extension of the new annex at Seibersdorf — \$162 000 for the general laboratory, \$38 000 for safeguards needs.

(c) Including \$150 000 for the above extension — \$68 000 for the general laboratory, \$82 000 for safeguards needs.

I. INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table I.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	240 375	291 000	9 000	—	9 000	300 000
Consultants	13 488	16 200	800	3 000	3 800	20 000
Overtime	8 054	8 000	—	—	—	8 000
Temporary assistance	15 064	18 000	500	(500)	—	18 000
Sub-total	276 981	333 200	10 300	2 500	12 800	346 000
Common staff costs	62 376	86 800	3 200	—	3 200	90 000
Travel	5 458	5 000	300	(300)	—	5 000
Meetings						
Conferences, symposia, seminars	383 631	559 000	—	(145 000)	(145 000)	414 000
Technical committees, advisory groups	—	6 500	1 000	—	1 000	7 500
Representation and hospitality	7 358	6 500	—	—	—	6 500
Common services, supplies and equipment	203 856	220 000	—	—	—	220 000
Other items of expenditure						
Fellowships	1 633	10 000	—	(4 000)	(4 000)	6 000
Visiting scientists and lecturers	108 856	150 000	—	50 000	50 000	200 000
Associate members	80 181	118 000	—	32 000	32 000	150 000
Other	2 197	—	—	50 000	50 000	50 000
Sub-total	192 867	278 000	—	128 000	128 000	406 000
Transfer of costs:						
Printing and publishing services	181 560	150 000	14 000	(14 000)	—	150 000
TOTAL	1 314 087	1 645 000	28 800	(28 800)	—	1 645 000
Source of funds:						
Regular Budget	305 000	600 000	28 800	(28 800)	—	600 000
Operating Fund I	1 009 087	1 045 000	—	—	—	1 045 000
TOTAL	1 314 087	1 645 000	28 800	(28 800)	—	1 645 000

SUMMARY OF MANPOWER

Table I.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
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

I.1. As will be seen from Table I.1 above, the total cost of this programme is expected to remain at the level of the 1977 budget. Price increases of \$28 800 will be offset by a programme reduction in the same amount.

I.2. A programme increase in the Trieste Centre's scientific activities in respect of visiting scientists and lecturers, associate members and federated institutions in an amount of \$128 000 and a programme increase of \$3000 in funds for consultants are offset by a reduction of \$145 000 in the funds available for scientific meetings. A programme decrease of \$ 14 000 is foreseen in the Centre's requirements for printing and publishing services.

I.3. It is expected that the activities of the Centre will be financed in 1978 from the following sources:

Regular Budget

Basic contribution	450 000	
Contribution to meet publishing cost	150 000	600 000
	600 000	

Operational Budget

Italian Government	350 000	
UNESCO	300 000	
SIDA	100 000	
UNDP	180 000	
Other	115 000	1 045 000
	1 045 000	
TOTAL		1 645 000

THE PROGRAMME

OBJECTIVE

I.4. 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

I.5. In 1978 the activities under this programme will continue as outlined in 567/H.7 to H.37.

J. INTERNATIONAL LABORATORY OF MARINE RADIOACTIVITY

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table J.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	399 575	465 000	13 000	—	13 000	478 000
Consultants	—	5 000	400	—	400	5 400
Overtime						
Temporary assistance						
Sub-total	399 575	470 000	13 400	—	13 400	483 400
Common staff costs	119 292	139 500	4 000	—	4 000	143 500
Travel	4 713	7 000	500	500	1 000	8 000
Representation and hospitality	300	1 500	100	—	100	1 600
Scientific supplies and equipment	75 966	65 000	6 000	9 000	15 000	80 000
Common services, supplies and equipment	35 608	33 000	2 500	—	2 500	35 500
Other items of expenditure	140					
Transfer of costs:						
Linguistic services	—	1 000	100	(100)	—	1 000
Printing and publishing services	2 683	3 000	300	(300)	—	3 000
TOTAL	638 277	720 000	26 900	9 100	36 000	756 000
Source of funds:						
Regular Budget	519 263	610 000	26 900	9 100	36 000	646 000
Operating Fund I	119 014	110 000	—	—	—	110 000
TOTAL	638 277	720 000	26 900	9 100	36 000	756 000

SUMMARY OF MANPOWER

Table J.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
P-5	2	2	3	—	3
P-4	3	3	2	—	2
P-3	1	1	1	—	1
P-1	3	2	2	—	2
Sub-total	9	8	8	—	8
GS	13	15	15	—	15
TOTAL	22	23	23	—	23

CHANGES IN COSTS

J.1. As will be seen from Table J.1 above, the cost of this programme is expected to increase by \$36 000 in 1978, of which \$26 900 will be required to cover salary and other price increases and \$9100 will be a programme increase.

J.2. A programme increase of \$9000 is foreseen in respect of scientific supplies and equipment since actual requirements in 1976 indicate that the amount provided for in the 1977 budget will be insufficient. A programme increase of \$500 in respect of travel is almost offset by the programme decreases in respect of linguistic services (\$100) and printing and publishing services (\$300).

J.3. It is expected that the amount available for this programme under the Operational Budget, expressed in United States dollars, will be the same as in 1977, price increases being offset by a change in the exchange rate after the establishment of the 1977 estimates. In addition to the contribution from the Monegasque Government, it is expected that UNESCO will again contribute under a contractual arrangement and that the balance will be covered by miscellaneous income. It is also expected that UNEP will contribute \$35 000 in support of biochemical studies of selected pollutants and in support of intercalibration measurements for pilot projects under the co-ordinated pollution monitoring and research programme.

THE PROGRAMME

OBJECTIVE

J.4. 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 the radioactivity in the oceans and to obtain the scientific information needed to assess the impact of waste disposal and nuclear power generation on the environment.

THE ORIGINAL PROGRAMME

J.5. In 1978 the activities under this programme will continue as outlined in 567/K.7 to K.25.

Summary of manpower and costs by sub-programmes

Table J.3

Sub-programme	1977 Adjusted Budget					1978 Estimate				
	Man-years		Costs			Man-years		Costs		
	P	GS	Staff	Other	Total	P	GS	Staff	Other	Total
Biology	3.0	5.0	214 500	34 500	249 000	3.0	5.0	233 500	42 100	275 600
Chemistry	2.5	5.0	195 000	41 000	236 000	2.5	5.0	194 000	46 500	240 500
Environmental studies	2.5	5.0	200 000	35 000	235 000	2.5	5.0	199 400	40 500	239 900
TOTAL	8.0	15.0	609 500	110 500	720 000	8.0	15.0	626 900	129 100	756 000

K. SAFEGUARDS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table K.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	2 847 317	3 715 000	237 000	716 000	953 000	4 668 000
Consultants	26 617	42 000	2 900	35 600	38 500	80 500
Overtime	1 343	2 000	100	100	200	2 200
Temporary assistance	733	5 000	100	(3 100)	(3 000)	2 000
Sub-total	2 876 010	3 764 000	240 100	748 600	988 700	4 752 700
Common staff costs	860 807	1 117 000	68 900	214 200	283 100	1 400 100
Travel	413 627	515 000	49 200	110 800	160 000	675 000
Meetings						
Conferences, symposia, seminars	19 614	30 000	2 000	101 000	103 000	133 000
Technical committees, advisory groups	60 540	84 000	3 600	33 400	37 000	121 000
Representation and hospitality	8 606	11 000	400	800	1 200	12 200
Scientific and technical contracts	69 876	486 000	30 000	(96 000)	(66 000)	420 000
Scientific supplies and equipment	634 280	578 000	58 000	155 000	213 000	791 000
Common services, supplies and equipment	95 826	—	—	—	—	—
Transfer of costs:						
Linguistic services	81 140	156 000	8 000	(33 000)	(25 000)	131 000
Printing and publishing services	123 710	80 000	8 000	47 000	55 000	135 000
Data processing services	237 960	400 000	36 000	992 000	1 028 000	1 428 000
Laboratory services	358 994	624 000	70 000	86 000	156 000	780 000
Legal services	96 000	106 000	6 000	—	6 000	112 000
TOTAL	5 936 990	7 951 000	580 200	2 359 800	2 940 000	10 891 000

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SUMMARY OF MANPOWER

Table K.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
DDG	1	1	1	—	1
D	3	4	4	—	4
P-5	24	28	28	1	29
P-4	36	41	41	17	58
P-3	33	34	34	5	39
P-2	5	3	3	—	3
Sub-total	102	111	111	23	134
GS	36	50	50	14	64
TOTAL	138	161	161	37	198

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 \$ 2 940 000 in 1978, of which \$ 580 200 will be required to cover price increases and \$ 2 359 800 will be the overall programme increase.

K.2. The programme increase of \$930 200 in respect of salaries for established posts and common staff costs will result from the addition of 23 Professional and 14 GS posts and, to some extent, from the additional cost of posts for which funds were provided in the 1977 budget only for part of the year.

K.3. The programme increase of \$ 35 600 in respect of consultants' services will be required partly under the "Safeguards information treatment" sub-programme and partly under the "Safeguards development" sub-programme for the physical protection activities. There will be a reduction of \$ 3100 in temporary assistance. The programme increase in respect of travel (\$ 110 800) is due to an increase in inspection activities.

K.4. The Division of Development and Technical Support is planning to hold one symposium and two training seminars in 1978, representing a programme increase of \$101 000. A programme increase of \$33 400 will be required in respect of technical committees and advisory groups, although the number of meetings will be the same as in 1977. An additional \$800 will be required for hospitality.

K.5. The programme increase of \$ 155 000 in respect of scientific supplies and equipment will be partly offset by a decrease of \$ 96 000 in respect of scientific and technical contracts.

K.6. As regards the allocation of service costs, programme increases are foreseen in respect of printing and publishing services (\$47 000) data processing services (\$992 000) and laboratory services (\$86 000). A programme decrease of \$ 33 000 is foreseen in respect of linguistic services.

K.7. The increase foreseen in respect of data processing services relates to safeguards information treatment. With the rapid growth in the volume of safeguards data it has become clear that the Agency's computer facilities need to be up-graded. Accordingly, a new computer is to be installed about the middle of this year, the increase foreseen in respect of data processing services reflecting rental payments and operating costs higher than those associated with the present computer, which the Agency owns.

K.8. The increase in respect of laboratory services reflects higher costs of operating the Safeguard Analytical Laboratory (SAL) and the inclusion of that part of the cost of extending the general laboratory facilities at Seibersdorf — through the construction of a new wing — which is attributable to the space in the new wing intended for assembling and testing electronic safeguards equipment and storing associated materials.

K.9. The Government of the United States will continue to support the programme and has offered a contribution of about \$ 500 000. It is also expected that the Government of the USSR will continue to support the programme by a contribution to the value of about \$ 331 000 in 1978.

Manpower

K.10. As will be seen from Table K.2 above, the addition of 23 Professional and 14 GS posts is foreseen for 1978. Detailed justifications are provided in Annex IV.

THE PROGRAMME

OBJECTIVE

K.11. The objective is to apply safeguards under agreements to which the Agency is a party. This involves the establishment of safeguards concepts and criteria, the implementation of established safeguards procedures and practices and the co-ordination and furtherance of development leading to the achievement of the safeguards objective in the most efficient way.

CHANGES IN THE ORIGINAL PROGRAMME

K.12. Detailed information on the activities planned for 1978 is provided in 567/N.10 to N.70. The following additions or adjustments are foreseen for 1978.

Safeguards operations (N.16–N.30)

K.13. The NPT agreement with EURATOM and the non-nuclear weapon States of EURATOM came into force in February 1977 and will be fully implemented in 1978. The agreements based on the voluntary offers of the United Kingdom and the United States of America are also expected to be fully implemented in 1978. The additional increase in the inspection workload is due to the normal growth of safeguarded nuclear materials, especially the increasing throughput of reprocessing and fuel fabrication plants and the start-up of new nuclear power plants.

K.14. Table K.3 below shows the type and number of facilities in which nuclear material subject to safeguards has to be inspected and replaces Table N.6 in document GC(XX)567. The total of 574 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 1976–1978

Table K.3

Type of facility	1976		1977		1978		1978 Totals
	NPT Agreements	Other Agreements	NPT Agreements	Other Agreements	NPT Agreements	Other Agreements	
Power plants	18	33	74	15	82	18	100
Conversion and fuel fabrication plants	6	8	23	3	23	3	26
Reprocessing plants	—	1	3	2	3	2	5
Enrichment plants	—	—	1	—	1	—	1
Pilot fuel fabrication plants	4	6	10	1	10	1	11
Pilot reprocessing plants	—	2	1	2	1	2	3
Research reactors and critical facilities	54	60	143	36	139	35	174
Sub-critical facilities	7	2	8	2	8	2	10
Research and development facilities	11	17	131	4	129	4	133
Other locations	32	71	99	12	100	11	111
TOTALS	132	200	493	77	496	78	574

Safeguards development
(N.31–N.54)

K.15. In its basic concepts the 1978 scientific programme for development in the field of safeguards and inspection (N.36–N.51) will remain unchanged. Adjustments to the programme which have become necessary due to new requirements are related to

- (a) The preparation of the reports to the Board of Governors on the effectiveness of safeguards implementation;
- (b) Improvement of the procedure for reviewing inspection reports, recording and summarizing of inspection results;
- (c) Emphasizing the importance of, and accelerating, the implementation of newly developed procedures and techniques in operational practice;
- (d) Improvement of real time detection of containment and surveillance system failures;
- (e) Studies concerning safeguards aspects of the transfer of nuclear technologies and the supply of such equipment and materials (other than nuclear fuels) which require Agency safeguards pursuant to an agreement; and
- (f) Recommendations concerning selected technical aspects of physical protection of nuclear materials.

K.16. It should be noted that since the Agency does not operate its own research facilities in this area, further development in the field of safeguards and inspection depends to a large extent on the assistance and support of Member States. In 1978 it is expected that wider use of assistance offered by Member States will be made in the following fields:

- (a) Training of Agency staff and assistance in training personnel of Member States in accounting, control and protection of nuclear material;
- (b) Studies on diversion analysis, effectiveness evaluation, criteria for safeguards performance, etc.;
- (c) Development and implementation of non-destructive assay techniques;
- (d) Quality control and assurance of non-destructive assay and chemical measurements;
- (e) Containment and surveillance instruments; in particular, television systems, fibre optic seals and remote status monitoring; and
- (f) Information processing.

S U B - P R O G R A M M E S

Summary of manpower and costs by sub-programme

Table K.4

Sub-programme	1977 Adjusted Budget			1978 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Programme co-ordination	2.0	3.0	773 000	2.0	3.0	1 030 000
Safeguards operations	73.0	21.0	3 719 000	90.0	27.0	4 554 000
Safeguards development	20.0	8.0	2 096 000	24.0	11.0	2 725 000
Standardization	4.0	4.0	242 000	5.0	5.0	291 000
Safeguards information treatment	12.0	14.0	1 121 000	13.0	18.0	2 291 000
TOTAL	111.0	50.0	7 951 000	134.0	64.0	10 891 000

Programme co-ordination

Summary by programme components

Table K.5

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Programme co-ordination	2.0	3.0	152 000	44 000	—	803 500	999 500
Linguistic, printing and publishing services	—	—	—	—	—	30 500	30 500
TOTAL	2.0	3.0	152 000	44 000	—	834 000	1 030 000

Safeguards operations

Summary by programme components

Table K.6

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Safeguards operations	90.0	27.0	3 741 500	—	—	599 000	4 340 500
Linguistic, printing and publishing services	—	—	—	—	—	101 500	101 500
Legal services	—	—	—	—	—	112 000	112 000
TOTAL	90.0	27.0	3 741 500	—	—	812 500	4 554 000

Safeguards development

Summary by programme components

Table K.7

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Safeguards development	24.0	11.0	1 193 500	180 000	400 000	59 500	1 833 000
Linguistic, printing and publishing services	—	—	—	—	—	112 000	112 000
Laboratory services	—	—	—	—	—	780 000	780 000
TOTAL	24.0	11.0	1 193 500	180 000	400 000	951 500	2 725 000

Standardization

Summary by programme components

Table K.8

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Standardization	5.0	5.0	279 300	—	—	200	279 500
Linguistic, printing and publishing services	—	—	—	—	—	11 500	11 500
TOTAL	5.0	5.0	279 300	—	—	11 700	291 000

Safeguards information treatment

Summary by programme components

Table K.9

Programme component	Man-years		1978 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Safeguards information treatment	13.0	18.0	786 500	30 000	20 000	16 000	852 500
Linguistic, printing and publishing services	—	—	—	—	—	10 500	10 500
Data processing services	—	—	—	—	—	1 428 000	1 428 000
TOTAL	13.0	18.0	786 500	30 000	20 000	1 454 500	2 291 000

L. INFORMATION AND TECHNICAL SERVICES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table L.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 391 369	1 590 000	144 000	63 000	207 000	1 797 000
Consultants	4 407	11 000	600	(2 600)	(2 000)	9 000
Overtime	7 121	14 000	900	(1 400)	(500)	13 500
Temporary assistance	19 328	22 500	1 500	500	2 000	24 500
Sub-total	1 422 225	1 637 500	147 000	59 500	206 500	1 844 000
Common staff costs	415 388	477 600	42 300	19 100	61 400	539 000
Travel	19 960	27 000	2 000	—	2 000	29 000
Meetings						
Conferences, symposia, seminars	13 637	12 000	1 000	—	1 000	13 000
Technical committees, advisory groups	19 825	30 000	2 000	2 000	4 000	34 000
Representation and hospitality	2 490	2 400	100	200	300	2 700
Scientific and technical contracts	30 400	26 500	800	(10 000)	(9 200)	17 300
Common services, supplies and equipment	1 342 813	1 258 000	88 000	860 000	948 000	2 206 000
Other items of expenditure	3 985	—	—	8 000	8 000	8 000
Transfer of costs:						
Linguistic services	90 477	98 000	6 000	10 000	16 000	114 000
Printing and publishing services	561 234	442 000	43 000	121 000	164 000	606 000
Data processing services	(821 445)	(1 106 000)	(96 000)	(1 025 000)	(1 121 000)	(2 227 000)
TOTAL	3 100 989	2 905 000	236 200	44 800	281 000	3 186 000

SUMMARY OF MANPOWER

Table L.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	–	1
P-5	3	3	3	1	4
P-4	10	11	11	(1)	10
P-3	8	8	8	3	11
P-2	6	5	5	(2)	3
P-1	5	5	5	(1)	4
Sub-total	33	33	33	–	33
GS	72	75	75	2	77
TOTAL	105	108	108	2	110

CHANGES IN COSTS AND MANPOWER

Costs

L.1. As will be seen from Table L.1 above, the cost of this programme is expected to increase by \$ 281 000 in 1978, of which \$ 236 200 will be required to cover salary and other price increases and \$ 44 800 will be a programme increase.

L.2. The programme increase of \$ 82 100 in respect of salaries for established posts and common staff costs is attributable partly to the addition of two GS posts (one each for the "Computer services" and the "Scientific journals" sub-programmes) and partly to the additional cost in 1978 of posts for which funds were provided in the 1977 budget only for part of the year.

L.3. The programme reductions foreseen in respect of consultants' services (\$ 2600) – for the Library – and in respect of overtime (\$ 1400) – for the Library and for the "Computer services" sub-programme – are partly offset by a \$ 500 increase in temporary assistance. Although the number of meetings planned under the "INIS" sub-programme is the same for 1978 as for 1977, a programme increase of \$ 2000 in respect of Technical committees is foreseen.

L.4. The programme decrease of \$ 10 000 in respect of scientific and technical contracts is mainly related to INIS activities. The programme increase of \$ 860 000 in respect of common services, supplies and equipment is the net result of an increase of \$ 900 000 in the requirements of the Computer Section partly offset by reductions in respect of the Library (\$ 9000) and INIS (\$ 31 000), the latter reduction reflecting a decrease in the production of microfiches and in the purchase of supplies and equipment as compared with 1977. The increase in the requirements of the Computer Section reflects higher rental payments and operating costs following the replacement, about the middle of this year, of the computer – which the Agency purchased – by a new one, the need for up-grading of the computer facilities having been shown clearly by projections of the growth in the demand for data – especially safeguards data – processing.

L.5. As regards the allocation of service costs, programme increases are foreseen in respect of linguistic services for the scientific journals (\$ 10 000) and printing and publishing services for the scientific journals and INIS publications (\$ 121 000). The amount of \$ 1 025 000 shown as a programme decrease in respect of data processing services reflects an increase in the data processing costs allocated to other programmes.

L.6. As will be seen from Table L.5 below, \$ 278 000 will remain as a recoverable charge against the Computer Section in 1978. This amount represents reimbursable services rendered to other organizations; a reduction in such services is expected.

L.7. It is expected that the income from INIS publications will be \$ 225 000 in 1978, assuming that the sale of microfiches by the Agency will be discontinued as recommended by the INIS Liaison Officers. Income from reimbursable computer services is expected to be \$ 278 000, made up of \$ 238 000 from UNIDO and \$ 40 000 from FAO (in respect of AGRIS).

Manpower

L.8. As will be seen from Table L.2 above, the addition of two GS posts and the up-grading of four Professional posts are foreseen for 1978. Detailed justifications are provided in Annex IV.

Cost of the Office of the Director, the scientific journals and the Library

Table L.3

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	273 205	277 000	19 000	23 000	42 000	319 000
Consultants	—	3 000	—	(3 000)	(3 000)	—
Overtime	108	1 000	100	(100)	—	1 000
Temporary assistance	5 886	3 500	200	300	500	4 000
Sub-total	279 199	284 500	19 300	20 200	39 500	324 000
Common staff costs	81 564	83 400	5 300	6 800	12 100	95 500
Travel	2 780	7 000	500	(1 500)	(1 000)	6 000
Representation and hospitality	464	600	—	100	100	700
Scientific and technical contracts	18 370	18 500	800	(2 000)	(1 200)	17 300
Common services, supplies and equipment	156 810	165 000	10 000	(9 000)	1 000	166 000
Transfer of costs:						
Linguistic services	46 294	81 000	5 000	11 000	16 000	97 000
Printing and publishing services	280 953	181 000	17 500	88 000	105 500	286 500
Data processing services	31 220	35 000	3 000	4 000	7 000	42 000
TOTAL	897 654	856 000	61 400	117 600	179 000	1 035 000

Cost of INIS activities

Table L.4

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	497 094	578 000	55 000	3 000	58 000	636 000
Consultants	4 407	4 000	300	700	1 000	5 000
Overtime	438	1 000	—	(500)	(500)	500
Temporary assistance	10 606	11 000	800	700	1 500	12 500
Sub-total	512 545	594 000	56 100	3 900	60 000	654 000
Common staff costs	148 406	173 200	16 800	1 000	17 800	191 000
Travel	13 517	11 000	800	1 200	2 000	13 000
Meetings						
Conferences, symposia, seminars	13 637	12 000	1 000	—	1 000	13 000
Technical committees, advisory groups	19 825	30 000	2 000	2 000	4 000	34 000
Representation and hospitality	2 026	1 800	100	100	200	2 000
Scientific and technical contracts	8 455	8 000	—	(8 000)	(8 000)	—
Common services, supplies and equipment	554 690	195 000	11 000	(31 000)	(20 000)	175 000
Transfer of costs:						
Linguistic services	44 183	17 000	1 000	(1 000)	—	17 000
Printing and publishing services	280 066	252 000	25 000	33 000	58 000	310 000
Data processing services	388 225	390 000	35 000	39 000	74 000	464 000
TOTAL	1 985 575	1 684 000	148 800	40 200	189 000	1 873 000

Cost of computer services

Table L.5

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	621 070	735 000	70 000	37 000	107 000	842 000
Consultants	—	4 000	300	(300)	—	4 000
Overtime	6 575	12 000	800	(800)	—	12 000
Temporary assistance	2 836	8 000	500	(500)	—	8 000
Sub-total	630 481	759 000	71 600	35 400	107 000	866 000
Common staff costs	185 418	221 000	20 200	11 300	31 500	252 500
Travel	3 663	9 000	700	300	1 000	10 000
Scientific and technical contracts	3 575	—	—	—	—	—
Common services, supplies and equipment	631 313	898 000	67 000	900 000	967 000	1 865 000
Other items of expenditure	3 985	—	—	8 000	8 000	8 000
Transfer of costs:						
Printing and publishing services	215	9 000	500	—	500	9 500
Data processing services	(1 240 890)	(1 531 000)	(134 000)	(1 068 000)	(1 202 000)	(2 733 000)
TOTAL	217 760	365 000	26 000	(113 000)	(87 000)	278 000

Computer services: Breakdown of costs by programme

Table L.6

Programme	1976 Actual obligations	1977 Adjusted budget	1978 Estimate
Technical assistance	1 301	6 000	7 000
Food and agriculture	11 765	15 000	22 000
Life sciences	25 098	15 000	25 000
Physical sciences	56 864	73 000	83 000
Laboratory	13 528	28 000	31 000
Nuclear power and reactors	109 520	234 000	233 000
Nuclear safety and environmental protection	12	—	—
Information and technical services			
Office of the Director, and scientific journals	3 189	—	2 000
INIS	388 225	390 000	464 000
Library	28 031	35 000	40 000
Safeguards	237 960	400 000	1 428 000
Administration	316 580	292 000	339 000
General services	1 798	—	2 000
Service activities			
Printing and publishing services	46 005	43 000	57 000
Transfer of costs to other programmes	1 239 876	1 531 000	2 733 000
Reimbursable services	217 760	365 000	278 000
Support to UNDP project	1 014	—	—
TOTAL	1 458 650	1 896 000	3 011 000

Summary of manpower by organization unit and category

Table L.7

Organization unit	1976 Adjusted budget				1977 Adjusted budget				1978 Estimate			
	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total
Office of the Director	2	4	—	6	2	4	—	6	2	5	—	7
INIS Section	14	23	—	37	14	24	—	38	14	24	—	38
Library	4	10	—	14	4	10	—	14	4	10	—	14
Computer Section	13	35	—	48	13	37	—	50	13	38	—	51
TOTAL	33	72	—	105	33	75	—	108	33	77	—	110

THE PROGRAMME

OBJECTIVE

L.9 The objective is to foster the exchange of scientific and technical information on peaceful uses of atomic energy by assembling such information and disseminating it to Member States, Agency staff and interested international organizations.

CHANGES IN THE ORIGINAL PROGRAMME

L.10. Detailed information on the activities planned for 1978 is provided in 567/L.12 to L.50. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1978.

INIS (567/L.14 to L.28)

L.11. At present only 15–20% of the documents announced by INIS are available through the INIS Clearinghouse. The remainder, mainly journal articles and chapters in books, are often not easily accessible, particularly in the developing countries which are still building up their library resources and systems. Because of this, the Agency intends to explore the possibility of increasing the range of documents available through the INIS Clearinghouse, for example by negotiating with scientific publishers for the right to produce microfiche copies of material published by them for distribution to national INIS centres.

L.12. Several European countries have requested the Agency to provide a facility by which they can search the INIS and AGRIS data bases directly from remote locations, using dial-up telephone lines which connect their own terminals with the Agency's computer. It is hoped that trials begun in 1977 will result in some five or six countries being connected in an experimental network during 1978.

Computer services (567/L.37 to L.42)

L.13. It is expected that the requirements for data processing support of safeguards and other major Agency programmes will expand to such an extent that the present computing facilities and staff will be inadequate to meet them. For 1978 the Agency is therefore planning a major up-grading of its central processing unit (CPU), peripheral storage devices and on-line terminals, in accordance with the results of a study conducted by a consultant late in 1976.

M. POLICY-MAKING ORGANS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table M.1

Items of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	133 755	154 000	10 000	—	10 000	164 000
Overtime	4 605	4 600	300	100	400	5 000
Temporary assistance	5 000	8 800	500	(1 500)	(1 000)	7 800
Sub-total	143 360	167 400	10 800	(1 400)	9 400	176 800
Common staff costs	39 932	46 000	3 200	—	3 200	49 200
Travel		600	100	—	100	700
Common services, supplies and equipment	96 536	105 000	10 300	7 000	17 300	122 300
Other items of expenditure	17 628	16 000	1 000	—	1 000	17 000
Transfer of costs:						
Linguistic services	814 169	1 091 000	66 000	11 000	77 000	1 168 000
Printing and publishing services	173 773	188 000	16 000	—	16 000	204 000
TOTAL	1 285 398	1 614 000	107 400	16 600	124 000	1 738 000

SUMMARY OF MANPOWER

Table M.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-4	2	2	2	—	2
Sub-total	3	3	3	—	3
GS	3	3	3	—	3
TOTAL	6	6	6	—	6

Distribution of costs between the General Conference and the Board

Table M.3

Organization unit	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
General Conference	380 244	683 000	44 000	(75 700)	(31 700)	651 300
Board of Governors	905 154	931 000	63 400	92 300	155 700	1 086 700
TOTAL	1 285 398	1 614 000	107 400	16 600	124 000	1 738 000

CHANGES IN COSTS

M.1. As will be seen from Table M.1 above, the total cost of this programme is expected to increase by \$124 000 as a result of price increases of \$107 400 and a programme increase of \$16 600. Of the latter, an amount of \$7000 will be required in respect of the allocation of common services and supplies to the policy-making organs and \$11 000 in respect of linguistic services.

M.2. A reduction of \$1500 is foreseen in the temporary assistance requirement of the Division of General Services in respect of the meetings of the Board of Governors. A shift in cost from the General Conference to the Board of Governors is reflected in Table M.3.

THE PROGRAMME

M.3. The responsibility for providing the services required by the policy-making organs of the Agency, namely the General Conference and the Board of Governors, is shared by four units in the Secretariat. The Secretariat of the Policy-making Organs undertakes the organizational and administrative work involved. The Division of Languages provides the language services (translation of documents) and prepares records of proceedings. Documents are reproduced and circulated by the Division of Publications, and the Division of External Relations is responsible for providing the facilities needed for the meetings of the two organs and their committees as well as for interpretation at meetings. In all work concerning the General Conference and the Board of Governors, the Secretariat of the Policy-making Organs will report to the Director General. Certain matters related to internal administration will be co-ordinated with the Head of the Department of Administration.

N. EXECUTIVE MANAGEMENT AND TECHNICAL PROGRAMME PLANNING

COST OF THE PROGRAMME

Summary by items of expenditure: Table N.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	500 711	529 000	37 000	58 000	95 000	624 000
Consultants	49 833	69 600	3 000	(19 000)	(16 000)	53 600
Overtime	5 207	8 600	700	(600)	100	8 700
Temporary assistance	1 775	—	—	800	800	800
Sub-total	557 526	607 200	40 700	39 200	79 900	687 100
Common staff costs	149 485	158 800	11 200	16 900	28 100	186 900
Travel	41 899	54 500	3 700	(700)	3 000	57 500
Meetings						
Technical committees, advisory groups	26 864	45 000	2 000	(2 000)	—	45 000
Representation and hospitality	22 500	23 500	—	—	—	23 500
Transfer of costs:						
Linguistic services	20 097	19 000	1 000	—	1 000	20 000
Printing and publishing services	4 649	7 000	700	300	1 000	8 000
TOTAL	823 020	915 000	59 300	53 700	113 000	1 028 000

SUMMARY OF MANPOWER

Table N.2

Grade of post	Number of established posts				1978
	1976 Adjusted	1977	1977 Adjusted	Change	
DG	1	1	1	—	1
DDG	3	3	3	—	3
D	1	1	1	—	1
P-5	1	1	1	1	2
P-3	2	3	3	—	3
P-2	2	2	2	—	2
P-1	2	1	1	—	1
Sub-total	12	12	12	1	13
GS	8	8	8	1	9
TOTAL	20	20	20	2	22

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 \$113 000, of which \$59 300 will be required to cover salary and other price increases and \$53 700 will be a programme increase.

N.2. The programme increase of \$74 900 in respect of salaries for established posts and common staff costs is attributable mainly to the addition of one P-5 and one GS post in the Office of the Director General.

N.3. The increase in respect of salaries and common staff costs is partly offset by a reduction of \$19 000 in the requirement for consultants' services. A programme reduction of \$700 is planned in respect of travel and one of \$2000 in respect of meetings of the Scientific Advisory Committee. A reduction of \$600 in respect of overtime will be offset by an increase of \$800 for temporary assistance, and a programme increase of \$300 is foreseen in respect of printing and publishing services.

Manpower

N.4. As will be seen from Table N.2 above, the addition of one Professional and one GS post is foreseen for 1978. Detailed justifications are provided in Annex IV.

THE PROGRAMME

OBJECTIVE

N.5. 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.

N.6. 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.

O. ADMINISTRATION

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table O.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	2 565 914	2 787 000	262 000	158 000	420 000	3 207 000
Consultants	13 304	50 000	—	(45 000)	(45 000)	5 000
Overtime	10 155	3 200	200	3 200	3 400	6 600
Temporary assistance	87 369	23 500	1 200	23 300	24 500	48 000
Sub-total	2 676 742	2 863 700	263 400	139 500	402 900	3 266 600
Common staff costs	766 560	837 200	77 400	45 500	122 900	960 100
Travel	31 265	42 700	3 100	(2 300)	800	43 500
Meetings						
Technical committees, advisory groups	—	15 000	500	(2 500)	(2 000)	13 000
Representation and hospitality	12 003	13 900	600	200	800	14 700
Common services, supplies and equipment	142 182	176 000	11 500	(67 200)	(55 700)	120 300
Other items of expenditure	73 902	85 500	5 000	1 300	6 300	91 800
Transfer of costs:						
Linguistic services	229 737	262 000	16 000	2 000	18 000	280 000
Printing and publishing services	313 495	257 000	24 000	43 000	67 000	324 000
Data processing services	316 580	292 000	27 000	20 000	47 000	339 000
To Other: PNE	(28 000)	(30 000)	(2 000)	—	(2 000)	(32 000)
Safeguards	(96 000)	(106 000)	(6 000)	—	(6 000)	(112 000)
Total	4 438 466	4 709 000	420 500	179 500	600 000	5 309 000

SUMMARY OF MANPOWER

Table O.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
DDG	1	1	1	—	1
D	6	6	6	—	6
P-5	14	14	14	—	14
P-4	12	13	13	2	15
P-3	11	11	13	—	13
P-2	9	11	11	1	12
P-1	5	3	3	(1)	2
Sub-total	58	59	61	2	63
GS	89	96	96	9	105
TOTAL	147	155	157	11	168

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 \$600 000 as a result of price increases of \$420 500 and a programme increase of \$179 500.
- O.2. The programme increase of \$203 500 in respect of salaries for established posts and common staff costs is attributable to the addition of new posts, the up-grading of posts and the additional cost in 1978 of posts for which funds were provided in the 1977 budget only for part of the year. A programme increase of \$23 300 in respect of temporary assistance required in the Divisions of Personnel and Budget and Finance and a programme increase of \$3200 in respect of overtime are by far offset by a reduction in consultants' services in the Office of the Deputy Director General for Administration and the Division of Personnel.
- O.3. Programme reductions are foreseen in respect of Technical committees and advisory groups (\$2500) and travel (\$2300). The programme reduction of \$67 200 in respect of common services, supplies and equipment is related to the Divisions of Budget and Finance, External Relations, and Personnel. Insurance premiums which were previously charged to the Division of Budget and Finance will in future be charged to the programmes requiring such insurance. In the Division of Personnel, a reduction is foreseen in respect of acquisition of medical equipment and in the Division of External Relations there will be a reduction in respect of public information services and supplies. The programme increase of \$1300 in respect of other items of expenditure is related to training activities.
- O.4. With regard to the cost of services, it is foreseen that programme increases in respect of linguistic services (\$2000) and printing and publishing services (\$43 000) will be mainly for the Division of External Relations. The increase in respect of data processing services (\$20 000) is mainly for the Division of Budget and Finance.

Manpower

- O.5. As will be seen from Table O.2 above, the addition of Professional and GS posts and the up-grading of Professional posts is foreseen for 1978. Detailed justifications are provided in Annex IV.

THE PROGRAMME

OBJECTIVE

O.6. 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 linguistic services and the "General services" programme. Certain matters related to internal administration in respect of the Secretariat of the Policy-making Organs will be co-ordinated with the Department of Administration.

THE ORIGINAL PROGRAMME

O.7. In 1978 the activities under this programme will continue as outlined in 567/O.15 to O.41.

Summary of total costs by organization unit

Table O.3

Organization unit	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Office of the Deputy Director General for Administration	269 848	309 000	21 100	(39 100)	(18 000)	291 000
Office of Internal Audit	203 266	261 000	16 000	22 000	38 000	299 000
Division of Budget and Finance	1 383 912	1 413 000	157 200	101 300	258 500	1 671 500
Division of External Relations	1 367 438	1 375 000	94 700	101 300	196 000	1 571 000
Legal Division	298 602	348 000	22 400	(4 400)	18 000	366 000
Division of Personnel	915 400	1 003 000	109 100	(1 600)	107 500	1 110 500
TOTAL	4 438 466	4 709 000	420 500	179 500	600 000	5 309 000

Summary of manpower by organization unit and category

Table O.4

Organization unit	1976 Adjusted budget				1977 Adjusted budget				1978 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	32	—	48	18	36	—	54	20	39	—	59
Division of External Relations	17	21	—	38	17	22	—	39	17	25	—	42
Legal Division	8	5	—	13	8	5	—	13	8	5	—	13
Division of Personnel	9	25	—	34	10	27	—	37	10	30	—	40
TOTAL	58	89	—	147	61	96	—	157	63	105	—	168

P. GENERAL SERVICES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table P.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 720 538	1 923 000	242 000	5 000	247 000	2 170 000
Consultants	—	24 000	—	(24 000)	(24 000)	—
Overtime	40 972	30 500	2 100	5 400	7 500	38 000
Temporary assistance	84 487	38 000	2 700	59 300	62 000	100 000
Sub-total	1 845 997	2 015 500	246 800	45 700	292 500	2 308 000
Common staff costs	513 660	577 700	71 600	1 500	73 100	650 800
Travel	990	600	100	300	400	1 000
Representation and hospitality	11	200	—	—	—	200
Scientific and technical contracts	34 578	—	—	—	—	—
Common services, supplies and equipment	1 478 181	1 466 000	104 000	(137 000)	(33 000)	1 433 000
Transfer of costs:						
Linguistic services	938	9 000	200	(7 200)	(7 000)	2 000
Printing and publishing services	112 077	108 000	10 000	22 000	32 000	140 000
Data processing services	1 798	—	—	2 000	2 000	2 000
TOTAL	3 988 230	4 177 000	432 700	(72 700)	360 000	4 537 000

SUMMARY OF MANPOWER

Table P.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	1	2	2	—	2
P-4	3	2	2	—	2
P-3	3	3	3	—	3
P-2	1	1	1	—	1
Sub-total	9	9	9	—	9
GS	70	71	71	—	71
M&O	116	129	129	—	129
TOTAL	195	209	209	—	209

CHANGES IN COSTS

P.1. As will be seen from Table P.1 above, it is expected that the cost of this programme will increase by \$360 000 as a net result of salary and other price increases of \$432 700 partly offset by a programme decrease of \$72 700.

P.2. A programme increase of \$ 6 500 in respect of salaries for established posts and common staff costs represents the additional cost of posts for which funds were provided in the 1977 budget only for part of the year.

P.3. A programme reduction of \$ 24 000 in respect of funds for consultants will be possible since, in view of alternative arrangements for the preparation of the move to the Permanent Headquarters, there is no requirement for a temporary procurement officer. In the light of actual expenditures for overtime in 1976, a programme increase of \$5400 will be required for emergency repair work, week-end work, snow removal and peak workloads in connection with meetings. The programme increase of \$ 59 300 in respect of temporary assistance reflects actual requirements, mainly for the maintenance and operation of the new temporary premises in Berggasse and Wasagasse. A programme increase of \$ 300 is foreseen in respect of travel.

P.4. A programme decrease of \$137 000 for common services, supplies and equipment reflects mainly the decision to charge the rental cost of photocopying equipment and related supplies to the printing services for allocation to the programmes using the photocopying services. In accordance with actual requirements, there are programme increases in respect of printing and publishing services (\$22 000) and data processing services (\$2000), and a programme reduction of \$7200 in respect of linguistic services.

Costs of common services, supplies and equipment

Table P.3

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	1978 Estimate
Division of General Services			
Services			
Communications	409 774	451 000	520 000
Freight and transportation	34 829	54 000	54 000
Rental and maintenance of premises	113 505	154 000	162 000
Utilities	390 839	437 000	346 000
Rental and maintenance of furniture and equipment	137 968	155 000	144 000
Other	1 881	4 000	2 000
Sub-total	1 088 796	1 255 000	1 228 000
Supplies			
Building and maintenance supplies	109 787	30 000	34 000
Office supplies	90 835	80 000	82 000
Expendable equipment	113 481	50 000	50 000
Other	3 698	5 000	4 000
Sub-total	317 801	165 000	170 000
Equipment			
Building, property and maintenance equipment	1 654	1 000	4 000
Office furniture and equipment	62 007	40 000	26 000
Transportation equipment	5 774	5 000	5 000
Other	2 149	-	-
Sub-total	71 584	46 000	35 000
TOTAL	1 478 181	1 466 000	1 433 000

THE PROGRAMME

OBJECTIVE

P.5. The objective is to ensure the provision of engineering, architectural and maintenance services for the Headquarters building, the Seibersdorf Laboratory, the Monaco Laboratory and the Trieste Centre, to provide registry and messenger services (including operation of the archives), purchasing and supply services, transportation services, security services, and housing and other staff services, and to operate the Agency's commissary and restaurant until the move to the Permanent Headquarters, and thereafter, to ensure the efficient operation of these common services. In the meantime, the main objective will be the completion of the Permanent Headquarters in accordance with the needs of the Agency, and the transfer of the Secretariat to the new premises.

THE ORIGINAL PROGRAMME

P.6. In 1978 the activities under this programme will continue as outlined in 567/P.10.

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	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 515 425	1 842 000	89 000	3 000	92 000	1 934 000
Overtime	17 021	25 000	1 800	200	2 000	27 000
Temporary assistance	376 833	645 000	44 000	97 500	141 500	786 500
Sub-total	1 909 279	2 512 000	134 800	100 700	235 500	2 747 500
Common staff costs	452 424	553 800	26 000	1 400	27 400	581 200
Travel	163	1 200	100	–	100	1 300
Scientific and technical contracts	10 748	100 000	10 000	(40 000)	(30 000)	70 000
Transfer of costs:						
Linguistic services	(2 372 614)	(3 168 000)	(171 000)	(63 000)	(234 000)	(3 402 000)
Printing and publishing services	–	1 000	100	900	1 000	2 000
TOTAL	–	–	–	–	–	–

SUMMARY OF MANPOWER

Table Q.2

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	-	1
P-5	6	6	6	-	6
P-4	16	16	16	-	16
P-3	25	25	23	-	23
P-2	1	1	1	-	1
Sub-total	49	49	47	-	47
GS	38	38	38	-	38
M&O	1	1	1	-	1
TOTAL	88	88	86	-	86

Summary of costs by programme component

Table Q.3

Programme component	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Interpretation services	469 680	857 000	39 000	91 000	130 000	987 000
Translation and records services	1 902 934	2 311 000	132 000	(28 000)	104 000	2 415 000
Sub-total	2 372 614	3 168 000	171 000	63 000	234 000	3 402 000
Less:						
Transfer to other programmes	(2 372 614)	(3 168 000)	(171 000)	(63 000)	(234 000)	(3 402 000)
TOTAL	-	-	-	-	-	-

Linguistic services: Breakdown of costs by programme

Table Q.4

	1976 Actual obligations	1977 Adjusted budget	1978 Estimate
Technical Assistance	136 146	148 000	170 000
Nuclear Power and Reactors	101 277	100 000	120 000
Nuclear Safety and Environmental Protection	240 631	157 000	228 000
Nuclear Explosions for Peaceful Purposes	29 440	35 000	35 000
Food and Agriculture	80 519	87 000	97 000
Life Sciences	38 248	60 000	41 000
Physical Sciences	85 049	74 000	66 000
The Laboratory	3 206	8 000	8 000
International Laboratory of Marine Radioactivity	-	1 000	1 000
Safeguards	81 140	156 000	131 000
Information and Technical Services	90 477	98 000	114 000
Policy Making Organs	814 169	1 091 000	1 168 000
Executive Management and Technical Programme Planning	20 097	19 000	20 000
Administration	229 737	262 000	280 000
General Services	938	9 000	2 000
Service Activities	2 380	6 000	2 000
Charges to meetings in various programmes	419 160	857 000	919 000
TOTAL	2 372 614	3 168 000	3 402 000

CHANGES IN COSTS

Q.2. As will be seen from Table Q.1 above, the total cost of the linguistic services will be charged to the programmes for which those services are provided. The cost of this programme is expected to increase by \$234 000, of which \$171 000 will be required to cover salary and other price increases and \$63 000 will be a programme increase.

Q.3. The programme increase of \$4400 in respect of salaries for established posts and common staff costs represents the additional cost of a post for which the 1977 budget provided funds only for part of the year. Small increases will be required in respect of overtime (\$200) and printing and publishing services (\$900). The programme increase of \$97 500 in respect of temporary assistance represents the additional requirement for free-lance interpretation. There will be a programme decrease of \$40 000 in respect of contractual translation services.

PRINTING AND PUBLISHING SERVICES

COSTS OF THE SUB-PROGRAMME

Summary by items of expenditure: Table Q.5

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 496 170	1 600 000	160 000	48 000	208 000	1 808 000
Overtime	16 275	41 500	1 500	(20 400)	(18 900)	22 600
Temporary assistance	72 814	97 000	4 000	(54 000)	(50 000)	47 000
Sub-total	1 585 259	1 738 500	165 500	(26 400)	139 100	1 877 600
Common staff costs	446 675	480 300	47 900	14 000	61 900	542 200
Travel	2 179	2 000	100	900	1 000	3 000
Representation and hospitality	—	200	—	—	—	200
Scientific and technical contracts	2 320	5 000	400	(400)	—	5 000
Common services, supplies and equipment	829 308	728 000	56 000	76 000	132 000	860 000
Transfer of costs:						
Linguistic services	2 380	6 000	100	(4 100)	(4 000)	2 000
Printing and publishing services	(2 807 221)	(2 843 000)	(264 000)	(140 000)	(404 000)	(3 247 000)
Data processing services	46 005	43 000	4 000	10 000	14 000	57 000
TOTAL	106 905	160 000	10 000	(70 000)	(60 000)	100 000

SUMMARY OF MANPOWER

Table Q.6

Grade of post	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
D	1	1	1	—	1
P-5	1	1	1	—	1
P-3	5	6	5	—	5
P-2	4	7	8	—	8
P-1	4	—	—	—	—
Sub-total	15	15	15	—	15
GS	101	102	102	6	108
M&O	14	14	14	—	14
TOTAL	130	131	131	6	137

Printing and Publishing services: Breakdown of costs by programme

Table Q.7

	1976 Actual obligations	1977 Adjusted budget	1978 Estimate
Technical Assistance	34 093	38 000	42 000
Nuclear Power and Reactors	343 686	408 000	390 000
Nuclear Safety and Environmental Protection	319 654	250 000	318 000
Nuclear Explosions for Peaceful Purposes	23	28 000	18 000
Food and Agriculture	172 229	224 000	231 000
Life Sciences	158 066	232 000	221 000
Physical Sciences	197 405	305 000	360 000
The Laboratory	28 919	15 000	15 000
International Centre for Theoretical Physics	181 560	150 000	150 000
International Laboratory of Marine Radioactivity	2 683	3 000	3 000
Safeguards	123 710	80 000	135 000
Information and Technical Services	561 234	442 000	606 000
Policy Making Organs	173 773	188 000	204 000
Executive Management and Technical Programme Planning	4 649	7 000	8 000
Administration	313 495	257 000	324 000
General Services	112 077	108 000	140 000
Service Activities	—	1 000	2 000
Charges to meetings in various programmes	79 965	107 000	80 000
Transfer of costs to other programmes	2 807 221	2 843 000	3 247 000
Reimbursable services	106 905	160 000	100 000
TOTAL	2 914 126	3 003 000	3 347 000

CHANGES IN COSTS AND MANPOWER

Costs

Q.4. As will be seen from Table Q.5 above, the cost of printing and publishing services will be charged to the programmes for which services are provided, except the reimbursable services provided for UNIDO under the IAEA/UNIDO services agreement, which remain as a charge against this programme.

Q.5. The total cost of this programme is expected to increase by \$344 000, of which \$274 000 will be required to cover salary and other price increases and \$70 000 is a programme increase.

Q.6. The programme increase of \$62 000 in respect of salaries for established posts and common staff costs is for the addition of six GS posts in the Printing section. Programme reductions will be possible in respect of overtime (\$20 400) and temporary assistance (\$54 000), mainly as a consequence of the addition of new GS posts. A programme increase of \$900 is foreseen in respect of travel, and a reduction of \$400 in respect of scientific and technical contracts for external contractual editing.

Q.7. The programme increase of \$76 000 in respect of common services, supplies and equipment is the net result of the shift of the cost of photocopying services from the Division of General Services to the Printing services, partly offset by a reduction in the requirement for external printing.

Q.8. A programme increase of \$10 000 is foreseen in respect of data processing services, partly offset by a reduction of \$4100 for linguistic services. The amount of \$ 140 000 which appears as a programme reduction in respect of printing and publishing services reflects an increase in the allocation of such service costs to other programmes.

Q.9. It is expected that income from the sale of Agency publications, not including INIS and CINDA publications, will amount to \$490 000 in 1978. Income from UNIDO for printing services is expected to be \$100 000.

Manpower

Q.10. As can be seen from Table Q.6 above, the addition of six GS posts is foreseen for 1978. Detailed justifications are provided in Annex IV.

R. TRANSFER OF THE AGENCY TO ITS PERMANENT HEADQUARTERS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table R.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977				1978 Estimate
			Price	Programme	Transfer to Permanent HQ	Total	
Common services, supplies and equipment	—	3 350 000	—	—	(2 550 000)	(2 550 000)	800 000
TOTAL	—	3 350 000	—	—	(2 550 000)	(2 550 000)	800 000

Summary of estimated agency costs by major category

Table R.2

Item	Total	1977 Budget	1978 Estimate	1979 Preliminary
Office furniture	415 000	130 000	130 000	155 000
Library equipment	235 000	90 000	70 000	75 000
Simultaneous interpretation	970 000	970 000	—	—
Sound transmission of proceedings from conference rooms	110 000	110 000	—	—
Conference room furniture	595 000	510 000	85 000	—
Registry equipment	95 000	55 000	40 000	—
Beverage stations and service facilities	45 000	—	45 000	—
Special video equipment	190 000	190 000	—	—
Projection equipment	180 000	180 000	—	—
Purchase and supply storage equipment	35 000	15 000	—	20 000
Restaurant and kitchen equipment	765 000	610 000	155 000	—
Wired intercom, loudspeaker and alarm system	135 000	135 000	—	—
Security surveillance system	50 000	25 000	—	25 000
Direction and other signs	75 000	75 000	—	—
Engineering, building management and maintenance equipment	85 000	30 000	20 000	35 000
Commissary	170 000	70 000	25 000	75 000
Lounges with refreshment areas	65 000	—	—	65 000
Medical	110 000	—	110 000	—
Sub-total	4 325 000	3 195 000	680 000	450 000
Moving cost	300 000	—	50 000	250 000
Unforeseen	225 000	155 000	70 000	—
TOTAL	4 850 000	3 350 000	800 000	700 000

R.1. In the budget document for 1977 a full description of the facilities, detailed cost estimates and justifications were included with regard to the Agency's transfer to its permanent headquarters (GC (XX)/567/S.1 to S.34). A recent review of requirements in the list of information available has indicated that the estimates as presented in the 1977 budget are still valid.

R.2. Due to some delays in the construction work, however, it seems appropriate to defer the acquisition of some of the movable items of equipment not required before actual occupancy of the new premises to 1979. Accordingly, the preliminary estimate for 1978 which was \$ 1 500 000 was reduced to \$ 800 000, which is the amount requested for 1978. The balance of \$ 700 000 will be requested for 1979 as a preliminary estimate.

DETAILS OF EQUIPMENT AND COSTS

R.3. In the paragraphs that follow a brief description is given of the various items required in 1978.

(A) OFFICE FURNITURE \$ 130 000

R.4. Purchase of furniture will be undertaken in 1978 for delivery directly to the Office Tower. Purchase of furniture for delivery in 1979 has been deferred to that year.

(B) LIBRARY EQUIPMENT \$ 70 000

R.5. The estimate of \$ 70 000 provides for the acquisition of steel shelving and wooden shelving required for the Library. The purchase of movable carrels, microfiche equipment and display units has been deferred to 1979.

(C) CONFERENCE ROOM FURNITURE \$ 85 000

R.6. Orders for conference room chairs will have to be placed in 1978 so that delivery may be effected in 1979. The estimate of \$ 85 000 provides for the purchase of 400 conference chairs. No additional requirements are foreseen for 1979.

(D) REGISTRY EQUIPMENT \$ 45 000

R.7. The estimate provides for the equipping of messenger stations and the mail and pouch units. Delivery of these items of equipment is foreseen for 1978.

(E) BEVERAGE STATIONS AND SERVICE FACILITIES \$ 45 000

R.8. It is planned to install all beverage stations and the service facilities in the office tower in 1978.

(F) RESTAURANT AND KITCHEN EQUIPMENT \$ 155 000

R.9. The estimate provides for the Agency's share of the installation of the preparation kitchen and self-service kitchen in an amount of \$ 62 000 and the acquisition of the restaurant equipment in an amount of \$ 93 000.

(G) ENGINEERING AND MAINTENANCE EQUIPMENT \$ 20 000

R.10. The preliminary estimate for 1978 of \$ 55 000 is reduced by a deferment to 1979 of expenditure of \$ 35 000. The present estimate of \$ 20 000 covers the Agency's share for the purchase of part of the building maintenance equipment required.

(H) COMMISSARY \$ 25 000

R.11. The estimate of \$ 25 000 covers the Agency's share for deep-freezing and refrigeration equipment. The purchase of movable items of equipment has been deferred to 1979.

(I) MEDICAL \$ 110 000

R.12. Orders for medical equipment will have to be placed in 1978 so that delivery may be effected in 1979. The amount covers the purchase of general equipment at \$ 16 000, special equipment at \$ 32 000 and X-ray equipment at \$ 62 000.

(K) MOVING \$ 50 000

R.13. It is foreseen that the transfer of the Agency to its Permanent Headquarters will start late in 1978. Whereas major expenditures of \$ 250 000 are expected in 1979, an amount of \$ 50 000 is provided for in 1978.

(L) UNFORESEEN \$ 70 000

R.14. A contingent provision of \$ 70 000 is included in the estimate for 1978 to cover unforeseen expenditure related to the transfer of the Agency.

S. ADJUSTMENT OF PROGRAMME COST ESTIMATES

Table S.1

Item of expenditure	1976 Actual obligations	1977 Adjusted budget	Increase or (decrease) from 1977			1978 Estimate
			Price	Programme	Total	
Adjustment of programme cost estimates	-	-	2 100 000	-	2 100 000	2 100 000
TOTAL	-	-	2 100 000	-	2 100 000	2 100 000

CHANGES IN COSTS

S.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 dollar. However, in the light of the current situation and the uncertainty about the future development of the exchange rate and with a view to avoiding an eventual supplementary budgetary appropriation, an amount of \$ 2.1 million is provided under this heading; the estimate of \$ 2.1 million in the table above provides for increased expenditures on the basis of an exchange rate of 17.40 schillings to the dollar. It should be emphasized that these funds are to be used only with the prior approval of the Bord.

ANNEX I

CONFERENCES, SYMPOSIA AND SEMINARS

Within the limits of the appropriations and subject to the requirements of the individual programmes as outlined for 1978, it is planned to hold the meetings listed below. All meetings were considered by the Scientific Advisory Committee. The reference following each meeting is to the relevant paragraph in the programme in document GC(XX)567. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

Nuclear power and reactors

- | | | |
|----|--|-------|
| 1. | Symposium on fuel element cladding materials including zirconium | I.59 |
| 2. | Symposium on control and instrumentation of nuclear power plants | I.119 |
| 3. | Symposium on design and construction of, and operating experience with, demonstration liquid metal fast breeder reactors | I.141 |
| 4. | Seminar on quality assurance of nuclear power plants | I.60 |
| 5. | Seminar on domestic participation in nuclear power programmes | I.98 |

Nuclear safety and environmental protection

- | | | |
|----|--|-------|
| 6. | Symposium on advances in radiation protection monitoring | J.34 |
| 7. | Symposium on the behaviour of tritium in the environment | J.107 |
| 8. | Symposium on the decommissioning of nuclear facilities | J.119 |
| 9. | Symposium on the problems associated with the export of nuclear power reactors (in co-operation with the Division of Nuclear Power and Reactors) | J.139 |

Food and agriculture

- | | | |
|-----|--|------|
| 10. | Symposium on protein improvement in cereals and grain legumes | D.43 |
| 11. | Symposium on isotopes and radiation in research on soil, plant and water relationships | D.15 |
| 12. | Seminar on utilization of induced mutations for crop improvement (Africa) | |

Life sciences

- | | | |
|-----|---|------|
| 13. | Symposium on the late biological effects of ionizing radiation | E.79 |
| 14. | Symposium on nuclear activation techniques in the life sciences | E.36 |

Physical sciences

- | | | |
|-----|--|------|
| 15. | Conference on plasma physics and controlled nuclear fusion research | F.34 |
| 16. | Symposium on isotope techniques in hydrology | F.74 |
| 17. | Seminar on isotope techniques in water resources development in the African region | |
| 18. | Seminar on the development of nuclear theory and computer programmes for application | F.99 |

International Centre for Theoretical Physics

- | | | |
|-----|--|------|
| 19. | Winter college and workshop on solid state physics | H.11 |
| 20. | Topical meetings on high energy and particle physics | H.15 |
| 21. | Topical meeting on diffraction physics | — |
| 22. | Workshop on cosmology and field theory | — |
| 23. | Meetings on biophysics | H.34 |
| 24. | Course on nuclear theory and nuclear reactors | H.17 |

Safeguards – Development

- | | | |
|-----|---|------|
| 25. | International symposium on the safeguarding of nuclear material | N.50 |
| 26. | Basic Training Seminar for State Systems of Accounting and Control | — |
| 27. | Advanced Training Seminar for State Systems of Accounting and Control | — |

Safeguards – Information treatment

- | | | |
|-----|--|------|
| 28. | Safeguards Training Seminar (for inputters in the Safeguards ADP System) | N.67 |
|-----|--|------|

Information and technical services

- | | | |
|-----|---|---|
| 29. | Regional training seminar of the International Nuclear Information System | — |
|-----|---|---|

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 1978, it is planned to hold the meetings listed below. The reference following each meeting is to the relevant paragraph in the programme in document GC (XX)/567. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

Nuclear power and reactors

1.	Technical committee on uranium exploration activities	I.30
2.	Technical committee on common standards of reporting uranium	I.30
3.	Advisory group on uranium geology in Latin America	I.31
4.	Technical committee on natural fission reactor	—
5.	Technical committee on reprocessing of irradiated fuels	I.64
6.	Technical committee on fuel performance and technology (International Working Group)	I.56
7.	Advisory group on man-power development and training needs	I.98
8.	Technical committee on plant control and instrumentation (International Working Group)	I.117
9.	Technical committee on reliability of reactor pressure vessel components	I.117
10.	Technical committee on nuclear heat applications	I.128
11.	Technical committee on liquid metal fast breeder reactors	I.142
12.	Technical committee on high-temperature reactors	I.143
13.	Advisory group on technology of reactor materials for advanced nuclear applications	I.147
14.	Technical committee on physics problems in reactor shieldings (Joint IAEA/NEA)	I.154
15.	Technical committee: Specialists' meeting on neutron spectrum unfolding codes	I.156
16.	Technical committee on reactor radiation measurements (International Working Group)	I.156
17.	Technical committee: International liaison group on MHD electrical power generation (Joint IAEA/UNESCO)	I.161
18.	Technical committee: Annual closed cycle MHD meeting	I.161

Nuclear safety and environmental protection

19.	Technical committee on revision of advisory material on the application of the IAEA transport regulations	—
20.	Advisory group on the revision of the basic safety standards for radiation protection (Safety Series No.9 — with WHO, ILO and NEA)	J.22
21.	Advisory group on the revision of code of practice on radiation protection in mining and milling of radioactive ores (Safety Series No.26 — with ILO and WHO)	J.22
22.	Advisory group on radiological protection services for fuel reprocessing plants	J.58
23.	Advisory group on the safe handling of selected transuranium elements	J.32
24.	Advisory group on questions of mutual co-operation between countries in the Danube catchment area (continuation)	J.42
25.	Advisory group on characteristics of solidified high-level radioactive wastes with respect to their disposal environment	J.87
26.	Advisory group on appraisal of radiological safety programme in nuclear facilities	—
27.	Advisory group on waste management at uranium fuel fabrication facilities	J.88
28.	Advisory group on general problems regarding disposal of radioactive waste into the sea	J.109
29.	Technical committee on environmental impacts of advanced power reactor systems	—
30.	Technical committee on use of geological formations for placement of radioactive wastes (continuation)	J.87

31.	Advisory group on safety research and development	—
32.	Advisory group on site licensing criteria and methodologies for the safety assessment of geological disposal	J.87
33.	Advisory group on waste management at uranium refining facilities	J.89
34.	Advisory group on radioactive particulate filtration, including filter testing	—
35.	Advisory group on site selection criteria, control, operation and decommissioning of radioactive waste burial grounds (continuation)	—
36.	Technical committee on methodology for assessment of radioactive, non-radioactive and thermal discharges and disposals on a regional and global basis (continuation)	—
37.	Advisory group on management of tailings from uranium mining and milling	J.89
38.	Advisory group on safe handling and storage of intermediate and high-level liquid wastes	—
39.	Advisory group on waste management at uranium enrichment facilities	—
40.	Technical committee on methods and techniques for radioiodine removal in nuclear facilities, including emergency situations	—
41.	Technical committee on removal, storage and disposal of krypton-85	—
42.	Technical committee on handling tritium-bearing effluents and wastes	—
43.	Technical committee on high-level and alpha-bearing wastes (continuation)	J.87
44.	Advisory group on containers' specifications for ocean dumping	—
45.	Advisory group on certain procedures and specifications for ocean dumping	—
46.	Technical committee to review guides and codes for geological disposal of radioactive waste	—
47—	16 Technical Review Committee meetings	J.132
62.		
63—	4 Senior Advisory Group meetings	J.132
66.		

Nuclear explosions for peaceful purposes

67.	Advisory group on the health and safety aspects of nuclear explosions for peaceful purposes	M.9
-----	---	-----

Food and agriculture

68.	Advisory group on nuclear techniques in soil moisture and fertility studies	D.21
69.	Advisory group on the use of isotopes and radiation in chemical residues and pollution	D.99
70.	Advisory group on radiation preservation of food (fish irradiation)	D.118

Life sciences

71.	Advisory group on instrumentation for nuclear medicine in developing countries	E.17
72.	Advisory group on standardization and dose comparisons in the International Network of SSDLs	E.53
73.	Advisory group on radiation sterilization of medical and biological products for Asia and the Far East region	E.69
74.	Advisory group on accelerator-based analysis of environmental pollutants in man	E.100
75.	Advisory group on co-ordinated research programme of in-vitro assay techniques	—

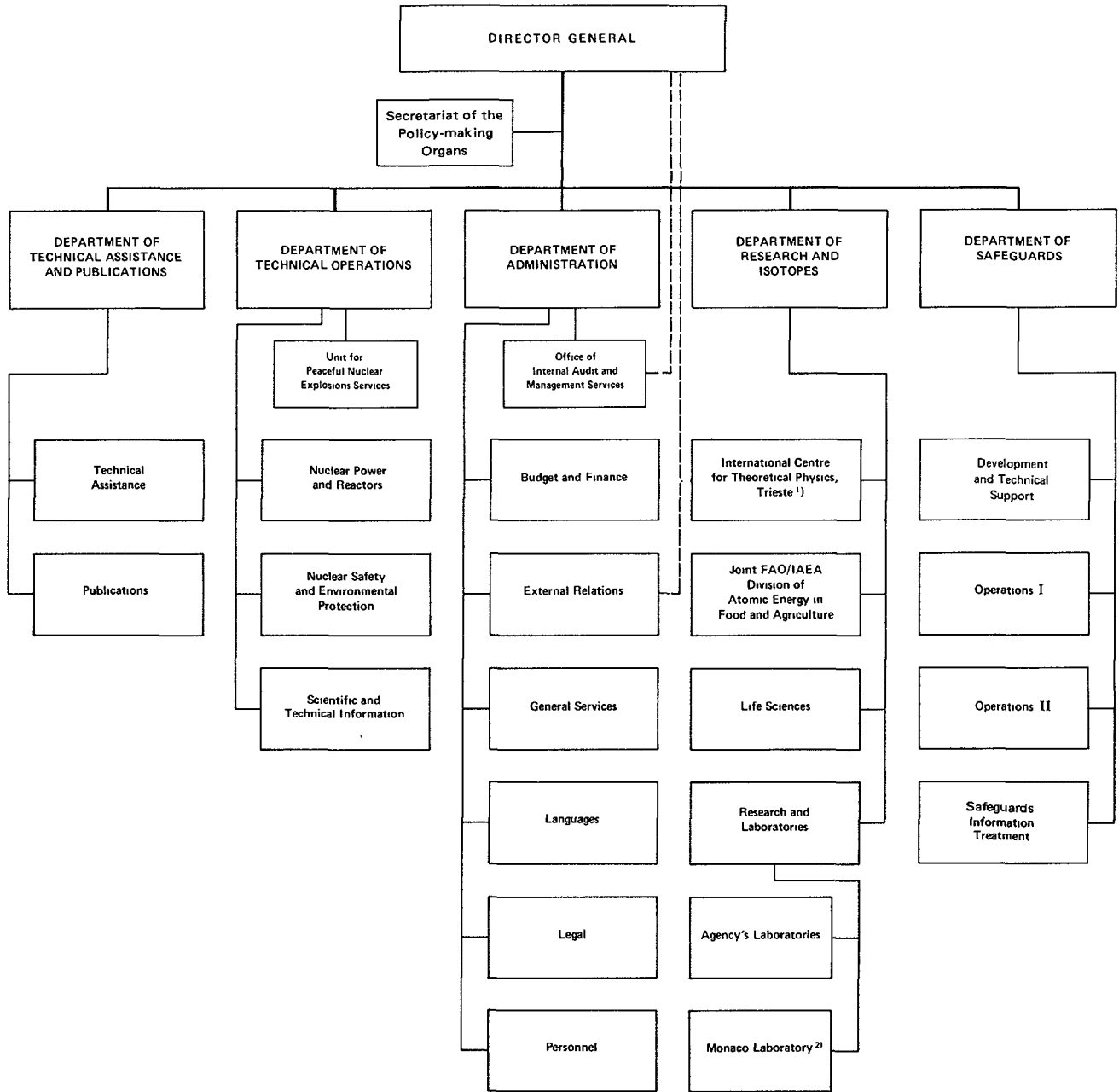
Physical sciences

76.	Advisory group on research reactor renewal and upgrading programmes	F.29
77.	Technical committee on technology of inertial confinement experiments	F.35
78.	Advisory group on disruptive instabilities	F.35

79.	Advisory group on practical aspects of energy dispersive X-ray fluorescence analysis	F.45
80.	Advisory group on industrial radioisotope economics	—
81.	Advisory group on isotope techniques in arid zones or in problems of erosion and sedimentation	F.83
82.	Advisory group on isotope techniques in geothermal prospecting	F.83
83.	Technical committee: 10th meeting of the International Nuclear Data Committee	F.90
84.	Advisory group on isotopic nuclear data requirements in science and technology/industry	F.103
85.	Advisory group on atomic and molecular data in fusion	F.109
<i>International Centre for Theoretical Physics</i>		
86.	Scientific Council	
<i>Safeguards – Programme co-ordination</i>		
87–		
88.	Standing Advisory Group on Safeguards Implementation (SAGSI) (two sessions)	N.15
<i>Safeguards – Development</i>		
89.	Advisory group on evaluation of safeguards effectiveness	N.37
90.	Advisory group on review of the status and development of safeguards techniques and identification of the long-range objectives for such development in 1979–1984	N.40/41
91.	Advisory group on safeguarding of reprocessing plants	N.43
92.	Advisory group on relationship between States' systems of accounting for and control of nuclear material and IAEA safeguards	N.44
<i>International Nuclear Information System</i>		
93.	Technical committee: Annual consultative meeting of INIS liaison officers	—
94.	Technical committee on INIS Research in Progress file	—
<i>Executive management and technical programme planning</i>		
95–		
96.	Scientific Advisory Committee (two sessions)	B.1
<i>Administration – Legal</i>		
97.	Standing Committee on civil liability for nuclear damage	—

ANNEX III

ORGANIZATIONAL CHART



1) Jointly operated by the Agency and UNESCO.

2) With the increasing participation of UNESCO and UNEP.

ANNEX IV

THE MANNING TABLE

Manning Table for 1978

Table 1

	DG	DDG	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	—	1	1	—	5	3	—	8
Secretariat of the Policy-making Organs	—	—	1	—	2	—	—	—	3	3	—	6
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	5	4	5	2	20	39	—	59
Division of General Services	—	—	1	2	2	3	1	—	9	71	129	209
Division of External Relations	—	—	2	6	7	7	4	—	26	26	—	52
Division of Languages	—	—	1	5	11	20	1	—	38	37	1	76
Legal Division	—	—	1	3	2	1	1	—	8	5	—	13
Division of Personnel	—	—	1	2	5	2	—	—	10	30	—	40
Department of Research and Isotopes	—	1	—	1	—	—	1	—	3	2	—	5
Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture	—	—	—	7	6	1	1	—	15	8	—	23
Division of Life Sciences	—	—	1	5	7	1	1	—	15	10	—	25
Division of Research and Laboratories	—	—	1	6	10	6	2	1	26	17	—	43
The Agency's Laboratory	—	—	—	4	14	5	4	2	29	60	24	113
The Monaco Laboratory	—	—	—	3	2	1	—	2	8	15	—	23
International Centre for Theoretical Physics	—	—	—	1	1	3	—	—	5	17	—	22
Department of Safeguards	—	1	—	2	2	2	—	—	7	8	—	15
Division of Development*	—	—	1	9	13	1	—	—	24	11	—	35
Divisions of Operations	—	—	2	15	37	33	3	—	90	27	—	117
Division of Safeguards Information Treatment	—	—	1	3	6	3	—	—	13	18	—	31
Department of Technical Assistance and Publications	—	1	—	1	2	1	—	—	5	7	—	12
Division of Technical Assistance	—	—	1	7	9	4	2	—	23	33	—	56
Division of Publications	—	—	1	1	—	5	8	—	15	108	14	137
Department of Technical Operations	—	1	—	—	—	1	—	1	3	2	—	5
Unit for Peaceful Nuclear Explosions Services	—	—	—	1	1	—	—	—	2	1	—	3
Division of Nuclear Safety and Environmental Protection	—	—	1	16	14	3	—	—	34	25	—	59
Division of Nuclear Power and Reactors	—	—	1	11	14	4	2	—	32	16	—	48
Division of Scientific and Technical Information	—	—	1	4	10	11	3	4	33	77	—	110
TOTAL	1	5	21	120	183	125	42	12	509	682	168	1359

* From 1 May 1977, the Division of Development and Technical Support.

**SUMMARY OF MANPOWER BY GRADE OF POST
AND BY DEPARTMENT**

Table 1.a

	Number of established posts				
	1976 Adjusted	1977	1977 Adjusted	Change	1978
Grade of post					
DG	1	1	1	—	1
DDG	5	5	5	—	5
D	20	21	21	—	21
P-5	109	116	116	4	120
P-4	153	165	165	18	183
P-3	112	116	116	9	125
P-2	41	43	43	(1)	42
P-1	22	14	14	(2)	12
Sub-total	463	481	481	28	509
GS	614	648	648	34	682
M&O	155	168	168	—	168
TOTAL	1232	1297	1297	62	1359
Department					
				P	GS
Office of the Director General	6	12	12	1	1
Department of Administration	436	452	452	2	9
Department of Research and Isotopes	248	253	253	1	—
Department of Safeguards	138	161	161	23	14
Department of Technical Assistance and Publications	193	196	196	1	8
Department of Technical Operations	211	223	223	—	2
TOTAL	1232	1297	1297	28	34

New Posts for 1978

Table 2

	DG	DDG	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	—	2
Department of Administration												
Division of Budget and Finance	—	—	—	—	1	1	—	—	2	3	—	5
Division of External Relations	—	—	—	—	—	—	—	—	—	3	—	3
Division of Personnel	—	—	—	—	—	—	—	—	—	3	—	3
Department of Research and Isotopes												
Division of Research and Laboratories	—	—	—	—	—	1	—	—	1	—	—	1
Department of Safeguards	—	—	—	—	—	1	—	—	1	1	—	2
Division of Development*	—	—	—	1	3	—	—	—	4	3	—	7
Divisions of Operations	—	—	—	—	13	4	—	—	17	6	—	23
Division of Safeguards Information Treatment	—	—	—	—	1	—	—	—	1	4	—	5
Department of Technical Assistance and Publications	—	—	—	1	—	—	—	—	1	—	—	1
Division of Technical Assistance	—	—	—	—	—	—	—	—	—	2	—	2
Division of Publications	—	—	—	—	—	—	—	—	—	6	—	6
Department of Technical Operations												
Division of Scientific and Technical Information	—	—	—	—	—	—	—	—	—	2	—	2
TOTAL	—	—	—	3	18	7	—	—	28	34	—	62

ADDITIONAL PROFESSIONAL POSTS IN 1978

Office of the Director General

As indicated in the Budget for 1977 (567/A.3 and B.2) one of the two Director posts was transferred to Policy-making Organs. It has now become necessary to re-establish the position of a senior assistant to the Director General for whom a P-5 post is required. (1 P-5)

Division of Budget and Finance

Because of the increasing workload, new activities and the need to strengthen accounting control in several areas, a senior professional accountant (P-4) with broad practical experience will be required. The additional post would better assure adequate accounting control over the special accounts entrusted to the Agency by other United Nations organizations and various Member States, accurate and timely billings of accounts receivable, a strengthening of control over off-site activities, improved accounting for fixed assets and expendable property, and the capability required to handle the increased workload and complicated financial issues of the common services activities at the Donaupark. The additional post would also provide the possibility to strengthen internal control by the segregation of responsibilities which are now overly centralized. (1 P-4)

The need to initiate and strengthen several activities in the area of establishment of policy and procedures which is outside of the main stream of the Division's day-to-day production work, will require an additional P-3 post. Specific areas requiring attention or increased efforts are the design and implementation of additional improvements in the computerized accounting and budgetary system; the development, issuance and maintenance of a manual of accounting and budget procedures expanding on the present Interim Financial Instructions; an in-depth evaluation of and improvement in cost measurement and allocation activities; an improved fund structure for extra-budgetary resources; an in-depth evaluation of the financial rules and regulations, and numerous other areas. (1 P-3)

Division of Research and Laboratories

The number of data libraries maintained by the Nuclear Data Section (NDS) and the number of requests for data services have increased steadily over the years. Over the period 1 April 1975 – 1 April 1976 the number of such requests received and the number of data sets disseminated have doubled. In addition, the developing nuclear energy programmes in Member States make it necessary to intensify co-ordination and the provision of advice on the use of nuclear data provided by NDS in order to avoid a duplication of efforts. The services rendered by NDS to Member States cannot be improved without additional manpower. An additional P-3 post will therefore be required primarily for the neutron nuclear data services which at the eighth meeting of the International Nuclear Data Committee have been identified as an area of high priority. (1 P-3)

Department of Safeguards

With the increased demands on the senior staff in the Section for Standardization and Administrative Support, whose time is taken up to a very large extent by the preparation, co-ordination, negotiation, review and further follow-up in respect of subsidiary arrangements (including facility attachments), it has become necessary to add a P-3 staff member who would in particular: devise and codify administrative procedures in the field of safeguards, with a view, especially, to their standardization; render non-technical support to safeguards operational activities and edit documents to be issued by the Department; and collect information in the area of safeguards and process it for use in reports, training seminars, lectures and articles. (1 P-3)

Division of Development and Technical Support

The workload of the Field Operation Section has increased during the last years considerably, due to the participation in preparatory work for the Standing Advisory Group on Safeguards Implementation, the Special Safeguards Implementation Report and the implementation of Agency safeguards in EURATOM countries. One additional senior professional officer (at P-5 level) will be needed who has extensive experience as an inspector and who has the capability to evaluate inspection data including statistical evaluations using computers. (1 P-5)

Responsibility for the development of measurement practices and procedures for safeguards implementation has been added to the Methods and Techniques Section as well as the responsibility for improvement of procedures for real time detection of containment and surveillance system failure. These new activities, the increasing support to the Divisions of Operations by participation of experts for non-destructive assay techniques in inspections and the testing and implementation of safeguards methods requires an additional P-4 post. (1 P-4)

The workload of the System Studies Section has been significantly increased due to the need to perform special studies on safeguards systems for new types of facilities. Studies for safeguarding fast breeder reactors, other sodium cooled reactors, high temperature reactors, uranium-235 enrichment plants, and spent fuel reprocessing facilities are required for the successful implementation of IAEA/NPT safeguards in Japan, EURATOM, the United Kingdom and the United States of America. In addition, systematic studies on the influence of the totality of nuclear activities in a State on IAEA safeguards are required to start soon. Two additional P-4 staff members are required for these purposes. (2 P-4)

Divisions of Operations

For each nuclear facility or accountability area under safeguards the inspection effort in man-days per year is calculated. Together with the man-days for travel, discussions with local authorities, and the Headquarters' time spent for the preparations of inspections, reporting on inspections, elaboration of specific safeguards implementation practices, country officers' duties and other tasks, the total man-power requirements are estimated. (13 P-4)
(4 P-3)

For 1978 the evaluation of the normal growth of safeguarded nuclear materials, especially the increasing throughput of reprocessing and fuel fabrication plants, the starting of new power plants in

States under safeguards as well as the full implementation of safeguards in the EURATOM non-nuclear weapon States and the starting of the application of safeguards under the United Kingdom and United States voluntary offers will require additional inspectors (13 at P-4, 4 at P-3 level).

Division of Safeguards Information Treatment

The expected growth in the volume of data flow through the computerized Safeguards Information System resulting both from the increase in the number of facilities in States currently reporting and the addition of reporting by EURATOM, the United Kingdom and the United States will require one additional Professional post and one additional GS post. The Professional staff member, at the P-4 level, will have to handle the continuing development activities of the system. (1 P-4)

Department of Technical Assistance and Publications

The functions of the Head, Programme Co-ordination Section and the Deputy Director, Division of Technical Assistance were performed by one person until his recent retirement. The increase in the technical assistance programme makes it impossible to continue with this arrangement. An additional P-5 post is therefore required for the Section Head who would ensure programme and policy co-ordination on development aid programmes, prepare financial plans and exercise financial control, maintain liaison at a senior level with UNDP, multi- and bilateral development aid programmes, and perform other related tasks. (1 P-5)

Total (28)

ADDITIONAL GS POSTS IN 1978

Office of the Director General

As a result of a redeployment of staff in the Office of the Director General there was a net reduction of one GS post for this programme under the Budget for 1977 (567/B.2). The proposed re-establishment of a Professional post and the increase in the overall workload in the Director General's office will make it necessary to add a GS post in 1978. (1 GS)

Division of Budget and Finance

Payment, receipt, and journal vouchers have increased from 22 103 in 1974 to 28 126 in 1976, an increase of 27%. While this is the principal indicator of the increased clerical workload in the Division, comparable or larger increases have also resulted from expanded and new efforts directed towards strengthening the overall operation. Over three man-years of temporary assistance were needed in 1976 to meet this increased workload and it is to regularize the situation that three additional GS posts are required. (3 GS)

Division of External Relations

One additional GS post will be required to regularize the post of a secretary which at present is charged against temporary assistance in the Public Information Section. A second clerical/secretarial post will be required for the same Section to provide administrative support for the team dealing with the public acceptance problem. In addition, a third GS post will be required for the Conference Service Section as a consequence of the increase in the number of meetings organized by the Agency. (3 GS)

Division of Personnel

The increase in the number of staff in the two organizations to be catered for by the Joint Medical Service and the intensification and expansion of medical care will require the addition of one GS post for a nurse in 1978. At present, the required standard of medical care can only be maintained by the employment of a part-time nurse under temporary assistance. In addition, two GS posts for clerk/typists will be necessary to cope with the steadily increasing personnel work which is attributable to the overall increase in the Agency's staff and the extension of personnel services. The two clerk/typists will mainly assist in data control, recruitment, post classification and in-service administration. (3 GS)

Department of Safeguards

The increase in the workload results in the need for one additional GS secretary to assist both the Section for Standardization and Administrative Support and the Office of the Deputy Director General. (1 GS)

Division of Development and Technical Support

Two additional clerical GS staff members will be needed to assist the Professional staff of the Field Operations Section in the statistical evaluation of safeguards inspection data and information originating from the Quality Control Programme. This work will increase considerably due to the implementation of Agency safeguards in EURATOM countries and the general expansion of Agency safeguards activities. One additional clerk at the GS level will be required because the work associated with instrumentation has substantially increased with the increasing use and number of items of safeguards equipment. The performance of stability and calibration checks of the non-destructive assay instruments, operability and reliability tests on assembled equipment such as surveillance devices, the training of safeguards inspectors and the preparation of equipment set-up and assistance during its use make the additional establishment of this additional GS post necessary. (3 GS)

Divisions of Operations

Due to the increased workload, six additional GS staff members will be needed as nuclear material accountants and for clerical and secretarial assistance. (6 GS)

Division of Safeguards Information Treatment

The expected growth in the volume of data flow through the computerized Safeguards Information System will require the services of four additional GS staff members. Of those, three would be safeguards clerks and input/output editors to perform the necessary data input, error corrections and output analysis and one would be a secretary to assist the Division. (4 GS)

Division of Technical Assistance

In view of the increase in large-scale UNDP projects administered by the Latin America Section an additional GS post will be required in 1978. The addition of this post would regularize a temporary assistance post which has been assigned to this Section to cope with the increased workload. A second GS post will be required for the Training courses Section. (2 GS)

Division of Publications

It is estimated that the number of pages printed for INIS will almost double in 1977 and treble in 1978. The increase in workload can only be coped with by adding additional manpower to the Printing Section. On the basis of the present workload (which even now requires continuously temporary assistance) and the expected increase, six additional GS posts would be required for two printers, two book-binders, one photographer and one distribution clerk. (6 GS)

Division of Scientific and Technical Information

Over 200 computer programmes are in current use in the Computer Section. Many of the programmes are in need of standardized documentation which can only be done if programmers receive substantial clerical support. For this purpose one additional GS post for a programme documentalist will be required. The other GS post will be required for the Scientific Journals Unit. The number of papers submitted for publication in the journal, Nuclear Fusion, increases by 30 to 50 every year. The growth will be accelerated if it is decided to broaden the scope of the journal. The increase in the workload cannot be met with the existing manpower. (2 GS)

Total (34)

Reclassification of existing posts

Table 3

	DG	DDG	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 Personnel	-	-	-	-	1	(1)	-	-	-	-	-	-
Department of Technical Operations												
Division of Scientific and Technical Information												
INIS	-	-	-	1	(1)	-	-	-	-	-	-	-
Computer	-	-	-	-	-	2	(1)	(1)	-	-	-	-
Journals	-	-	-	-	-	1	(1)	-	-	-	-	-
TOTAL	-	-	-	1	-	2	(1)	(2)	-	-	-	-

RECLASSIFICATION OF PROFESSIONAL POSTS IN 1978

Division of Budget and Finance

One P-1 to P-2 (Research Contract Officer)

(1 P-2)

The Research Contract Officer has been assigned additional, substantial responsibility for the day-to-day operation of the research contract programme, including the financial control of all research contracts funds which now amount to some \$1.5 million per annum. He also deputizes for the P-5 Section Head during his absence and in this respect acts as Secretary to the Committee for Contractual Scientific Services. The present grading of this post at the lowest Professional level does not take account of the increased responsibilities and duties of the incumbent.

Division of Personnel

One P-3 to P-4 (Medical Officer)

(1 P-4)

The steady increase in the number of staff members in the Agency and UNIDO to be serviced by the Joint Medical Service has necessitated a distribution of work whereby each of the two medical officers does the same substantive medical work, apart from the administrative functions which are the responsibility of the Chief Medical Officer. In addition the Joint Medical Service will soon be assigned the responsibility for the surveillance of staff members exposed to radiation in the Agency. The present grade of the medical officer does not take into account the high level of responsibility assigned to the post and it is not in line with the classification of comparable posts in other United Nations organizations, as a recent study carried out under the auspices of the International Civil Service Commission shows.

Division of Scientific and Technical Information

One P-4 to P-5 (INIS System Analyst)

(1 P-5)

Within the context of his general responsibility to the Head of the INIS Section for planning and co-ordinating technical aspects of INIS, the duties of the Systems Analyst have increased significantly over the last two years. This increase can be attributed mainly to the continued growth and development of INIS, as exemplified by its evolution into an international abstracting service and by its adoption of such major new information processing techniques as optical character recognition, teleprocessing and computerized photocomposition. The Systems Analyst has played and continues to play a major role in incorporating these developments into the technical framework of INIS.

In addition, as a result of a major reallocation of duties in the Section, the Systems Analyst is now responsible for planning the meetings related to the INIS programme. He also works along with the Head of the Section in formulating the INIS programme and budget and in planning the Section's work schedules, acquisition of equipment and priority assignments. The present grading of the post is not in line with the responsibilities of the incumbent.

One P-2 to P-3 (Managing Editor)

(1 P-3)

The managing editor is responsible for the two periodicals, Nuclear Fusion and Atomic Energy Review. The responsibilities of the managing editor have substantially increased in scope and complexity as a result of the increase in the number of printed pages and a change in the publishing cycle. Over the period 1971–1975 the number of printed pages of Nuclear Fusion has nearly doubled, and in 1978 it will be changed from a bi-monthly journal to a monthly journal. In addition special issues of, and supplements to, both journals are published. This increase in the volume of work has had a direct impact on the level of responsibility of the managing editor because the increase in the number of manuscripts submitted for publication could only be absorbed by streamlining the editorial and selection process and establishing efficient managerial control. The present grading of the post does not take account of the added responsibilities of the post and is not in line with the general classification pattern for editorial posts in the Agency.

One P-2 to P-3 (Computer Systems Analyst)

(1 P-3)

The incumbent of this post is, within the Computer Section's Management Information Systems Group, responsible for systems analysis and programming for the Agency's personnel and payroll systems. In this respect he co-ordinates and supervises the work of three or four other systems analysts and application programmers. The classification guide-lines approved by the Consultative Committee on Administrative Questions provide a P-3 grading for positions of this calibre.

One P-1 to P-3 (Computer Systems Analyst)

(1 P-3)

The incumbent of this post is the leader of the Scientific and Technical Application Group in the Computer Section. This group, which consists of six systems analysts and application programmers, provides programming and systems analysis services to various areas in the Agency in which statistical, medical, nuclear power, safeguards and various other scientific applications are required. The classification guide-lines approved by the Consultative Committee on Administrative Questions provide a P-3 grading for positions of this calibre.

Adjusted Manning Table for 1977

Table 4

	DG	DDG	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	1	—	4	2	—	6
Secretariat of the Policy-making Organs	—	—	1	—	2	—	—	—	3	3	—	6
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	4	3	4	3	18	36	—	54
Division of General Services	—	—	1	2	2	3	1	—	9	71	129	209
Division of External Relations	—	—	2	6	7	7	4	—	26	23	—	49
Division of Languages	—	—	1	5	11	20	1	—	38	37	1	76
Legal Division	—	—	1	3	2	1	1	—	8	5	—	13
Division of Personnel	—	—	1	2	4	3	—	—	10	27	—	37
Department of Research and Isotopes	—	1	—	1	—	—	1	—	3	2	—	5
Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture	—	—	—	7	6	1	1	—	15	8	—	23
Division of Life Sciences	—	—	1	5	7	1	1	—	15	10	—	25
Division of Research and Laboratories	—	—	1	6	10	5	2	1	25	17	—	42
The Agency's Laboratory	—	—	—	4	14	5	4	2	29	60	24	113
The Monaco Laboratory	—	—	—	3	2	1	—	2	8	15	—	23
International Centre for Theoretical Physics	—	—	—	1	1	3	—	—	5	17	—	22
Department of Safeguards	—	1	—	2	2	1	—	—	6	7	—	13
Division of Development*	—	—	1	8	10	1	—	—	20	8	—	28
Divisions of Operations	—	—	2	15	24	29	3	—	73	21	—	94
Division of Safeguards Information Treatment	—	—	1	3	5	3	—	—	12	14	—	26
Department of Technical Assistance and Publications	—	1	—	—	2	1	—	—	4	7	—	11
Division of Technical Assistance	—	—	1	7	9	4	2	—	23	31	—	54
Division of Publications	—	—	1	1	—	5	8	—	15	102	14	131
Department of Technical Operations	—	1	—	—	—	1	—	1	3	2	—	5
Unit for Peaceful Nuclear Explosions Services	—	—	—	1	1	—	—	—	2	1	—	3
Division of Nuclear Safety and Environmental Protection	—	—	1	16	14	3	—	—	34	25	—	59
Division of Nuclear Power and Reactors	—	—	1	11	14	4	2	—	32	16	—	48
Division of Scientific and Technical Information	—	—	1	3	11	8	5	5	33	75	—	108
TOTAL	1	5	21	116	165	116	43	14	481	648	168	1297

Changes in 1977

Table 5

	DG	DDG	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	-	-	1
Division of External Relations	-	-	-	1	4	4	-	-	9	1	-	10
Division of Languages	-	-	-	(1)	(5)	(5)	-	-	(11)	(1)	-	(12)
Division of Personnel	-	-	-	-	1	-	-	-	1	-	-	1
Department of Research and Isotopes												
Joint IAEA/FAO Division	-	-	-	-	-	-	1	-	1	-	-	1
The Agency's Laboratory	-	-	-	(1)	1	-	(1)	-	(1)	-	-	(1)
The Monaco Laboratory	-	-	-	1	(1)	-	-	-	-	-	-	-
Department of Safeguards												
Division of Development*	-	-	-	-	1	(1)	-	-	-	-	-	-
Divisions of Operations	-	-	-	(1)	(1)	1	-	-	(1)	-	-	(1)
Department of Technical Assistance and Publications												
Division of Technical Assistance	-	-	-	-	(1)	2	(1)	-	-	-	-	-
Division of Publications	-	-	-	-	-	(1)	1	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-

ANNEX V

IAEA/UNEP COLLABORATION – STATUS ON 1 JUNE 1977

Number assigned by UNEP	Title of project	UNEP contribution proposed by the Agency			UNEP allocation received by the Agency		
		1976	1977	1978	1976	1977	1978
FP/0501-75-03 (542)	Evaluation of releases of radionuclides into aquatic environments (Nuclear safety and environmental protection)	–	12 000	–	–	13 000	–
0102-74-001	Studies of the radiation doses to the population from the peaceful use of atomic energy, including nuclear industry (Nuclear safety and environmental protection)	–	29 000	63 000	–	–	–
Proposal 297	Studies on the development of environmental surveillance programmes related to the release of radioactive and other contaminants (Nuclear safety and environmental protection)	95 000	155 000	–	–	–	–
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 (Nuclear safety and environmental protection)	65 700	47 400	40 000	65 700	47 400	40 000
Proposal 298	Study of the feasibility of developing a register of releases of significant quantities of radioactive materials to the biosphere (Nuclear safety and environmental protection)	84 750	48 250	–	–	–	–
FP/0503-76-09	Biochemical studies of selected pollutants: Open ocean measurements and laboratory experiments (Monaco)	111 000	68 000	9 000	44 000	107 000	9 000
FP/0503-75-04 (979)	The Mediterranean programme activity: Intercalibration measurements for pilot projects under the co-ordinated pollution monitoring and research programme – Med IV (Monaco)	22 500	22 500	26 000	69 000	79 500	26 000
700-75-01	Regional Centres for Nuclear Fuel Cycle (Nuclear power and reactors)	54 450	8 000	–	35 000	38 200	–
	Multi-Agency Mediterranean Programme Activity: Pollutants from landbased Sources in the Mediterranean – Med X						
	PHASE I (Preparatory)	1 000	–	–	1 000	–	–
	PHASE II	4 000	–	–	–	4 000	–
	Training in Environmental Monitoring and Analysis Techniques	22 000	44 000	–	–	–	–
	Activation analysis of human hair	125 000	140 000	142 000	–	–	–
	TOTAL	585 400	574 150	280 000	214 700	289 100	75 000

ANNEX VI

Draft resolutions

A. REGULAR BUDGET APPROPRIATIONS FOR 1978

The General Conference

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 1978⁽¹⁾,

1. *Appropriates* an amount of \$48 879 000 for the Regular Budget expenses of the Agency in 1978 as follows:

Section	United States dollars
1. Technical assistance and training	2 066 000
2. Technical operations ⁽²⁾	10 237 000
3. Research and isotopes ⁽³⁾	8 827 000
4. Operational facilities ⁽⁴⁾	1 246 000
5. Safeguards	10 891 000
6. Policy-making organs	1 738 000
7. Executive management and administration ⁽⁵⁾	6 437 000
8. General services	4 537 000
9. Transfer of the Agency to its Permanent Headquarters	800 000
10. Adjustment of programme cost estimates	2 100 000
TOTAL	48 879 000

2. *Decides* that the funds appropriated for Section 1–8 and 10 in paragraph 1 above shall be financed as follows:

- (a) \$3 316 000 from miscellaneous income; and
(b) \$44 763 000 from contributions by Member States on the basis of the scale of assessment fixed by the General Conference in Resolution GC(XXI)/RES/ ;

3. *Decides* that the appropriation of \$800 000 for Section 9 in paragraph 1 above shall be made up as follows:

- (a) \$363 273 from the final cash surplus in respect of 1975⁽⁶⁾; and
(b) \$436 727 from the cash surplus in respect of 1976⁽⁷⁾;

4. *Decides* further that the funds appropriated for Section 10 in paragraph 1 above shall be used only with the prior approval of the Board of Governors; and

5. *Authorizes* the Director General:

- (a) To incur expenditures additional to those for which provision is made in the Regular Budget for 1978, 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 1978; and

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

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- (1) See document GC(XXI)/582, Table 5.
(2) For the financing of Nuclear power and reactors, Nuclear safety and environmental protection, Information and technical services and Nuclear explosions for peaceful purposes.
(3) For the financing of Food and agriculture, Life sciences and Physical sciences.
(4) For the financing of the International Centre for Theoretical Physics (in part) and the International Laboratory of Marine Radioactivity (in part).
(5) For the financing of Executive management and technical programme planning, Administration and the undistributed balance of Service activities.
(6) See document GC(XXI)/581, Part IV, Statement 1.B.
(7) Ibid. Part IV, Statement 1.C.

B. OPERATIONAL BUDGET ALLOCATIONS FOR 1978

The General Conference

Accepting the recommendations of the Board of Governors relating to the Agency's operational programme for 1978 [1],

1. *Decides* that for 1978 the target for voluntary contributions to the General Fund shall be \$7 million;
2. *Notes* that funds from other sources, estimated at \$1 505 000, are expected to be available for that programme;
3. *Allocates* the following sums for the Agency's operational programme for 1978:

	United States dollars
Operating Fund I	1 155 000
Operating Fund II	7 350 000
	<hr/>
	8 505 000

4. *Urges* all Member States to make voluntary contributions to the General Fund for 1978 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;
5. *Endorses* the Board's special appeal to Member States for additional voluntary contributions in the amount of \$500 000;
6. *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 1978, 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 1978.

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- (1) See document GC(XXI)/582, Table 6.

C. THE WORKING CAPITAL FUND IN 1978

The General Conference

Accepting the recommendations of the Board of Governors relating to the Agency's Working Capital Fund in 1978⁽¹⁾,

1. *Approves* a level of \$2 million for the Agency's Working Capital Fund in 1978;
2. *Decides* that the Fund shall be financed, administered and used in 1978 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(XXI)/582, para 28.
(2) INFCIRC/8/Rev.1 and Mod.1.

