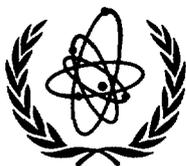


# THE AGENCY'S BUDGET FOR 1982

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INTERNATIONAL ATOMIC ENERGY AGENCY



THE AGENCY'S BUDGET FOR 1982

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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
CCAQ	Consultative Committee on Administrative Questions
CINDA	Computer Index of Neutron Data
FAO	Food and Agriculture Organization of the United Nations
GS	General Service category (staff)
IAEA	International Atomic Energy Agency
IIASA	International Institute for Applied Systems Analysis
INIS	International Nuclear Information System
INTOR	International Tokamak Reactor
Joint FAO/IAEA Division	Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development
M&O	Maintenance and Operative Service category (staff)
Monaco Laboratory	International Laboratory of Marine Radioactivity at Monaco
NDA	Non-destructive assay
NEA	Nuclear Energy Agency (of the Organisation for Economic Co-operation and Development)
NUSS programme	Agency's programme on nuclear safety standards for nuclear power plants
OECD	Organisation for Economic Co-operation and Development
P	Professional category (staff)
PNE	Nuclear explosions for peaceful purposes
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
SAL	Safeguards Analytical Laboratory
SIDA	Swedish International Development Authority
SIT	Sterile insect technique
SSAC	States' Systems of Accounting for and Control of Nuclear Material
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
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
VIC	Vienna International Centre
WHO	World Health Organization
WMO	World Meteorological Organization

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NOTE

All sums of money are expressed in United States dollars.

## INTRODUCTION



## 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 the expenses of the Agency in 1982, together with the preliminary estimates for 1983 and 1984. The Board requests the General Conference to adopt the draft resolutions set forth in Annex VII.
2. The estimates for 1982 are based on the requirements for the second year of the biennium 1981-82, for which plans were presented in the Agency's Programme for 1981-86 and Budget for 1981 [1]. Only changes in the plans for 1982 are described in the present document, which complements document GC(XXIV)/630. Where appropriate, cross references are made in the present document to document GC(XXIV)/630 in the form "630/..." - for example, "630/C.1.2/14".
3. The estimates for 1983 and 1984 are based on conditions and trends as known now and are presented as preliminary estimates only. Final budget estimates for 1983 will be presented to the General Conference at its twenty-sixth regular session with the Agency's programme of work for the six-year period 1983-88.

### Format

4. The structure and presentation of the budget remain essentially the same as in the Agency's Programme for 1981-86 and Budget for 1981.
5. Preliminary estimates for the two years following the budget year have been included for the first time in the budget for the second year of a biennium.

### Programme trends

6. The nature of the "Technical Assistance" programme will continue to be determined by the type of requests received from Member States. Requests for Agency assistance with projects which are linked to UNDP programmes or which form an integral part of national development plans will be particularly encouraged. In accordance with the wishes expressed by the Board of Governors, special emphasis will be given to post-project evaluation. The data processing and computer-reporting system will be extended to cover information on fellowships and training courses.
7. Under the "Nuclear Power" programme, improvements will continue to be made in methods for collecting and analysing energy demand and supply data, cost parameters and other information needed for future nuclear power planning studies by the Agency or its Member States. Priority areas relating to nuclear power programme implementation, particularly for developing Member States, will include manpower and local infrastructure development and the technical planning of project-related activities. Work in connection with nuclear power plant technology will concentrate on engineering safety, the analysis of plant performance and quality assurance. Both current and potential applications of nuclear power will continue to be studied. In the area of advanced nuclear power technology, the main objective will be to investigate the present status and future potential of advanced power reactors offering substantive improvements in energy resource utilization.
8. In February 1981, the Board of Governors gave approval for the holding of the International Conference on Nuclear Power Experience from 13 to 17 September 1982 in Vienna. The purpose of this major IAEA conference will

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[1] GC(XXIV)/630.

be to provide a retrospective review of the accumulated experience of industrialized and developing Member States in the field of nuclear power in order to make an authoritative and objective assessment of the achievements to date. The Conference will provide useful input into other, related international conferences planned for 1983, such as the United Nations Conference for the Promotion of International Co-operation in the Peaceful Use of Nuclear Energy for Economic and Social Development.

9. In addition to its main activities connected with nuclear materials and fuel cycle technology and with waste management, support will be given by the "Nuclear Fuel Cycle" programme, through the provision of the necessary technical background, for Agency activities related to technical assistance, the international plutonium storage (IPS) and international spent fuel management (ISFM) projects, the Committee on Assurances of Supply (CAS) and the possible future discussions on an international fuel bank and regional fuel cycle centres. In order to respond to these requirements, a number of additional meetings concerned with uranium recovery, fuel element performance and spent fuel management will be organized. Continuing emphasis will also be given to the programme on radioactive waste management. To cover the proposed increase in particular activities while keeping within the budgetary limitations, some meetings on subjects of lesser priority will be postponed to 1983/84.

10. The expanded nuclear safety activities established over the past few years will continue. As the first stage of the NUSS programme nears completion, with publication by the end of 1982 of the five codes of practice and 38 of the projected 58 safety guides (of which a further seven will have been completed and be ready for printing), increased emphasis will be given to promoting the acceptance and use of the documents through advisory missions, training courses and seminars. The Agency's emergency assistance activities will be extended to include special missions to advise Member States on national and regional emergency plans. Recently started work on the collection and review of data concerning significant abnormal operating experience and on the promotion of international co-operation in safety research will continue. A new Safety Series report on procedures for establishing limits for the release of radioactive material into the environment will highlight the continuing effort related to radiological safety of the public. As part of the work on the safe transport of radioactive materials, a manual on package test standards will be prepared.

11. In the "Food and Agriculture" programme, work will continue in those areas where nuclear techniques have become established as useful tools. The emphasis will be on technical assistance projects, training and the co-ordination of research in Member States. The programme trends will take into account the current move towards reduced use of costly, energy-intensive agricultural materials such as fertilizers and pesticides. Examples of the new approach are provided by two co-ordinated research programmes: the use of tracers in studies aimed at maximizing the biological fixation of atmospheric nitrogen in field crops; and the use of labelling techniques in work on fertilizer effectiveness in multiple-cropping schemes. Efforts will be made to promote the use of radioimmunoassay techniques for improving the reproductive performance of livestock and work will be carried out on the application of isotopic tracers in animal nutrition research. Co-ordinated programmes on mutation plant breeding for disease and pest resistance and work on the sterile insect technique will continue to help provide answers to the problem of high agricultural costs. In the field of food irradiation, the emphasis will be on promoting acceptance of the process itself and facilitating the commercialization of irradiated foodstuffs in the light of the recent recommendations of the Joint FAO/IAEA/WHO Expert Committee on the Wholesomeness of Irradiated Food.

12. Under the "Life Sciences" programme it is planned to give priority to upgrading the quality of radionuclide techniques used in the medical field in developing countries. Specific programmes will be concerned with the maintenance of instruments and with the quality control of instrument performance and procedures. Assistance will continue to be given to the network of Secondary Standard Dosimetry Laboratories in Member States. Radiotherapy dose intercomparisons will be extended to high-energy photon and particle radiation. Work will continue on the standardization of dosimetry

for the high doses and dose rates used in food preservation and radiation sterilization, and on the establishment of an interregional high-dose intercomparison programme. Co-ordinated research programmes and training courses will continue on nuclear techniques in the study and control of human parasitic diseases, on radiation sterilization and the improvement of radiation therapy in developing countries, and on new methodological approaches to the assessment of health impacts from radioactive and chemical pollutants resulting from power production and use.

13. In the area of controlled fusion research within the "Physical Sciences" programme, the International Tokamak Reactor (INTOR) Workshop, which completed its Phase Zero Report on schedule, produced a conceptual design in July 1981. The Workshop's future activities will involve detailed consideration of the problems brought out in the conceptual design phase.

14. A major aspect of the applied chemistry activities will be the use of intense radiation sources and nuclear techniques in industrial processes in developing countries. Support will continue to be given for work on the use of nuclear methods in mineral exploration and the production of radiopharmaceuticals in developing countries. The main emphasis in isotope hydrology work will be on the needs of developing countries and the transfer to them of the necessary know-how. In this connection, the Headquarters staff will be increasingly involved in technical assistance assignments, while the Agency's Laboratory will provide the related analytical support. Priority will be given to work on the evaluation and optimum use of groundwater resources. In the nuclear data field, emphasis will be on the provision of improved nuclear data and associated data processing codes to scientists in developing countries as an essential contribution to the build-up of their nuclear infrastructure. Special importance will be attached to training in the use and processing of nuclear data and in the use of nuclear techniques.

15. Under the "Safeguards" programme, work will continue on the consideration and adoption of policies related to the application of safeguards to large plants, the financing and incorporation of "new generation" safeguards equipment, and the establishment and operation of field offices. In addition, there is now a need to adopt a clear policy on the scope of the implementation of safeguards under "voluntary offer" agreements with nuclear-weapon States.

16. With the reduction in the number of facilities still to be covered by some type of safeguards agreement, there will be a slowing down in the rate of increase of safeguards staff. In the case of Professional staff, for example, the increase was 11% for 1979-80 but will fall to 6% for 1982-83 and 1983-84. The only appreciable increase in safeguards commitments which can be foreseen after 1985 is that resulting from a growth in the nuclear industry.

17. The trend in INIS will be towards the expansion and improvement of on-line access to the data base and increased assistance to Member States in the effective use of INIS output products. Library automation will gradually be extended to cover management and service activities and new data bases will be added. The trend in the Computer Section will be towards increased local processing, more sophisticated use of word processing equipment and the development of computer systems better serving the needs of management.

#### Manning table

18. For 1982, authority is requested to upgrade an additional three P-5 posts, whose incumbents have reached the top of the grade, to the rank of 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.

#### Adjustments made in the budget estimates and manning table for 1981

19. Since the Agency's budget for 1981 was approved, the on-going survey of the utilization of staff has resulted in a number of internal transfers of posts, made so as to obtain the maximum benefit from available resources. These changes represent shifts between programmes resulting from the continuing efforts to meet new manpower needs by the redeployment of existing staff. The proposed changes in the manning table are reflected in Annex IV, Table 5.

#### The Regular Budget for 1982

20. The total of the Regular Budget estimates for 1982 as shown in the Consolidated Budget, Table 1, is \$ 86 369 000, a decrease of 2.6% as compared to the 1981 level. The Regular Budget by programme is shown in Table 2 and the Regular Budget by item of expenditure in Table 3.

21. The budget estimates for the individual programmes are based on an exchange rate of 12.90 Austrian schillings to the United States dollar; they can, therefore, be compared directly with the budget estimates for 1981, which are also based on that rate.

22. Because of the substantial increase in the dollar/schilling exchange rate during recent months, however, an amount of \$ 12 620 000 has been deducted for the adjustment of the programme cost estimates - in order to compensate for an assumed average exchange rate of AS 15.50 to the dollar in 1982. The draft resolution on the Regular Budget appropriations for 1982 as contained in Annex VII is accordingly based on the assumed exchange rate of AS 15.50 to the dollar. The budget document for the 1983 estimates will contain an "1982 Adjusted budget" column based on an exchange rate of AS 15.50 to the dollar, if appropriate.

23. Table 2 shows the budget estimates for the Agency's programmes and the cost of work for others. The programme cost estimates for 1982 are directly comparable with the adjusted programme cost estimates for 1981. The increase for the Agency's programme in 1982 over the 1981 level is \$ 10 312 000 or 11.6%. It is made up as follows: 9.3% for price increases attributable to inflation and 2.3% for a net programme increase. After deduction of the "Adjustment of programme cost estimates" of \$ 12 620 000, the Regular Budget for 1982 is \$ 86 369 000, a reduction of \$ 2 308 000, or 2.6%, compared to the 1981 Regular Budget.

24. Table 3 shows the Regular Budget by item of expenditure. Programme decreases occur in "Established posts", "Common staff costs", "Overtime", "Technical committees and advisory groups" and "Common services, supplies and equipment". All other items of expenditure show a programme increase.

25. With regard to price increases, a detailed study has been made of the effects of inflation on the budget estimates for each item of expenditure. On the basis of this study, it is expected that the overall price increase in 1982 over the 1981 level will be 9.3%, as noted above. After deduction of the "Adjustment of programme cost estimates" of \$ 12 620 000 to reflect the assumed appreciation of the United States dollar from AS 12.90 for 1981 to AS 15.50 for 1982, there will be a net price decrease of 4.9% compared with the budget for 1981.

26. It is proposed that the Regular Budget estimates for 1982 of \$ 86 369 000 be funded by estimated income of \$ 9 025 000 plus an assessment on Member States of \$ 77 344 000. The assessment for 1982 is a decrease of \$ 4 325 000, or 5.3%, compared to the assessment for 1981.

27. As in the previous budget document, information is provided on the total extrabudgetary resources expected to be available to the Agency for carrying out its programme in 1982 (see Tables 1 and 5).

Target for voluntary contributions to the Technical Assistance Fund

28. The provision of technical assistance by the Agency to its developing Member States is financed from the Technical Assistance Fund, which receives its income mainly in the form of voluntary contributions for which a target is set each year. The Board agreed to recommend that the target for 1982 be established at \$ 16 million.

Working Capital Fund

29. The Board recommends that for 1982 the Agency's Working Capital Fund remain at the same level as for 1981, namely \$ 2 million. The recommendation is reflected in draft resolution C set forth in Annex VII. This level will be adequate to maintain the cash liquidity of the Agency only if Members pay their assessments promptly.

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

30. In accordance with Article XVI of the Agency's relationship agreement with the United Nations [2], the budget will be reviewed by ACABQ, which will report on the administrative aspects thereof to the General Assembly of the United Nations.

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[2] INFC1RC/11, Part I.

THE CONSOLIDATED BUDGET - 1982

Table 1

Programme	Regular Budget	Technical Assistance Fund	Extrabudgetary				
			Australia	Canada	Finland	Germany F.R.	Italy
A. Technical assistance and training	4 477 000	16 700 000	-	-	130 000	300 000	-
B. Nuclear power	3 276 000	-	-	-	-	-	-
C. Nuclear fuel cycle	3 160 000	-	-	-	-	-	-
D. Nuclear Safety	5 395 000	-	-	-	-	-	-
E. Nuclear explosions for peaceful purposes	14 000	-	-	-	-	-	-
F. Food and agriculture	4 383 000	-	-	-	-	70 000	-
G. Life sciences	3 173 000	-	-	-	-	-	-
H. Physical sciences	6 538 000	-	90 000	-	-	50 000	-
J. International Centre for Theoretical Physics	1 207 000	-	-	-	-	-	950 000
K. International Laboratory of Marine Radioactivity	1 208 000	-	-	-	-	-	-
L. Safeguards	29 170 000	-	30 000	200 000	-	200 000	-
M. Information and technical services	5 082 000	-	-	-	-	-	-
N. Policy-making organs	3 108 000	-	-	-	-	-	-
O. Executive management and technical programme planning	1 744 000	-	-	-	-	-	-
P. Administration	9 361 000	-	-	-	-	-	-
Q. General services	13 314 000	-	-	-	-	-	-
S. Cost of work for others	4 379 000 <sup>e/</sup>	-	-	-	-	-	-
T. Adjustment of programme cost estimates	(12 620 000)	-	-	-	-	-	-
<b>TOTAL</b>	<b>86 369 000</b>	<b>16 700 000</b>	<b>120 000</b>	<b>200 000</b>	<b>130 000</b>	<b>620 000</b>	<b>950 000</b>
<b>Source of Funds</b>							
Assessment on Member States	77 344 000	-	-	-	-	-	-
Voluntary contributions	-	16 000 000	-	-	-	-	-
Extrabudgetary resources	-	-	120 000	200 000	130 000	620 000	950 000
Income from work for others	3 710 000 <sup>f/</sup>	-	-	-	-	-	-
Other miscellaneous income	5 315 000	700 000	-	-	-	-	-
<b>TOTAL</b>	<b>86 369 000</b>	<b>16 700 000</b>	<b>120 000</b>	<b>200 000</b>	<b>130 000</b>	<b>620 000</b>	<b>950 000</b>

a/ In addition to the above indicated cash resources, Member States make contributions in kind, consisting of cost-free experts and consultants, stipends for fellowships, training courses and other.

b/ UNDP \$ 6 000 000; Belgium \$ 70 000.

c/ UNESCO \$ 400 000; OPEC \$ 100 000, Denmark \$ 13 000.

d/ Principality of Monaco \$ 125 000.

e/ Unadjusted, at AS 12.90 to 1 US dollar.

f/ Adjusted, at AS 15.50 to 1 US dollar.

R e s o u r c e s (excluding contributions in kind)<sup>a/</sup>

Japan	Sweden	United Kingdom	USA	USSR	Other	Sub-total	TOTAL
-	300 000	250 000	1 200 000	25 000	6 070 000 <sup>b/</sup>	8 275 000	29 452 000
-	-	-	-	-	-	-	3 276 000
-	-	-	-	-	-	-	3 160 000
-	-	-	65 000	-	-	65 000	5 460 000
-	-	-	-	-	-	-	14 000
80 000	300 000	-	-	-	-	450 000	4 833 000
-	-	-	-	-	-	-	3 173 000
-	-	-	60 000	-	-	200 000	6 738 000
24 000	70 000	-	-	-	513 000 <sup>c/</sup>	1 557 000	2 764 000
-	-	-	-	-	125 000 <sup>d/</sup>	125 000	1 333 000
-	-	100 000	1 000 000	400 000	-	1 930 000	31 100 000
-	-	-	-	-	-	-	5 082 000
-	-	-	-	-	-	-	3 108 000
-	-	-	-	-	-	-	1 744 000
-	-	-	-	-	-	-	9 361 000
-	-	-	-	-	-	-	13 314 000
-	-	-	-	-	-	-	4 379 000
-	-	-	-	-	-	-	(12 620 000)
104 000	670 000	350 000	2 325 000	425 000	6 708 000	12 602 000	115 671 000
-	-	-	-	-	-	-	77 344 000
-	-	-	-	-	-	-	16 000 000
104 000	670 000	350 000	2 325 000	425 000	6 708 000	12 602 000	12 602 000
-	-	-	-	-	-	-	3 710 000
-	-	-	-	-	-	-	6 015 000
104 000	670 000	350 000	2 325 000	425 000	6 708 000	12 602 000	115 671 000

TOTAL RESOURCES - 1982<sup>a/</sup>

Table 1a

Programme	Regular Budget	Technical Assistance Fund	Extra- budgetary Resources	TOTAL
A. Technical assistance and training	3 877 000	16 700 000	8 275 000	28 852 000
B. Nuclear power	2 859 000	-	-	2 859 000
C. Nuclear fuel cycle	2 777 000	-	-	2 777 000
D. Nuclear safety	4 745 000	-	65 000	4 810 000
E. Nuclear explosions for peaceful purposes	12 000	-	-	12 000
F. Food and agriculture	3 887 000	-	450 000	4 337 000
G. Life sciences	2 846 000	-	-	2 846 000
H. Physical sciences	5 718 000	-	200 000	5 918 000
J. International Centre for Theoretical Physics	1 179 000	-	1 557 000	2 736 000
K. International Laboratory of Marine Radioactivity	1 208 000	-	125 000	1 333 000
L. Safeguards	25 693 000	-	1 930 000	27 623 000
M. Information and technical services	4 410 000	-	-	4 410 000
N. Policy-making organs	2 694 000	-	-	2 694 000
O. Executive management and technical programme planning	1 523 000	-	-	1 523 000
P. Administration	8 084 000	-	-	8 084 000
Q. General services	11 147 000	-	-	11 147 000
S. Cost of work for others	3 710 000	-	-	3 710 000
	86 369 000	16 700 000	12 602 000	115 671 000
<u>Source of Funds</u>				
Assessment on Member States	77 344 000	-	-	77 344 000
Voluntary contributions	-	16 000 000	-	16 000 000
Extrabudgetary resources	-	-	12 602 000	12 602 000
Income from work for others	3 710 000	-	-	3 710 000
Other miscellaneous income	5 315 000	700 000	-	6 015 000
TOTAL	86 369 000	16 700 000	12 602 000	115 671 000

<sup>a/</sup> At AS 15.50 to 1 US dollar.

THE REGULAR BUDGET

By programme

Table 2

Programme	1981	Price increase	Programme increase	Total		1982	1983	1984		
	Adjusted budget			change	change				Estimate	Preliminary estimate
	\$	\$	%	\$	%	\$	\$	\$		
A. Technical assistance and training (Regular Budget)	4 055 000	329 700	8.1	92 300	2.3	422 000	10.4	4 477 000	4 841 000	5 336 000
B. Nuclear Power	2 635 000	204 200	7.7	436 800	16.6	641 000	24.3	3 276 000	3 456 000	3 657 000
C. Nuclear Fuel Cycle	2 937 000	216 500	7.4	6 500	0.2	223 000	7.6	3 160 000	3 780 000	4 012 000
D. Nuclear Safety	4 836 000	472 800	9.8	86 200	1.8	559 000	11.6	5 395 000	6 117 000	6 279 000
E. Nuclear explosions for peaceful purposes	115 000	2 000	1.7	(103 000)	(89.5)	(101 000)	(87.8)	14 000	37 000	14 000
F. Food and agriculture	4 019 000	352 500	8.8	11 500	0.3	364 000	9.1	4 383 000	4 790 000	5 230 000
G. Life sciences	2 959 000	217 300	7.3	(3 300)	(0.1)	214 000	7.2	3 173 000	3 267 000	3 668 000
H. Physical sciences	6 301 000	470 800	7.5	(233 800)	(3.7)	237 000	3.8	6 538 000	6 835 000	7 367 000
J. International Centre for Theoretical Physics (Regular Budget)	966 000	172 000	17.8	69 000	7.1	241 000	24.9	1 207 000	1 220 000	1 230 000
K. International Laboratory of Marine Radioactivity (Regular Budget)	971 000	147 000	15.1	90 000	9.3	237 000	24.4	1 208 000	1 391 000	1 452 000
L. Safeguards	25 003 000	2 407 200	9.6	1 759 800	7.1	4 167 000	16.7	29 170 000	35 664 000	39 259 000
M. Information and technical services	4 705 000	457 400	9.7	(80 400)	(1.7)	377 000	8.0	5 082 000	5 705 000	6 160 000
N. Policy-making organs	2 683 000	234 000	8.7	191 000	7.1	425 000	15.8	3 108 000	3 315 000	3 600 000
O. Executive management and technical programme planning	1 677 000	124 100	7.4	(57 100)	(3.4)	67 000	4.0	1 744 000	1 848 000	1 977 000
P. Administration	8 439 000	804 700	9.5	117 300	1.4	922 000	10.9	9 361 000	10 114 000	10 743 000
Q. General services	13 313 000	1 342 200	10.1	(1 341 200)	(10.1)	1 000	-	13 314 000	14 815 000	16 478 000
Agency programmes	85 614 000	7 954 400	9.3	1 041 600	1.2	8 996 000	10.5	94 610 000	107 195 000	116 462 000
S. Cost of work for others	3 063 000	282 000	9.2	1 034 000	33.8	1 316 000	43.0	4 379 000 <sup>a/</sup>	4 691 000 <sup>a/</sup>	5 085 000 <sup>a/</sup>
Sub-total	88 677 000	8 236 400	9.3	2 075 600	2.3	10 312 000	11.6	98 989 000 <sup>a/</sup>	111 886 000 <sup>a/</sup>	121 547 000 <sup>a/</sup>
T. Adjustment of programme cost estimates	-	(12 620 000)	-	-	-	(12 620 000)	-	(12 620 000)	(14 260 000)	(15 500 000)
Regular Budget	88 677 000 <sup>a/</sup>	(4 383 600)	(4.9)	2 075 600	2.3	(2 308 000)	(2.6)	86 369 000 <sup>b/</sup>	97 626 000 <sup>b/</sup>	106 047 000 <sup>b/</sup>
Less: Miscellaneous income										
Income from work for others	3 063 000 <sup>a/</sup>	282 000	9.2	365 000	11.9	647 000	21.1	3 710 000 <sup>b/</sup>	3 974 000 <sup>b/</sup>	4 310 000 <sup>b/</sup>
Other	3 945 000	219 000	5.5	1 151 000	29.2	1 370 000	34.7	5 315 000	5 530 000	5 855 000
Assessment on Member States	81 669 000 <sup>a/</sup>	(4 884 600)	(6.0)	559 600	0.7	(4 325 000)	(5.3)	77 344 000 <sup>b/</sup>	88 122 000 <sup>b/</sup>	95 882 000 <sup>b/</sup>

<sup>a/</sup>Based on an exchange rate of AS 12.90.

<sup>b/</sup>Based on an exchange rate of AS 15.50.

THE REGULAR BUDGET

By item of expenditure

Table 3

Item of expenditure	1980 Actual obligations	1981 Adjusted budget	Increase or (decrease) from 1981						1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
			Price	%	Programme	%	Total	%			
Salaries and wages											
Established posts	37 417 128	44 907 000	3 734 000	8.3	(81 000)	(0.2)	3 653 000	8.1	48 560 000	53 557 000	58 474 000
Consultants	536 987	762 600	88 200	11.6	236 100	30.9	324 300	42.5	1 086 900	1 245 900	1 319 500
Overtime	184 725	178 600	12 600	7.1	(12 400)	(7.0)	200	0.1	178 800	266 200	276 800
Temporary assistance	712 757	543 400	37 700	6.9	59 600	11.0	97 300	17.9	640 700	895 900	914 100
Sub-total	38 851 597	46 391 600	3 872 500	8.4	202 300	0.4	4 074 800	8.8	50 466 400	55 965 000	60 984 400
Common staff costs	11 549 251	13 699 300	1 385 400	10.1	(22 900)	(0.2)	1 362 500	9.9	15 061 800	16 602 300	18 126 600
Travel	1 916 262	2 426 400	285 600	11.8	775 900	31.9	1 061 500	43.7	3 487 900	4 440 100	4 968 500
Meetings											
Conferences, symposia, seminars	485 438	633 000	74 000	11.7	245 000	38.7	319 000	50.4	952 000	872 000	1 081 000
Technical committees, advisory groups	1 089 086	1 561 000	182 000	11.7	(129 000)	(8.3)	53 000	3.4	1 614 000	2 039 000	2 125 000
Representation and hospitality	91 334	108 200	12 400	11.5	6 200	5.7	18 600	17.2	126 800	147 900	153 200
Scientific and technical contracts	2 179 877	2 404 000	144 600	6.0	666 400	27.7	811 000	33.7	3 215 000	3 340 500	3 487 500
Scientific supplies and equipment	1 372 252	1 647 800	162 900	9.9	290 200	17.6	453 100	27.5	2 100 900	4 542 800	4 576 500
Common services, supplies and equipment	13 085 036	15 847 400	1 667 400	10.5	(1 063 800)	(6.7)	603 600	3.8	16 451 000	18 045 900	19 785 300
Other items of expenditure	909 469	895 300	167 600	18.7	71 300	8.0	238 900	26.7	1 134 200	1 199 500	1 174 000
Losses from exchange of currency	820 462	-	-	-	-	-	-	-	-	-	-
Agency programmes	72 350 064	85 614 000	7 954 400	9.3	1 041 600	1.2	8 996 000	10.5	94 610 000	107 195 000	116 462 000
Cost of work for others	3 127 769	3 063 000	282 000	9.2	1 034 000	33.8	1 316 000	43.0	4 379 000	4 691 000	5 085 000
Sub-total	75 477 833	88 677 000	8 236 400	9.3	2 075 600	2.3	10 312 000	11.6	98 989 000 <sup>a/</sup>	111 886 000 <sup>a/</sup>	121 547 000 <sup>a/</sup>
Adjustment of programme cost estimates	-	-	(12 620 000)	-	-	-	(12 620 000)	-	(12 620 000)	(14 260 000)	(15 500 000)
Total Regular Budget	75 477 833	88 677 000 <sup>a/</sup>	(4 383 600)	(4.9)	2 075 600	2.3	(2 308 000)	(2.6)	86 369 000 <sup>b/</sup>	97 626 000 <sup>b/</sup>	106 047 000 <sup>b/</sup>

<sup>a/</sup>Based on an exchange rate of AS 12.90.

<sup>b/</sup>Based on an exchange rate of AS 15.50.

Summary of income

Table 4

Item	1980 Actual	1981 Budget <sup>a/</sup>	Increase or (decrease) over 1981	1982 Estimate <sup>b/</sup>	1983 Preliminary estimate <sup>b/</sup>	1984 Preliminary estimate <sup>b/</sup>
Assessed contributions on Member States	72 670 962	81 669 000	(4 325 000)	77 344 000	88 122 000	95 882 000
Cash surplus in respect of 1978/1979	1 000 000	-	-	-	-	-
Miscellaneous income						
(a) Income from work for others						
Data processing services	838 015	779 000	694 000	1 473 000	1 510 000	1 620 000
Printing services	1 299 994	1 212 000	(41 000)	1 171 000	1 195 000	1 302 000
Medical services	367 664	322 000	21 000	343 000	384 000	438 000
Library services	622 097	750 000	(27 000)	723 000	885 000	950 000
Sub-total	3 127 770	3 063 000	647 000	3 710 000	3 974 000	4 310 000
(b) Attributable to specific programmes						
Publications of the Agency	841 911	700 000	180 000	880 000	915 000	940 000
INIS publications including microfiches	464 366	340 000	160 000	500 000	540 000	580 000
CINDA publications	31 046	20 000	5 000	25 000	25 000	30 000
Advertising	28 717	20 000	5 000	25 000	25 000	30 000
Laboratory income	118 393	100 000	5 000	105 000	110 000	120 000
Sales of surplus property	128 521	20 000	(15 000)	5 000	5 000	5 000
Amounts recoverable under safeguards agreements from non-member States	61 171	110 000	(30 000)	80 000	80 000	80 000
UNDP programme support cost	1 049 397	950 000	50 000	1 000 000	1 100 000	1 200 000
SIDA programme support cost	92 078	100 000	(70 000)	30 000	-	-
Sub-total	2 815 600	2 360 000	290 000	2 650 000	2 800 000	2 985 000
(c) Not attributable to specific programmes						
Investment and interest income	2 559 165	1 060 000	1 105 000	2 165 000	2 200 000	2 300 000
Refund from the United Nations Joint Staff Pension Fund	153 771	185 000	(35 000)	150 000	150 000	150 000
Refund of Value Added Tax	777 483	-	-	-	-	-
Other	532 126	340 000	10 000	350 000	380 000	420 000
Sub-total	4 022 545	1 585 000	1 080 000	2 665 000	2 730 000	2 870 000
Total miscellaneous income	9 965 915	7 008 000	2 017 000	9 025 000	9 504 000	10 165 000
TOTAL	83 636 877	88 677 000	(2 308 000)	86 369 000	97 626 000	106 047 000

<sup>a/</sup>Based on an exchange rate of AS 12.90.

<sup>b/</sup>Based on an exchange rate of AS 15.50.

EXTRABUDGETARY RESOURCES 1980-1982

(excluding contributions in kind)<sup>a/</sup>

Table 5

	1980 Actual obligations	1981 Estimate	1982 Estimate
<b>A. Technical assistance and training</b>			
UNDP	5 017 945	6 500 000	6 000 000
Argentina	1 972	-	-
Australia	23 643	-	-
Belgium	102 228	70 000	70 000
Canada	16 415	65 000	-
Denmark	-	60 000	-
Finland	3 220	123 000	130 000
Federal Republic of Germany	391 380	224 000	300 000
Japan	4 022	-	-
Sweden	915 589	900 000	300 000
Union of Soviet Socialist Republics	-	25 000	25 000
United Kingdom of Great Britain and Northern Ireland	-	200 000	250 000
United States of America	679 287	1 330 000	1 200 000
Sub-total	7 155 701	9 497 000	8 275 000
<b>C. Nuclear Fuel Cycle</b>			
INFCE	302 183	-	-
NEA/OECD	33 841	9 000	-
Federal Republic of Germany	-	20 000	-
United States of America	68 372	72 000	-
Sub-total	404 396	101 000	-
<b>D. Nuclear Safety</b>			
Supplementary Nuclear Safety Programme	173 976	-	-
United States of America	55 429	127 000	65 000
Sub-total	229 405	127 000	65 000
<b>F. Food and Agriculture</b>			
Federal Republic of Germany	161 251	204 000	70 000
Japan (RCA)	29 721	25 000	80 000
Sweden	285 580	345 000	300 000
Sub-total	476 552	574 000	450 000

G.	Life sciences			
	UNEP	-	29 000	-
	United States of America	2 377	55 000	-
	Sub-total	2 377	84 000	-
H.	Physical sciences			
	Australia (RCA)	86 402	90 000	90 000
	Federal Republic of Germany	13 980	60 000	50 000
	Japan (RCA)	8 837	-	-
	United States of America	71 611	119 000	60 000
	Sub-total	180 830	269 000	200 000
I.	International Centre for Theoretical Physics			
	United Nations University	30 000	-	-
	United Nations Sudan Sahelian Office	12 000	-	-
	UNESCO	320 000	360 000	400 000
	UNDP	-	270 000	-
	UNEP	48 000	-	-
	WMO	4 092	-	-
	Denmark	13 410	26 000	13 000
	Federal Republic of Germany	28 248	-	-
	Italy	845 963	876 000	950 000
	Japan	19 235	24 000	24 000
	Sweden	71 770	71 000	70 000
	United States of America	28 928	131 000	-
	International Union of Geology and Geophysics	2 500	-	-
	OPEC	-	100 000	100 000
	Sub-total	1 424 146	1 858 000	1 557 000
K.	International Laboratory of Marine Radioactivity			
	UNEP	166 976	14 000	-
	Monaco	110 981	120 000	125 000
	Sub-total	277 957	134 000	125 000
L.	Safeguards			
	Australia	63 863	30 000	30 000
	Canada	138 248	185 000	200 000
	Federal Republic of Germany	191 866	200 000	200 000
	Union of Soviet Socialist Republics	328	508 000	400 000
	United Kingdom of Great Britain and Northern Ireland	-	100 000	100 000
	United States of America	1 805 706	1 000 000	1 000 000
	Sub-total	2 200 011	2 023 000	1 930 000

	1980 Actual obligations	1981 Estimate	1982 Estimate
P. Administration			
International Plutonium Storage			
Argentina	-	3 000	-
Australia	-	17 500	-
Finland	-	3 000	-
Federal Republic of Germany	-	70 000	-
Italy	-	15 000	-
Japan	4 114	86 000	-
Netherlands	45 369	31 000	-
Pakistan	-	262	-
Spain	-	15 000	-
Sweden	60 196	35 000	-
United Kingdom of Great Britain and Northern Ireland	38 525	93 000	-
Sub-total	148 204	368 762	-
International Spent Fuel Management			
Argentina	-	790	-
Finland	-	1 000	-
Italy	-	4 000	-
Pakistan	-	100	-
Switzerland	-	1 200	-
United States of America	70 054	24 000	-
Sub-total	70 054	31 090	-
Total, Administration	218 258	399 852	-
TOTAL	12 569 633	15 066 852	12 602 000

a/ In addition to the above indicated cash resources, Member States make contributions in kind consisting of cost-free experts and consultants, stipends for fellowships, training courses and other.

**THE PROGRAMME BUDGET**

**A. TECHNICAL ASSISTANCE AND TRAINING**

A. TECHNICAL ASSISTANCE AND TRAINING

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table A.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	2 284 384	2 534 000
Consultants	-	19 000
Overtime	3 574	3 000
Temporary assistance	54 397	36 000
Sub-total	2 342 355	2 592 000
Common staff costs	704 428	773 100
Travel	66 110	95 000
Representation and hospitality	584	1 100
Common services, supplies and equipment	5 473	9 800
Other items of expenditure		
Losses from exchange of currency	36 601	-
Transfer of costs:		
Linguistic services	223 573	375 000
Printing and publishing services	101 789	144 000
Data processing services	134 443	65 000
TOTAL	3 615 356	4 055 000

A. TECHNICAL ASSISTANCE AND TRAINING

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
193 000	45 000	238 000	2 772 000	3 051 000	3 311 000
2 000	(7 000)	(5 000)	14 000	21 000	21 000
200	(200)	-	3 000	3 000	3 300
3 000	6 000	9 000	45 000	55 000	60 000
198 200	43 800	242 000	2 834 000	3 130 000	3 395 300
72 800	14 000	86 800	859 900	945 900	1 026 500
10 000	(10 000)	-	95 000	100 000	110 000
200	-	200	1 300	1 200	1 200
500	(2 500)	(2 000)	7 800	8 900	10 000
-	-	-	-	-	-
31 000	(88 000)	(57 000)	318 000	320 000	416 000
12 000	-	12 000	156 000	177 000	222 000
5 000	135 000	140 000	205 000	158 000	155 000
329 700	92 300	422 000	4 477 000	4 841 000	5 336 000

A. TECHNICAL ASSISTANCE AND TRAINING

SUMMARY OF MANPOWER

Table A.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	9	9	9	-	9	9	9
P-4	11	11	11	-	11	11	11
P-3	8	8	8	-	8	8	8
P-2	4	4	5	1	6	7	7
Sub-total	33	33	34	1	35	36	36
GS	41	42	42	2	44	47	49
TOTAL	74	75	76	3	79	83	85

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 \$ 422 000, of which \$ 329 700 will be required to cover salary and other price increases and \$ 92 300 will be a programme increase.

A/2. A programme increase of \$ 59 000 is foreseen in respect of salaries and common staff costs due to the addition of three GS posts, one each for the Programme Co-ordination, Experts and Training Courses Sections (see para. A/7 below). The addition of one P-2 post in the "Fellowships and training" sub-programme by transfer from another programme is already reflected in the "1981 Adjusted budget". A programme increase of \$ 6 000 in respect of temporary assistance will be offset by programme decreases in consultants' services (\$ 7 000) and overtime (\$ 200). Further programme decreases are foreseen in respect of duty travel (\$ 10 000) and common services (\$ 2 500).

A/3. With regard to the allocation of service costs, a programme increase of \$ 135 000 will be required for data processing services; this will be partly offset by a programme reduction of \$ 88 000 in respect of linguistic services.

A/4. The Agency's administrative costs in carrying out UNDP projects are in part refunded to the Agency as miscellaneous income under the Regular Budget. The UNDP programme support costs shown in Table 4 (Summary of income) are related to support both under the "Technical Assistance and Training" programme and under "Executive Management and Technical Programme Planning" and "Administration".

A/5. An amount of \$ 16 700 000 is foreseen for the Technical Assistance Fund, as compared with \$ 13 650 000 for 1981. The increase of \$ 3 050 000 is attributable to the increase in the target for voluntary contributions from \$ 13 million to \$ 16 million and to an expected increase of \$ 50 000 in other income.

A/6. As can be seen from Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), it is expected that UNDP will put \$ 6 million at the Agency's disposal. Special contributions to finance technical assistance have also been offered by Belgium (\$ 70 000), Finland (\$ 130 000), Federal Republic of Germany (\$ 300 000), Sweden (\$ 300 000), the United Kingdom (\$ 250 000) and the United States of America (\$ 1.2 million). An amount of \$ 25 000 is again foreseen for fellowships to be financed from funds contributed for that purpose by the Soviet Union.

Manpower

A/7. The column "1981 adjusted" in Table A.2 above reflects the transfer to this programme of one P-2 post; the "1982" column reflects the addition of three GS posts and the upgrading of one GS post to the P-2 level, which results in a net increase of two GS posts and one P-2 post, as can be seen from the "Change" column in Table A.2 above. Detailed justifications for the new posts and for the reclassification are provided in Annex IV.

A/8. For 1983, the addition of one P-2 post and three GS posts is foreseen. It is also anticipated that in 1984 two additional GS posts will be needed.

THE PROGRAMME

OBJECTIVE

A/9. The objective is to promote the transfer to developing countries of skills and knowledge relating to the use of nuclear energy for peaceful purposes in order to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world, in accordance with the Agency's Statute. The mechanisms for achieving this objective are:

- (a) The annual regular programme of technical assistance approved by the Board of Governors and financed from the Agency's own resources (derived mainly from voluntary contributions, a target for which is set annually by the General Conference) and through additional, extrabudgetary contributions in cash and in kind;
- (b) The designation of the Agency as executing agency for UNDP-assisted projects;
- (c) Special arrangements with donor countries for providing assistance to specific projects financed entirely by those countries; and
- (d) Funds-in-trust arrangements with recipient countries for the provision of assistance through the Agency.

THE ORIGINAL PROGRAMME

A/10. In 1982 the activities under this programme will continue as outlined in 630/A.



## B. NUCLEAR POWER

## B. NUCLEAR POWER

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table B.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	1 196 574	1 397 000
Consultants	40 333	76 400
Temporary assistance	3 651	6 400
Sub-total	1 240 558	1 479 800
Common staff costs	368 102	426 000
Travel	35 289	47 000
Meetings		
Conferences, symposia, seminars	32 768	32 000
Technical committees, advisory groups	64 047	85 000
Representation and hospitality	4 595	7 200
Scientific and technical contracts	33 445	88 000
Scientific supplies and equipment	849	-
Common services, supplies and equipment	6 737	9 000
Other items of expenditure		
Losses from exchange of currency	19 164	-
Transfer of costs:		
Linguistic services	98 420	95 000
Printing and publishing services	500 997	263 000
Data processing services	145 170	80 000
To other: PNE	(24 000)	(7 000)
Conference services	27 340	30 000
TOTAL	2 553 481	2 635 000

B. NUCLEAR POWER

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
92 000	-	92 000	1 489 000	1 583 000	1 691 000
9 100	6 000	15 100	91 500	154 000	159 000
500	(700)	(200)	6 200	5 000	4 900
101 600	5 300	106 900	1 586 700	1 742 000	1 854 900
35 900	-	35 900	461 900	490 600	525 000
5 000	500	5 500	52 500	80 000	82 000
4 000	179 000	183 000	215 000	74 000	100 000
10 000	-	10 000	95 000	150 000	140 000
1 200	(500)	700	7 900	8 400	9 100
5 000	(3 000)	2 000	90 000	95 000	95 000
-	-	-	-	-	-
500	2 500	3 000	12 000	14 000	16 000
-	-	-	-	-	-
8 000	(10 000)	(2 000)	93 000	105 000	96 000
23 000	191 000	214 000	477 000	520 000	550 000
7 000	28 000	35 000	115 000	121 000	133 000
-	7 000	7 000	-	-	-
3 000	37 000	40 000	70 000	56 000	56 000
204 200	436 800	641 000	3 276 000	3 456 000	3 657 000

## B. NUCLEAR POWER

## SUMMARY OF MANPOWER

Table B.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	9	9	9	-	9	9	9
P-4	7	7	7	-	7	7	7
P-3	4	4	4	1	5	5	5
P-2	1	1	1	(1)	-	-	-
Sub-total	22	22	22	-	22	22	22
GS	13	13	12	-	12	12	12
TOTAL	35	35	34	-	34	34	34

## CHANGES IN COSTS AND MANPOWER

Costs

B/1. As will be seen from Table B.1 above, the cost of this programme is expected to increase by \$ 641 000, of which \$ 204 200 will be required to cover salary and other price increases and \$ 436 800 will be a programme increase.

B/2. The programme increase of \$ 179 000 in respect of conferences, symposia and seminars is attributable to the increase in the number of meetings foreseen for 1982 as compared with 1981. Whereas the 1981 budget estimates related to a single symposium, it is planned to hold two symposia and also the International Conference on Three Decades of Nuclear Power in 1982.

B/3. Programme increases are foreseen in respect of consultants' services (\$ 6 000), travel (\$ 500) and common services, supplies and equipment (\$ 2 500); these are partly offset by programme reductions in respect of temporary assistance (\$ 700), hospitality (\$ 500) and scientific and technical contracts (\$ 3 000).

B/4. As regards the allocation of service costs, a programme decrease of \$ 10 000 is foreseen in respect of linguistic services. The programme increase of \$ 191 000 in respect of printing and publishing services and of \$ 37 000 in respect of conference services are mainly related to the increase in the number of meetings to be held in 1982. A programme increase of \$ 28 000 will be required for data processing services. The amount of \$ 7 000 shown against "To other: PNE" reflects the fact that the support rendered to the "Nuclear Explosions for Peaceful Purposes" programme, for which in the 1981 estimates \$ 7 000 were charged to that programme, will be discontinued.

Manpower

B/5. Table B.2 reflects, in the "1981 Adjusted" column, the transfer of one GS post to another programme. For 1982, the upgrading of one Professional post from the P-2 to the P-3 level is foreseen. Detailed justifications are provided in Annex IV.

B/6. No further changes are foreseen for 1983 and 1984.

## THE PROGRAMME

## OBJECTIVE

B/7. The objective is to promote the exchange of information between Member States on technical aspects of nuclear power plants and economic aspects of nuclear power and its fuel cycle, to provide assistance to Member States in the planning, implementation and operation of nuclear power plants and to assist in the development of advanced nuclear power technology and fuel cycle concepts. This will be done in particular by:

- (a) Giving interested Member States technical and economic advice in connection with their programmes and supporting them in ensuring that their nuclear manpower is adequately trained;
- (b) Collecting and disseminating evaluated and systematized information on nuclear power requirements and costs, on plant operating experience, on proven and advanced nuclear power technologies and on new fuel cycle concepts; and
- (c) Assessing the role of nuclear power, compared to conventional and non-conventional energy options, in meeting world energy demands within financing, environmental, manpower availability and infrastructure constraints.

## STRUCTURE

B/8. This programme consists of the four sub-programmes shown in Table B.3.

## CHANGES IN THE ORIGINAL PROGRAMME

B/9. Detailed information on the activities planned for 1982 is provided in 630/B. The following additions to, and changes in, activities under the sub-programmes indicated below are foreseen.

Energy forecasts and the economic assessment  
of nuclear power and its fuel cycle

(630/B.1)

B.1/1. The energy and economic data bank (see 630/B.1.1/4) is increasingly being used in the Agency's assistance to developing countries for energy planning studies. In this connection, a review will be made, with the advice of energy planning experts, of the methodologies used by the Agency for forecasting energy and electricity needs in developing countries and deciding on the appropriate role of nuclear power. A report on improved methodologies will be issued.

B.1/2. The review of the methodologies for electric system expansion planning (see 630/B.1.1/6) will be undertaken within the Agency, so that the originally proposed Advisory Group meeting has been cancelled.

## B. NUCLEAR POWER

### Nuclear power programme implementation

(630/B.2)

B.2/1. The question of small and medium power reactors will be covered in detail at the International Conference on Nuclear Power Experience (Annex I(1)), and sufficient material for the compilation of the status report (see 630/B.2.1/7) will therefore be available without the need for the originally proposed Technical Committee meeting.

### Technology of nuclear power plants of proven types

(630/B.3)

B.3/1. The Advisory Group meeting on possible applications of nuclear power in the 1990s (see 630/B.3.3/3) will be postponed to 1983. The associated report will be also issued in that year.

### Advanced nuclear power technology

(630/B.4)

B.4/1. A review will be made by a Technical Committee of the possibility of using medium-temperature and high-temperature nuclear heat to replace fossil-fuel energy in industrial processes requiring large amounts of heat. A report will be issued in 1983.

### Summary of manpower and costs by sub-programme

Table B.3

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Energy forecasts and the economic assessment of nuclear power and its fuel cycle	7.4	3.8	857 000	7.4	3.8	931 000	7.4	3.8	1 003 000
Nuclear power programme implementation	4.7	2.6	642 000	4.7	2.6	710 000	4.7	2.6	724 000
Technology of nuclear power plants of proven types	5.7	3.2	985 000	5.7	3.2	1 031 000	5.7	3.2	1 095 000
Advanced nuclear power technology	4.2	2.4	630 000	4.2	2.4	784 000	4.2	2.4	835 000
International Conference on Nuclear Power Experience	-	-	162 000	-	-	-	-	-	-
<b>TOTAL</b>	<b>22.0</b>	<b>12.0</b>	<b>3 276 000</b>	<b>22.0</b>	<b>12.0</b>	<b>3 456 000</b>	<b>22.0</b>	<b>12.0</b>	<b>3 657 000</b>

Energy forecasts and the economic assessment of  
nuclear power and its fuel cycle

Summary by programme components

Table B.4

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Energy demand analysis and nuclear power planning	3.1	1.6	276 500	4 000	10 000	6 500	297 000
Economics of nuclear power and its fuel cycle	3.3	1.7	296 500	10 000	10 000	3 500	320 000
Demand for nuclear raw materials and fuel cycle services	1.0	0.5	83 300	-	-	7 700	91 000
<hr/>							
Linguistic services	-	-	-	-	-	30 000	30 000
Printing and publishing services	-	-	-	-	-	14 000	14 000
Data processing services	-	-	-	-	-	99 000	99 000
Conference services	-	-	-	-	-	6 000	6 000
<b>TOTAL</b>	<b>7.4</b>	<b>3.8</b>	<b>656 300</b>	<b>14 000</b>	<b>20 000</b>	<b>166 700</b>	<b>857 000</b>

Nuclear power programme implementation

Summary by programme components

Table B.5

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Survey of nuclear power applicability and constraints in developing countries	1.0	0.7	98 300	-	5 000	4 700	108 000
Assistance with technical planning and project-related activities and domestic infrastructure development	1.7	0.9	159 300	23 000	7 000	10 700	200 000
Manpower development	2.0	1.0	211 200	-	-	6 800	218 000
<hr/>							
Linguistic services	-	-	-	-	-	22 000	22 000
Printing and publishing services	-	-	-	-	-	88 000	88 000
Data processing services	-	-	-	-	-	2 000	2 000
Conference services	-	-	-	-	-	4 000	4 000
<b>TOTAL</b>	<b>4.7</b>	<b>2.6</b>	<b>468 800</b>	<b>23 000</b>	<b>12 000</b>	<b>138 200</b>	<b>642 000</b>

B. NUCLEAR POWER

Technology of nuclear power plants of proven types

Summary by programme components

Table B.6

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Survey of nuclear power plant operating experience and system performance	3.2	2.1	321 800	102 000	10 000	13 200	447 000
Quality assurance for nuclear power plants	1.5	0.7	138 200	7 000	10 000	3 800	159 000
Potential applications of nuclear power	1.0	0.4	91 800	-	-	3 200	95 000
<hr/>							
Linguistic services	-	-	-	-	-	11 000	11 000
Printing and publishing services	-	-	-	-	-	225 000	225 000
Data processing services	-	-	-	-	-	12 000	12 000
Conference services	-	-	-	-	-	36 000	36 000
<b>TOTAL</b>	<b>5.7</b>	<b>3.2</b>	<b>551 800</b>	<b>109 000</b>	<b>20 000</b>	<b>304 200</b>	<b>985 000</b>

Advanced nuclear power technology

Summary by programme components

Table B.7

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Power reactor technology	2.2	1.4	202 100	14 000	8 000	7 900	232 000
Reactor and fuel cycle concepts	1.0	0.5	84 600	-	-	1 400	86 000
In-core fuel management	1.0	0.5	85 000	-	30 000	3 000	118 000
<hr/>							
Linguistic services	-	-	-	-	-	30 000	30 000
Printing and publishing services	-	-	-	-	-	150 000	150 000
Data processing services	-	-	-	-	-	2 000	2 000
Conference services	-	-	-	-	-	12 000	12 000
<b>TOTAL</b>	<b>4.2</b>	<b>2.4</b>	<b>371 700</b>	<b>14 000</b>	<b>38 000</b>	<b>206 300</b>	<b>630 000</b>

International Conference on Nuclear Power Experience

## Summary by programme components

Table B.8

Programme component	Man-years		1982 Cost estimates				Total
	P	GS	Staff	Meetings	Contracts	Other	
International Conference on Nuclear Power Experience	-	-	-	150 000	-	12 000	162 000
TOTAL	-	-	-	150 000	-	12 000	162 000

## TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

	<u>Paragraph</u>
1. Technical Committee on energy, electricity and nuclear power projection methodologies	
2. Advisory Group on review of recent experience of power plant investment costs	B.1.2/5
3. Advisory Group on guidebook on nuclear power project management	B.2.2/4
4. Technical Committee on the selection, qualification and specialized training of certain types of operation staff	B.2.2/5
5. Advisory Group on reporting and evaluating operational experience with nuclear power plants	B.3.1/5
6. Technical Committee on reactor pressure components	B.3.1/6
7. Technical Committee on nuclear power plant control and instrumentation	B.3.1/6
8-9. Specialists' meetings of the International Working Group on the Reliability of Reactor Pressure Components	B.3.1/7
10. Specialists' meetings on actuators and control equipment	B.3.1/7
11. Specialists' meeting on alarm and disturbance analysis for nuclear power plants	B.3.1/7
12. Advisory Group on manual for auditing of quality assurance programmes for nuclear power plants	B.3.2/4
13. Technical Committee on fast breeder reactor development	B.4.1/5
14-16. Specialists' meetings of International Working Group on Fast Breeder Reactors	B.4.1/5
17-18. Specialists' meetings on gas-cooled reactors	B.4.1/6
19. Technical Committee on the substitution of nuclear process heat for fossil-fuel energy	



### C. NUCLEAR FUEL CYCLE

## C. NUCLEAR FUEL CYCLE

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table C.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	1 083 230	1 315 000
Consultants	62 725	109 900
Overtime	152	3 700
Temporary assistance	2 096	1 200
Sub-total	1 148 203	1 429 800
Common staff costs	333 129	400 900
Travel	46 425	68 100
Meetings		
Conferences, symposia, seminars	54 294	65 000
Technical committees, advisory groups	183 616	313 000
Representation and hospitality	9 180	9 200
Scientific and technical contracts	200 125	175 000
Scientific supplies and equipment	56	-
Common services, supplies and equipment	2 197	3 000
Other items of expenditure		
Losses from exchange of currency	17 311	-
Transfer of costs:		
Linguistic services	115 555	73 000
Printing and publishing services	508 652	311 000
Data processing services	42 796	30 000
Conference services	78 113	59 000
TOTAL	2 739 652	2 937 000

## C. NUCLEAR FUEL CYCLE

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
67 000	-	67 000	1 382 000	1 507 000	1 628 000
13 100	(7 000)	6 100	116 000	175 000	195 000
100	(2 800)	(2 700)	1 000	700	800
100	900	1 000	2 200	3 600	3 600
80 300	(8 900)	71 400	1 501 200	1 686 300	1 827 400
27 600	-	27 600	428 500	467 400	504 800
7 900	(3 500)	4 400	72 500	95 000	110 000
8 000	23 000	31 000	96 000	190 000	195 000
38 000	(32 000)	6 000	319 000	494 000	530 000
1 500	-	1 500	10 700	13 300	14 800
11 000	(7 500)	3 500	178 500	225 000	240 000
-	-	-	-	-	-
200	400	600	3 600	28 000	31 000
-	-	-	-	-	-
6 000	-	6 000	79 000	72 000	73 000
27 000	-	27 000	338 000	369 000	334 000
3 000	32 000	35 000	65 000	71 000	77 000
6 000	3 000	9 000	68 000	69 000	75 000
216 500	6 500	223 000	3 160 000	3 780 000	4 012 000

## C. NUCLEAR FUEL CYCLE

## SUMMARY OF MANPOWER

Table C.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	-	1	1	-	1	1	1
P-5	8	7	7	-	7	7	7
P-4	12	12	12	-	12	13	13
Sub-total	20	20	20	-	20	21	21
GS	12	12	13	-	13	13	13
TOTAL	32	32	33	-	33	34	34

## CHANGES IN COSTS AND MANPOWER

Costs

C/1. As will be seen from Table C.1 above, it is expected that the cost of this programme will increase by \$ 223 000, of which \$ 216 500 will be required to cover salary and other price increases and \$ 6 500 will be a programme increase.

C/2. Programme decreases are foreseen in respect of consultants' services (\$ 7 000), overtime (\$ 2 800) and travel (\$ 3 500). The programme increase of \$ 23 000 in respect of conferences, symposia and seminars is attributable to an increase by one in the number of symposia compared with 1981. This amount is offset by a programme reduction of \$ 32 000 in respect of Technical Committees and Advisory Groups that is expected to be achieved in spite of the fact that the number of meetings has risen by two. A programme decrease of \$ 7 500 is foreseen in respect of research contracts in the "Waste management" sub-programme. Small programme increases are foreseen in respect of temporary assistance (\$ 900) and common services, supplies and equipment (\$ 400).

C/3. As regards the allocation of service costs, a programme increase of \$ 32 000 is foreseen in data processing services. The programme increase of \$ 3 000 in respect of conference services is related to the increase in the number of meetings to be held in 1982.

Manpower

C/4. Table C.2 reflects, in the "1981 Adjusted" column, the transfer of one GS post to this programme. An explanation is provided in Annex IV.

C/5. For 1983, the addition of one P-4 post will be required in the "Nuclear materials and fuel cycle technology" sub-programme, for work in connection with spent fuel management.

C/6. No further changes are foreseen for 1984.

## THE PROGRAMME

## OBJECTIVE

C/7. The objective is to promote the exchange of information between Member States on technical, environmental and economic aspects of nuclear fuel cycle technology, to provide assistance to Member States in the planning, implementation and operation of nuclear fuel cycle facilities and to assist in the development of advanced nuclear fuel cycle technology. This will be done in particular by:

- (a) Collecting and disseminating evaluated and systematized information on subjects such as:
  - (i) nuclear materials, resources and supply;
  - (ii) reactor fuel technology, performance and reliability;
  - (iii) spent fuel management;
  - (iv) the handling and treatment of radioactive wastes at nuclear fuel cycle facilities;
  - (v) the underground disposal of radioactive wastes; and
  - (vi) environmental aspects of the nuclear fuel cycle;
- (b) Co-operating in the development of guidelines and in the preparation of nuclear fuel cycle safety codes and guides;
- (c) Giving interested Member States technical advice in connection with their nuclear fuel cycle programmes; and
- (d) Assessing technical and environmental aspects of nuclear fuel cycle development in Member States.

## STRUCTURE

C/8. This programme consists of the two sub-programmes shown in Table C.3.

## CHANGES IN THE ORIGINAL PROGRAMME

C/9. Detailed information on the activities planned for 1982 is provided in 630/C. The following additions to, and changes in, activities under the sub-programmes indicated below are foreseen.

Nuclear materials and fuel cycle technology

(630/C.1)

C.1/1. In place of the consultants' meeting planned for 1981 to consider certain aspects of uranium recovery (see 630/C.1.1/11), a joint NEA/IAEA Working Group will be convened in 1982 to initiate preparation of a Technical Report (for issue in 1983) on the more general topic of the use of advanced technologies in uranium ore processing, including recovery from non-conventional sources.

C.1/2. The report on uranium geology (see 630/C.1.1/13) will be delayed to 1983, owing to the postponement of the relevant Technical Committee meeting.

C.1/3. In accordance with recommendations from the International Working Group, the scope of the reports on fuel element reliability and fuel utilization (see 630/C.1.2/11) will be modified to cover the following subjects: computer modelling of fuel element performance and the behaviour of water reactor fuel under power ramping and power cycling conditions.

## C. NUCLEAR FUEL CYCLE

C.1/4. It has been decided to postpone the specialists' meeting on fuel technology (see 630/C.1.2/14) until 1982. The corresponding report will be issued in 1983 and will cover improved fuel technology and performance.

C.1/5. The consultants' meeting to review reprocessing technologies (see 630/C.1.3/8) was held in 1981 and will now be followed by an Advisory Group meeting which will focus on the technological requirements for spent fuel management related to safety, safeguards and environmental considerations. The originally proposed Technical Document will be replaced by one on the latter subject.

### Waste management

(630/C.2)

C.2/1. The Technical Committee meeting on the management of control rods and other intermediate-level waste components from nuclear facilities (see 630/C.2.1/9) will be postponed.

C.2/2. Owing to the postponement until 1983 of the associated Advisory Group meeting, the Safety Series recommendations on the operation of off-gas cleaning systems at nuclear facilities (see 630/C.2.1/11) will now be issued in 1984.

C.2/3. It is planned to postpone to 1983 the Advisory Group meeting on the Revision of the Code of Practice on the Management of Wastes from the Mining and Milling of Uranium and Thorium Ores (see 630/C.2.1/12).

C.2/4. The Advisory Group meeting on the regulation of underground disposal (see 630/C.2.2/6) and the issue of the corresponding Safety Series document are to be postponed.

C.2/5. The Technical Committee meeting on the effects of heat and radiation from radioactive waste in underground disposal (see 630/C.2.2/11) is now to be held in 1983: the Technical Document will also be issued in that year.

C.2/6. Work has been completed on the co-ordinated research programme concerned with the behaviour of radium in inland waterways and aquifers (see 630/C.2.3/12). A follow-up programme on the migration of radium and other contaminants present in liquid and solid waste from the mining and milling of uranium has already been initiated.

C.2/7. The Advisory Group meeting on the environmental assessment of sea dumping activities (see 630/C.2.3/16) is to be postponed and the associated Technical Document will not now be produced in 1982. The subject will, however, be partially covered in a related Safety Series report to be issued in 1982 on the protection of the marine environment from the disposal of radioactive waste into the sea. This report will result from a review, initiated in 1980 with the aid of consultants (see 630/C.2.3/7), of the 1961 Safety Series No. 5 (Radioactive Waste Disposal into the Sea).

C.2/8. It is proposed to broaden the scope of the Advisory Group meeting on sea dumping (see 630/C.2.3/16) to cover the development of methodologies for the determination of de minimis quantities exempted from special permits, the environmental assessment of dumping operations and the assessment of sea dumping versus underground disposal. The first of these topics will not now form the subject of a separate Technical Report in 1982 (see 630/C.2.3/16) as the associated Technical Committee meeting due to be held in 1981 was postponed.

Summary of manpower and costs by sub-programme

Table C.3

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Nuclear materials and fuel cycle technology	9.5	6.0	1 191 000	10.5	6.0	1 511 000	10.5	6.0	1 723 000
Waste management	10.5	7.0	1 969 000	10.5	7.0	2 269 000	10.5	7.0	2 289 000
<b>TOTAL</b>	<b>20.0</b>	<b>13.0</b>	<b>3 160 000</b>	<b>21.0</b>	<b>13.0</b>	<b>3 780 000</b>	<b>21.0</b>	<b>13.0</b>	<b>4 012 000</b>

Nuclear materials and fuel cycle technology

## Summary by programme components

Table C.4

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear materials, resources and supply	4.5	2.6	431 000	46 000	20 000	14 000	511 000
Reactor fuel technology, performance and reliability	3.7	2.7	345 900	6 000	18 500	13 600	384 000
Spent fuel management	1.3	0.7	117 500	2 000	10 000	6 500	136 000
Linguistic services	-	-	-	-	-	10 000	10 000
Printing and publishing services	-	-	-	-	-	81 000	81 000
Data processing services	-	-	-	-	-	59 000	59 000
Conference services	-	-	-	-	-	10 000	10 000
<b>TOTAL</b>	<b>9.5</b>	<b>6.0</b>	<b>894 400</b>	<b>54 000</b>	<b>48 500</b>	<b>194 100</b>	<b>1 191 000</b>

C. NUCLEAR FUEL CYCLE

Waste management

Summary by programme components

Table C.5

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Handling and treatment of radioactive wastes	4.2	3.0	419 500	195 000	60 000	21 500	696 000
Underground disposal of radioactive wastes	3.1	2.0	304 600	85 000	20 000	14 400	424 000
Environmental aspects of the nuclear fuel cycle	3.2	2.0	311 200	81 000	50 000	16 800	459 000
Linguistic services	-	-	-	-	-	69 000	69 000
Printing and publishing services	-	-	-	-	-	257 000	257 000
Data processing services	-	-	-	-	-	6 000	6 000
Conference services	-	-	-	-	-	58 000	58 000
<b>TOTAL</b>	<b>10.5</b>	<b>7.0</b>	<b>1 035 300</b>	<b>361 000</b>	<b>130 000</b>	<b>442 700</b>	<b>1 969 000</b>

TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

	<u>Paragraph</u>
1. NEA/IAEA Steering Group on uranium resources	C.1.1/8
2. Technical Committee on uranium ore refining and processing	C.1.1/15
3. Technical Committee on uranium geology	
4. NEA/IAEA Working Group on uranium extraction	
5. Specialists' meeting on computer modelling of fuel element performance	
6. Specialists' meeting on behaviour of water reactor fuel under power ramping and power cycling conditions	
7. Specialists' meeting on improved fuel technology and performance	
8. Advisory Group on technological requirements for spent fuel management related to safety, safeguards and environmental considerations	
9. Advisory Group on methods for treatment of low-intermediate level liquid waste	C.2.1/9
10. Advisory Group on Code of Practice on Management of Radioactive Waste from Nuclear Power Plants	C.2.1/9
11. Advisory Group on conditioning requirements for storage and disposal of radioactive waste	C.2.1/10

12.	Advisory Group on testing of particulate filters	C.2.1/11
13.	Technical Committee on nuclear facility decontamination techniques and the management of waste from decontamination and decommissioning activities	C.2.1/13
14.	Technical Review Committee on the underground disposal of radioactive wastes	C.2.2/5
15.	Advisory Group on basic criteria for underground disposal of radioactive wastes	C.2.2/6
16.	Technical Committee on design and construction of solid waste repositories in shallow ground	C.2.2/9
17.	Technical Committee on design and construction of solid waste repositories in rock caverns	C.2.2/9
18.	Advisory Group on the operation, shut-down and surveillance of shallow-ground waste repositories	C.2.2/10
19.	Advisory Group on the operation, shut-down and surveillance of rock-cavern waste repositories	C.2.2/10
20.	Advisory Group on models and radiological basis for recommendations on radionuclide releases of regional and world-wide interest	C.2.3/10
21.	Technical Committee on atmospheric dispersion models	C.2.3/10
22.	Advisory Group on radiological basis for IAEA recommendations under London Dumping Convention	C.2.3/15
23.	Advisory Group on methodology for assessment of sea dumping	C.2.3/16



D. NUCLEAR SAFETY

## D. NUCLEAR SAFETY

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table D.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	1 418 396	1 778 000
Consultants	90 684	161 700
Overtime	10 263	12 600
Temporary assistance	5 124	3 600
Sub-total	1 524 467	1 955 900
Common staff costs	438 181	542 600
Travel	46 962	120 900
Meetings		
Conferences, symposia, seminars	30 143	99 000
Technical committees, advisory groups	447 820	672 000
Representation and hospitality	8 938	10 600
Scientific and technical contracts	201 019	170 000
Scientific supplies and equipment	42 607	76 000
Common services, supplies and equipment	40 568	16 000
Other items of expenditure	-	-
Losses from exchange of currency	22 716	-
Transfer of costs:		
Linguistic services	689 472	462 000
Printing and publishing services	478 013	627 000
Data processing services	12 496	22 000
To other: PNE	(48 000)	(33 000)
Conference services	64 444	95 000
TOTAL	3 999 846	4 836 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
164 000	8 000	172 000	1 950 000	2 168 000	2 386 000
19 300	12 000	31 300	193 000	206 000	218 000
1 000	5 800	6 800	19 400	21 100	22 800
300	(1 400)	(1 100)	2 500	3 000	3 000
184 600	24 400	209 000	2 164 900	2 398 100	2 629 800
59 200	3 000	62 200	604 800	672 600	739 400
13 100	(12 000)	1 100	122 000	181 000	193 000
10 000	(36 000)	(26 000)	73 000	141 000	160 000
80 000	(32 000)	48 000	720 000	690 000	750 000
1 900	-	1 900	12 500	18 500	19 000
10 000	135 000	145 000	315 000	355 000	355 000
7 000	(26 000)	(19 000)	57 000	57 000	57 000
1 000	51 000	52 000	68 000	91 000	116 000
-	800	800	800	800	800
-	-	-	-	-	-
44 000	(2 000)	42 000	504 000	650 000	500 000
52 000	(47 000)	5 000	632 000	718 000	597 000
2 000	26 000	28 000	50 000	61 000	72 000
-	33 000	33 000	-	-	-
8 000	(32 000)	(24 000)	71 000	83 000	90 000
472 800	86 200	559 000	5 395 000	6 117 000	6 279 000

## D. NUCLEAR SAFETY

## SUMMARY OF MANPOWER

Table D.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	10	12	13	-	13	13	13
P-4	11	10	10	-	10	11	12
P-3	3	3	3	-	3	3	3
P-2	1	-	-	-	-	-	-
Sub-total	26	26	27	-	27	28	29
GS	20	20	19	1	20	22	22
TOTAL	46	46	46	1	47	50	51

## CHANGES IN COSTS AND MANPOWER

Costs

D/1. As will be seen from Table D.1 above, the cost of this programme is expected to increase by \$ 559 000, of which \$ 472 800 will be required to cover salary and other price increases and \$ 86 200 will be a programme increase.

D/2. The programme increase of \$ 11 000 in respect of salaries and common staff costs is the net result of the addition of one GS post for the "Radiation protection service" sub-programme and the temporary lapsing of a Professional post in the "Risk assessment research" component which will be redeployed in the "Safety of nuclear installations" sub-programme. The addition of one P-5 post in the "Radiological safety" sub-programme by transfer from another programme and the transfer of a GS post to the "Nuclear Fuel Cycle" programme are already reflected in the "1981 Adjusted budget".

D/3. Programme increases are foreseen in respect of consultants' services (\$ 12 000) and overtime (\$ 5 800); these are partly offset by programme decreases in respect of temporary assistance (\$ 1 400) and travel (\$ 12 000). The programme decrease of \$ 36 000 for conferences, symposia and seminars is attributable to the reduction in the number of meetings planned. Although there will be an increase of one in the number of Technical Committee and Advisory Group meetings, a programme reduction of \$ 32 000 is foreseen under this item. A programme increase of \$ 135 000 in respect of scientific and technical contracts is foreseen in the two components dealing with radiological protection of workers and of the general public.

D/4. In connection with the proposed production of a training film on "Emergency planning and preparedness", a programme increase of \$ 51 000 is foreseen. Under scientific supplies and equipment, a programme decrease of \$ 26 000 will be possible. The amount of \$ 800 against "Other items of expenditure" is related to training activities.

D/5. As regards the allocation of service costs, programme decreases are expected in linguistic services (\$ 2 000), printing and publishing services (\$ 47 000) and conference services (\$ 32 000). These will be partly offset by increased requirements in respect of data processing services (\$ 26 000). No further transfers of charges to the "Nuclear Explosions for Peaceful Purposes" programme in connection with services rendered to that programme will be made. The discontinuation of such services is reflected in a programme increase of \$ 33 000 for the "Nuclear Safety" programme.

D/6. As can be seen from Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), it is expected that the United States Government will contribute an amount of \$ 65 000 to cover the cost of an expert it is making available.

#### Manpower

D/7. As will be seen from Table D.2 above, one P-5 post is being transferred to this programme in the adjusted manning table for 1981, while one GS post is transferred to another programme. For 1982, the addition of one GS post will be required. Detailed justifications for the new post and the transfers are provided in Annex IV.

D/8. For 1983, the addition of one P-4 post and one GS post will be required for the "Safety of nuclear installations" sub-programme, and one GS post for the "Radiation protection service" sub-programme. A further P-4 post for the "Safety of nuclear installations" sub-programme is foreseen for 1984.

### THE PROGRAMME

#### OBJECTIVE

D/9. 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.

#### STRUCTURE

This programme consists of the three sub-programmes shown in Table D.3.

#### CHANGES IN THE ORIGINAL PROGRAMME

D/10. Detailed information on the activities planned for 1982 is provided in 630/D. The following additions to, and changes in, activities under the sub-programme indicated below are foreseen.

#### Radiological safety

(630/D.1)

D.1/1. A Technical Committee on the assessment of internal exposure, meeting in 1980, identified a number of unresolved problems. A second meeting is therefore required for preparation of the final guidance document on the control and assessment of internal exposure (to be issued in 1983).

## D. NUCLEAR SAFETY

D.1/2. After the publication in 1981 of the revised version of the Agency's Basic Safety Standards (see 630/D.1.1/6 (a)), an Advisory Group on current needs in applied radiation protection will review the Agency's radiological safety programme, identify priorities for future work and establish the timetable for revision of other Safety Series publications. Its recommendations will be issued as a Technical Document in 1983.

D.1/3. A second meeting of the Advisory Group on the safe use of radioactive sources and tracers in food and agriculture (see 630/D.1.1/6(b)) will be required to finalize the Safety Series publication.

D.1/4. Owing to the good progress made at the 1981 meeting of the Advisory Group on the provision of radiological protection services, the originally proposed second meeting of the Group (see 630/D.1.1/6(c)) is now no longer required. The final revision of the Code of Practice will be undertaken with the aid of a consultant and the document will be issued in 1983.

D.1/5. Work is to start on the development of the methodology for assessment of doses to the public by intake of radioactive materials through food chains. A Technical Committee on this subject will lead to the issue of a Technical Report in 1983.

D.1/6. In addition to the 1981 consultants' meeting on compliance with the Agency's transport regulations (see 630/D.1.3/7), a Technical Committee meeting will be needed to complete the preparation of a guide (for issue in 1983).

D.1/7. At its meeting in 1980, the Technical Committee on emergency preparedness drafted a programme for the Agency which encompassed both short-term and longer-term activities (see 630/D.1.5/6). The short-term activities include training programmes and advisory missions on the planning and evaluation of emergency preparedness, particularly for developing countries. A Technical Committee will meet to prepare a handbook for use in the assessment of radiological emergency planning (for issue in 1983).

### Safety of nuclear installations

(630/D.2)

D.2/1. In order to keep the Agency's programme in the field of nuclear power plant safety up to date, within the "Exchange of information and training" component an Advisory Group will be held late in 1982 to review - and possibly to advise on new initiatives in - the current programme, taking into account new developments in Member States.

### Summary of manpower and costs by sub-programme

Table D.3

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Radiological safety	11.3	10.4	2 389 000	11.3	10.4	3 058 000	11.3	10.4	3 227 000
Safety of nuclear installations	12.6	5.4	2 591 000	13.6	6.4	2 593 000	14.6	6.4	2 550 000
Radiation protection service	3.1	4.2	415 000	3.1	5.2	466 000	3.1	5.2	502 000
TOTAL	27.0	20.0	5 395 000	28.0	22.0	6 117 000	29.0	22.0	6 279 000

Radiological safety  
Summary by programme components

Table D.4

Programme component	Man-years		1982 Cost estimates				Total
	P	GS	Staff	Meetings	Contracts	Other	
Radiological protection workers	2.8	1.6	277 500	99 000	155 000	14 500	546 000
Radiological protection of the general public	2.8	1.5	257 700	37 000	100 000	12 300	407 000
Safe transport of radioactive materials	2.4	2.4	258 800	72 000	30 000	10 200	371 000
Risk assessment research; joint IAEA/IIASA project	1.1	4.0	218 600	-	30 000	6 400	255 000
Emergency assistance with regard to nuclear accidents	2.2	0.9	193 000	80 000	-	82 000	355 000
<hr/>							
Linguistic services	-	-	-	-	-	124 000	124 000
Printing and publishing services	-	-	-	-	-	262 000	262 000
Data processing services	-	-	-	-	-	43 000	43 000
Conference services	-	-	-	-	-	26 000	26 000
<b>TOTAL</b>	<b>11.3</b>	<b>10.4</b>	<b>1 205 600</b>	<b>288 000</b>	<b>315 000</b>	<b>580 400</b>	<b>2 389 000</b>

Safety of nuclear installations  
Summary by programme components

Table D.5

Programme component	Man-years		1982 Cost estimates				Total
	P	GS	Staff	Meetings	Contracts	Other	
Nuclear safety standards for thermal-neutron nuclear power plants	5.3	3.9	600 900	410 000	-	16 100	1 027 000
Nuclear safety standards for advanced nuclear power plants and for fuel cycle facilities	0.9	0.2	96 200	-	-	43 800	140 000
Advisory missions and safety evaluations of nuclear reactors and other nuclear facilities	4.5	0.8	351 600	-	-	21 400	373 000
Exchange of information and training	1.7	0.3	137 000	57 000	-	1 000	195 000
Nuclear reactor safety research and development	0.2	0.2	15 400	38 000	-	600	54 000
<hr/>							
Linguistic services	-	-	-	-	-	380 000	380 000
Printing and publishing services	-	-	-	-	-	370 000	370 000
Data processing services	-	-	-	-	-	7 000	7 000
Conference services	-	-	-	-	-	45 000	45 000
<b>TOTAL</b>	<b>12.6</b>	<b>5.4</b>	<b>1 201 100</b>	<b>505 000</b>	<b>-</b>	<b>884 900</b>	<b>2 591 000</b>

Radiation protection service  
Summary by programme component

Table D.6

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Radiation protection service	3.1	4.2	363 000	-	-	52 000	415 000
<b>TOTAL</b>	<b>3.1</b>	<b>4.2</b>	<b>363 000</b>	<b>-</b>	<b>-</b>	<b>52 000</b>	<b>415 000</b>

TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

	<u>Paragraph</u>
1. Technical Committee on assessment of internal exposure	
2. Advisory Group on current needs in applied radiation protection	
3. Advisory Group on safe uses of radioactive sources and tracers in food and agriculture	
4. Advisory Group on medical supervision of occupational workers (normal conditions)	D.1.1/7
5. Advisory Group on radiological safety aspects of the operation of accelerators used in industry, hospitals and applied research	D.1.1/9
6. Technical Committee on co-operative programme on levels of radioactive materials in the Baltic Sea	D.1.2/5
7. Technical Committee on assessment of intake of radioactive materials by members of the public through food chains	
8. Advisory Group on comprehensive review of the transport regulations	D.1.3/6
9. Technical Committee on assurance of compliance with the transport regulations	
10. Technical Committee on handbook for assessment of off-site radiological emergency planning	
11-31. Eighteen Technical Review Committees and three Senior Advisory Groups for NUSS programme	D.2.1/4
32. Technical Committee on nuclear incidents	D.2.4/5
33. Advisory Group to review the Agency's programme in nuclear power plant safety	
34. Technical Committee on nuclear safety research results	D.2.5/3
35. Technical Committee on review and updating of safety documentation for research reactors	D.2.5/4

E. NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES

E. NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table E.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	62 099	11 000
Sub-total	62 099	11 000
Common staff costs	19 222	3 900
Meetings		
Technical committees, advisory groups	-	-
Representation and hospitality	-	-
Common services, supplies and equipment	-	1 100
Other items of expenditure		
Losses from exchange of currency	994	-
Transfer of costs:		
Linguistic services	1 463	5 000
Printing and publishing services	13 868	2 000
Other services	120 000	92 000
Conference services	-	-
TOTAL	217 646	115 000

E. NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
1 000	(7 000)	(6 000)	5 000	5 000	6 000
1 000	(7 000)	(6 000)	5 000	5 000	6 000
400	(3 300)	(2 900)	1 000	1 000	2 000
-	-	-	-	23 000	-
-	-	-	-	1 000	-
-	(1 100)	(1 100)	-	-	-
-	-	-	-	-	-
600	(600)	-	5 000	3 000	3 000
-	1 000	1 000	3 000	3 000	3 000
-	(92 000)	(92 000)	-	-	-
-	-	-	-	1 000	-
2 000	(103 000)	(101 000)	14 000	37 000	14 000

E. NUCLEAR EXPLOSIONS FOR PEACEFUL PURPOSES

SUMMARY OF MANPOWER

Table E.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
P-5	1	1	-	-	-	-	-

CHANGES IN COSTS AND MANPOWER

Costs

E/1. As will be seen from Table E.1 above, the cost of this programme is expected to decrease by \$ 101 000 as a net result of salary and other price increases of \$ 2 000 and a programme decrease of \$ 103 000.

E/2. A programme decrease of \$ 10 300 is foreseen in respect of salaries and common staff costs, leaving in this programme only the cost of one man-month of Professional effort. The transfer of the P-5 post to another programme is already reflected in the "1981 Adjusted budget". No provision will be made for common services in 1982 and this will result in a programme decrease of \$ 1 100. As regards the transfer of service costs, the programme decrease of \$ 92 000 shown against "Other" reflects the intention not to use the services of the "Nuclear Power", "Nuclear Safety" and "Administration" programmes in 1982. A programme decrease in respect of linguistic services (\$ 600) is offset by an increase for printing and publishing services (\$ 1 000).

Manpower

E/3. Table E.2 above reflects, in the "1981 Adjusted" column, the transfer to another programme of one P-5 post. As a result, there remains no post on the manning table of this programme.

THE PROGRAMME

OBJECTIVE

E/4. 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, legal health, safety and environmental aspects involved and to respond to requests for PNE-related services.

CHANGES IN THE ORIGINAL PROGRAMME

E/5. Detailed information on the activities planned for 1982 is provided in 630/E. The following change is foreseen.

E/6. The Advisory Group meeting on health and safety aspects of PNEs is being postponed until such time as it is considered that sufficient new information is available to justify holding it.

F. FOOD AND AGRICULTURE

## F. FOOD AND AGRICULTURE

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table F.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	927 772	1 015 000
Consultants	16 293	65 000
Overtime	-	500
Temporary assistance	-	2 800
Sub-total	944 065	1 083 300
Common staff costs	286 580	310 500
Travel	23 961	23 000
Meetings		
Conferences, symposia, seminars	46 239	83 000
Technical committees, advisory groups	53 549	-
Representation and hospitality	2 900	3 700
Scientific and technical contracts	561 363	443 000
Common services, supplies and equipment	3 370	6 500
Other items of expenditure	-	-
Losses from exchange of currency	14 858	-
Transfer of costs:		
Linguistic services	58 158	178 000
Printing and publishing services	219 529	420 000
Data processing services	8 632	42 000
Laboratory services	1 209 660	1 386 000
Conference services	31 246	40 000
TOTAL	3 464 110	4 019 000

## F. FOOD AND AGRICULTURE

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
88 000	(60 000)	28 000	1 043 000	1 114 000	1 188 000
7 800	29 200	37 000	102 000	32 000	35 000
-	-	-	500	600	600
200	1 000	1 200	4 000	4 100	4 400
96 000	(29 800)	66 200	1 149 500	1 150 700	1 228 000
31 400	(18 000)	13 400	323 900	345 300	368 500
3 000	14 000	17 000	40 000	60 000	65 000
10 000	4 000	14 000	97 000	72 000	120 000
-	-	-	-	124 000	130 000
600	-	600	4 300	7 000	7 500
27 000	180 000	207 000	650 000	700 000	715 000
500	-	500	7 000	7 500	8 000
-	3 300	3 300	3 300	4 500	5 000
-	-	-	-	-	-
17 000	(82 000)	(65 000)	113 000	153 000	260 000
36 000	(14 000)	22 000	442 000	478 000	513 000
3 000	(10 000)	(7 000)	35 000	40 000	45 000
126 000	(20 000)	106 000	1 492 000	1 620 000	1 735 000
2 000	(16 000)	(14 000)	26 000	28 000	30 000
352 500	11 500	364 000	4 383 000	4 790 000	5 230 000

F. FOOD AND AGRICULTURE

SUMMARY OF MANPOWER

Table F.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	- (1) <sup>a</sup>	- (1)	- (1)	-	- (1)	- (1)	- (1)
P-5	8 (2)	8 (2)	8 (2)	(1)	7 (2)	7 (2)	7 (2)
P-4	6 (3)	6 (3)	6 (3)	-	6 (3)	6 (3)	6 (3)
P-3	1 (-)	1 (-)	1 (-)	-	1 (-)	1 (-)	1 (-)
P-2	1 (-)	1 (-)	1 (-)	-	1 (-)	1 (-)	1 (-)
Sub-total	16 (6)	16 (6)	16 (6)	(1)	15 (6)	15 (6)	15 (6)
GS	8 (6)	8 (6)	8 (6)	-	8 (6)	8 (6)	8 (6)
TOTAL	24 (12)	24 (12)	24 (12)	(1)	23 (12)	23 (12)	23 (12)

<sup>a</sup> FAO staff in brackets

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

Table F.3

	Budget 1980-1981	Estimates 1982-1983
Salaries and common staff costs for Professional staff <sup>a</sup>	650 000	670 000
Consultants	65 000	65 000
Duty travel	34 000	34 000
Contractual services and equipment <sup>a</sup>	766 000	959 000
Operating expenses	32 000	34 000
Publications	71 000	73 000
TOTAL	1 618 000	1 835 000

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

## CHANGES IN COSTS AND MANPOWER

Costs

F/1. As will be seen from Table F.1 above, it is expected that the cost of this programme will increase by \$ 364 000 as a result of salary and other price increases of \$ 352 500 and a programme increase of \$ 11 500.

F/2. The programme decrease of \$ 78 000 in respect of salaries and common staff costs reflects the elimination of one P-5 post from the "Food preservation" sub-programme upon expiry of the International Project in the Field of Food Irradiation (IFIP) in Karlsruhe. It is partly offset by an increase in respect of consultants' services (\$ 29 200) and temporary assistance (\$ 1 000).

F/3. Although it is planned to hold the same number of meetings in 1982 as in 1981, a programme increase of \$ 4 000 is foreseen. The programme increase of \$ 180 000 for scientific and technical contracts relates to all the sub-programmes. The amount of \$ 3 300 in respect of "Other items of expenditure" is connected with training activities.

F/4. As regards the allocation of service costs, it is expected that there will be programme decreases in respect of linguistic services (\$ 82 000), printing and publishing services (\$ 14 000), data processing services (\$ 10 000), laboratory services (\$ 20 000) and conference services (\$ 16 000).

F/5. It is expected that the contribution by FAO towards the financing of the activities of the Joint FAO/IAEA Division will be \$ 1 835 000 for the two-year period 1982-83, as shown in Table F.3 above.

F/6. As can be seen from Table 1 (CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), it is expected that the Federal Republic of Germany will contribute an amount of \$ 70 000 for activities relating to nitrogen residues and that Japan will make a contribution of \$ 80 000 under RCA. It is also expected that Sweden will support the research contracts programme with a contribution of \$ 300 000.

Manpower

F/7. In 1982 one P-5 post will be relinquished from the "Food preservation" sub-programme.

F/8. No further changes are foreseen for 1983 and 1984.

## THE PROGRAMME

## OBJECTIVE

F/9. The objective is to foster applications of isotopes and radiation related to food and agriculture under a joint FAO/Agency programme aimed at increasing the ability of developing countries to apply nuclear techniques (when necessary in combination with other advanced methods) in research and development, so as economically to increase agricultural production, reduce post-harvest losses and minimize pollution of food and the environment.

## STRUCTURE

F/10. This programme consists of the six sub-programmes shown in Table F.4.

F. FOOD AND AGRICULTURE

CHANGES IN THE ORIGINAL PROGRAMME

F/11. Detailed information on the activities planned for 1982 is provided in 630/F. The following change in activities under the sub-programmes indicated below is foreseen.

Soil fertility, irrigation and crop production

(630/F.1)

F.1/1. A co-ordinated research programme on the use of nuclear techniques in improving the management of mixed cultures of legumes and non-legumes will be initiated, with a view to maximizing the contribution of dinitrogen fixation to plant and animal production.

Plant breeding and genetics

(630/F.2)

F.2/1. On the recommendation of the RCA Committee, a regional project will be started on the evaluation of mutant stocks for semi-dwarf types in rice, the aim being to make maximum use of such stocks in practical agriculture.

Insect and pest control

(630/F.4)

F.4/1. Now that the Mexican meatly facility has reached its expected production capacity (see 630/F.4.1/4), work will be started on the development of a genetic sexing method which could be used with the sterile insect technique (SIT). The aim of the method would be to eliminate the release of female flies, both to prevent damage to commercial fruit and to reduce the cost associated with SIT programmes.

Chemical residues and pollution

(630/F.5)

F.5/1. A co-ordinated research programme will be initiated on the use of nuclear techniques in studies of agricultural chemical residues in milk, meat and other foods, with the objective of minimizing human exposure to undesirable agrochemicals.

Summary of manpower and costs by sub-programme

Table F.4

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Soil fertility, irrigation and crop production	4.2(0.2) <sup>a</sup>	1.4(1.1)	993 000	4.2(0.2)	1.4(1.1)	1 125 000	4.2(0.2)	1.4(1.1)	1 152 000
Plant breeding and genetics	2.2(1.2)	1.4(1.2)	927 000	2.2(1.2)	1.4(1.2)	915 000	2.2(1.2)	1.4(1.2)	1 037 000
Animal production and health	1.2(1.1)	1.3(0.2)	321 000	1.2(1.1)	1.3(0.2)	419 000	1.2(1.1)	1.3(0.2)	468 000
Insect and pest control	2.1(1.2)	1.3(1.2)	1 203 000	2.1(1.2)	1.3(1.2)	1 322 000	2.1(1.2)	1.3(1.2)	1 445 000
Agro-chemicals and residues	1.2(2.1)	2.2(0.2)	425 000	1.2(2.1)	2.2(0.2)	396 000	1.2(2.1)	2.2(0.2)	458 000
Food preservation	4.1(0.2)	0.4(2.1)	514 000	4.1(0.2)	0.4(2.1)	613 000	4.1(0.2)	0.4(2.1)	670 000
TOTAL	15.0(6.0)	8.0(6.0)	4 383 000	15.0(6.0)	8.0(6.0)	4 790 000	15.0(6.0)	8.0(6.0)	5 230 000

<sup>a</sup> FAO Staff in brackets

Soil fertility, irrigation and crop production

## Summary by programme components

Table F.5

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Use of isotopes and radiation in studies on plant nutrition and fertilizer application	1.3 (0.1) <sup>a</sup>	0.4 (0.3)	115 600	-	40 000	2 400	158 000
Use of isotopes and radiation in studies of soil-water regimes	1.3 (-)	0.4 (0.3)	106 600	-	20 000	2 400	129 000
Use of isotopes and radiation in studies of ion and water movement in soils	1.3 (0.1)	0.4 (0.3)	106 600	-	20 000	2 400	129 000
Use of nuclear techniques in improving pasture management and animal production practices	0.3 (-)	0.2 (0.2)	35 700	-	60 000	1 300	97 000
Linguistic service	-	-	-	-	-	17 000	17 000
Printing and publishing services	-	-	-	-	-	97 000	97 000
Data processing services	-	-	-	-	-	8 000	8 000
Laboratory services	-	-	-	-	-	358 000	358 000
TOTAL	4.2 (0.2)	1.4 (1.1)	364 500	-	140 000	488 500	993 000

<sup>a</sup> FAO staff in brackets.Plant breeding and genetics

## Summary by programme components

Table F.6

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Grain protein improvement by means of nuclear techniques	0.6 (0.3) <sup>a</sup>	0.4 (0.3)	59 600	-	20 000	2 400	82 000
Disease and pest resistance of crop plants	0.6 (0.3)	0.4 (0.3)	58 600	-	20 000	2 400	81 000
Crop improvement through induced mutations	0.5 (0.3)	0.3 (0.3)	63 900	32 000	75 000	3 100	174 000
Development of induced mutation technology	0.5 (0.3)	0.3 (0.3)	57 600	-	20 000	1 400	79 000
Linguistic services	-	-	-	-	-	20 000	20 000
Printing and publishing services	-	-	-	-	-	97 000	97 000
Data processing services	-	-	-	-	-	14 000	14 000
Laboratory services	-	-	-	-	-	373 000	373 000
Conference services	-	-	-	-	-	7 000	7 000
TOTAL	2.2 (1.2)	1.4 (1.2)	239 700	32 000	135 000	520 300	927 000

<sup>a</sup> FAO staff in brackets.

F. FOOD AND AGRICULTURE

Animal production and health  
Summary by programme components

Table F.7

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Isotope techniques in animal nutrition and physiology	0.6 (0.6) <sup>a</sup>	0.7 (0.1)	74 200	-	55 000	3 800	133 000
Nuclear techniques in animal parasitology and disease control	0.6 (0.5)	0.6 (0.1)	65 300	-	40 000	3 700	109 000
Linguistic services	-	-	-	-	-	16 000	16 000
Printing and publishing services	-	-	-	-	-	62 000	62 000
Data processing services	-	-	-	-	-	1 000	1 000
<b>TOTAL</b>	<b>1.2 (1.1)</b>	<b>1.3 (0.2)</b>	<b>139 500</b>	<b>-</b>	<b>95 000</b>	<b>86 500</b>	<b>321 000</b>

<sup>a</sup> FAO staff in brackets.

Insect and pest control  
Summary by programme components

Table F.8

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Development of the sterile-insect technique against fruit flies	0.8 (0.4) <sup>a</sup>	0.5 (0.4)	77 300	32 000	20 000	3 700	133 000
Development of the sterile-insect technique against the tsetse fly and other biting flies	0.7 (0.4)	0.5 (0.4)	69 900	-	30 000	3 100	103 000
Use of isotopes and radiation in developing insect pest management	0.6 (0.4)	0.3 (0.4)	71 300	-	30 000	5 700	107 000
Linguistic services	-	-	-	-	-	20 000	20 000
Printing and publishing services	-	-	-	-	-	62 000	62 000
Data processing services	-	-	-	-	-	10 000	10 000
Laboratory services	-	-	-	-	-	761 000	761 000
Conference services	-	-	-	-	-	7 000	7 000
<b>TOTAL</b>	<b>2.1 (1.2)</b>	<b>1.3 (1.2)</b>	<b>218 500</b>	<b>32 000</b>	<b>80 000</b>	<b>872 500</b>	<b>1 203 000</b>

<sup>a</sup> FAO staff in brackets.

Agro-chemicals and residues  
Summary by programme components

Table F.9

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Isotope-aided research on agricultural nitrogen residues, with particular reference to their conservation as fertilizers and their behaviour as potential pollutants	0.4 (1.2) <sup>a</sup>	1.0 (0.1)	71 500	-	35 000	3 500	110 000
Isotope-tracer-aided studies of residue-biota interactions in agriculture and fisheries	0.4 (0.7)	1.0 (0.1)	67 200	33 000	80 000	3 800	184 000
Collection and dissemination of comparative data on inputs, levels, the fate and effects of contaminants (including radioactive substances) in agriculture, fisheries and food	0.4 (0.2)	0.2 (-)	35 700	-	-	300	36 000
Linguistic services	-	-	-	-	-	20 000	20 000
Printing and publishing services	-	-	-	-	-	62 000	62 000
Data processing services	-	-	-	-	-	1 000	1 000
Conference services	-	-	-	-	-	12 000	12 000
<b>TOTAL</b>	<b>1.2 (2.1)</b>	<b>2.2 (0.2)</b>	<b>174 400</b>	<b>33 000</b>	<b>115 000</b>	<b>102 600</b>	<b>425 000</b>

<sup>a</sup> FAO staff in brackets.

Food preservation  
Summary by programme components

Table F.10

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Technological and economic feasibility of food irradiation	3.4 (0.1) <sup>a</sup>	0.2 (1.1)	277 100	-	55 000	4 900	337 000
Public health acceptance and regulatory aspects of the process of food irradiation	0.7 (0.1)	0.2 (1.0)	59 700	-	30 000	4 300	94 000
Linguistic services	-	-	-	-	-	20 000	20 000
Printing and publishing services	-	-	-	-	-	62 000	62 000
Data processing services	-	-	-	-	-	1 000	1 000
<b>TOTAL</b>	<b>4.1 (0.2)</b>	<b>0.4 (2.1)</b>	<b>336 800</b>	<b>-</b>	<b>85 000</b>	<b>92 200</b>	<b>514 000</b>

<sup>a</sup> FAO staff in brackets.



**G. LIFE SCIENCES**

G. LIFE SCIENCES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table G.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	721 492	871 000
Consultants	23 504	30 700
Temporary assistance	-	1 000
Sub-total	744 996	902 700
Common staff costs	223 324	265 600
Travel	25 932	33 800
Meetings		
Conferences, symposia, seminars	50 632	114 000
Technical committees, advisory groups	12 783	60 000
Representation and hospitality	4 680	4 900
Scientific and technical contracts	528 765	531 000
Scientific supplies and equipment	-	4 000
Common services, supplies and equipment	7 333	5 000
Other items of expenditure	2 420	1 000
Losses from exchange of currency	11 555	-
Transfer of costs:		
Linguistic services	39 309	37 000
Printing and publishing services	218 702	263 000
Data processing services	3 470	2 000
Laboratory services	652 002	677 000
Conference services	42 962	58 000
TOTAL	2 568 865	2 959 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
53 000	-	53 000	924 000	979 000	1 047 000
3 600	7 000	10 600	41 300	37 200	37 000
100	(100)	-	1 000	1 000	1 000
56 700	6 900	63 600	966 300	1 017 200	1 085 000
20 700	-	20 700	286 300	303 900	324 600
3 200	5 000	8 200	42 000	42 000	45 000
8 000	(46 000)	(38 000)	76 000	51 000	110 000
6 000	(15 000)	(9 000)	51 000	68 000	70 000
800	-	800	5 700	7 000	6 000
32 000	124 000	156 000	687 000	625 000	665 000
500	400	900	4 900	1 700	1 900
300	200	500	5 500	5 700	6 000
100	200	300	1 300	1 500	1 500
-	-	-	-	-	-
3 000	19 000	22 000	59 000	63 000	67 000
23 000	(23 000)	-	263 000	283 000	428 000
-	6 000	6 000	8 000	9 000	10 000
60 000	(45 000)	15 000	692 000	745 000	800 000
3 000	(36 000)	(33 000)	25 000	44 000	48 000
217 300	(3 300)	214 000	3 173 000	3 267 000	3 668 000

## G. LIFE SCIENCES

## SUMMARY OF MANPOWER

Table G.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	5	5	4	-	4	4	4
P-4	5	5	6	-	6	6	6
P-3	1	1	1	-	1	1	1
Sub-total	12	12	12	-	12	12	12
GS	10	10	10	-	10	10	10
TOTAL	22	22	22	-	22	22	22

## 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 \$ 214 000 as a net result of salary and other price increases of \$ 217 300 partly offset by a programme decrease of \$ 3 300.

G/2. The programme decrease of \$ 46 000 in respect of conferences, symposia and seminars is attributable to a reduction in the number of meetings planned for 1982 (one symposium and two seminars) as compared with 1981 (two symposia and two seminars). The programme decrease of \$ 15 000 reflects a reduction in the number of Advisory Groups from five in 1981 to four in 1982.

G/3. A programme increase of \$ 124 000 is foreseen in respect of scientific and technical contracts in the "Dosimetry for intentional radiation exposures", "Radiation biology" and "Health-related environmental research" sub-programmes. There will also be programme increases in consultants (\$ 7 000), travel (\$ 5 000), scientific supplies and equipment (\$ 400), common services, supplies and equipment (\$ 200) and "Other items of expenditure" (\$ 200, in respect of training).

G/4. As regards the allocation of service costs, programme increases are foreseen in respect of linguistic services (\$ 19 000) and data processing services (\$ 6 000), while there will be programme decreases in printing and publishing services (\$ 23 000) and laboratory services (\$ 45 000). The programme decrease of \$ 36 000 in conference services is related to the smaller number of meetings planned for 1982.

Manpower

G/5. As will be seen from Table G.2 above, one P-5 post from this programme is transferred to the "Physical Sciences" programme in exchange for a P-4 post in the adjusted manning table.

G/6. No further changes in manpower are foreseen for 1982, 1983 and 1984.

## THE PROGRAMME

## OBJECTIVE

G/7. The objective is to foster - in close collaboration with other organizations belonging to the United Nations family, especially WHO, to whom it is the Agency's policy to hand over at the appropriate time those activities in the programme which relate to procedures whose applications have become routine - the development of techniques for the application of radiation and radionuclides in medicine, biology and health-related environmental research and to promote the use of techniques for improving accuracy in radiation dosimetry.

## STRUCTURE

G/8. This programme consists of the four sub-programmes shown in Table G.3.

## CHANGES IN THE ORIGINAL PROGRAMME

G/9. Detailed information on the activities planned for 1982 is provided in 630/G. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

Medical applications

(630/G.1)

G.1/1. A seminar on the quality assurance of in vivo techniques in nuclear medicine will be held for countries in Asia and the Pacific region, in connection with an ongoing regional technical assistance project.

Dosimetry for intentional radiation exposures

(630/G.2)

G.2/1. The support that is being given through research contracts and calibration and advisory missions to secondary standard dosimetry laboratories in Member States will be extended.

G.2/2. A co-ordinated research programme will be initiated on the evaluation of new chemical and solid-state high-dose dosimetry systems that are being developed.

Radiation biology

(630/G.3)

G.3/1. It is planned to hold an inter-regional training course on the use of nuclear techniques in the study and control of parasitic diseases in man and to start a co-ordinated research programme on the use of nuclear techniques in the diagnosis of such diseases.

Health-related environmental research

(630/G.4)

G.4/1. Methodologies for assessing the health impacts of radioactive and chemical pollutants resulting from power production and use will be studied under a new co-ordinated research programme.

G. LIFE SCIENCES

Summary of manpower and costs by sub-programme

Table G.3

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Medical applications	3.2	2.2	1 201 000	3.2	2.2	1 300 000	3.2	2.2	1 541 000
Dosimetry for intentional radiation exposures	3.3	4.3	953 000	3.3	4.3	949 000	3.3	4.3	1 002 000
Radiation biology	3.3	2.3	685 000	3.3	2.3	694 000	3.3	2.3	732 000
Health-related environmental research	2.2	1.2	334 000	2.2	1.2	324 000	2.2	1.2	393 000
TOTAL	12.0	10.0	3 173 000	12.0	10.0	3 267 000	12.0	10.0	3 668 000

Medical applications

Summary by programme components

Table G.4

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Instrumentation for nuclear medicine in developing countries	0.6	0.6	67 900	30 000	57 000	8 100	163 000
Technical improvement of <u>in vitro</u> assay procedures with radioactive agents	1.2	0.6	119 700	-	90 000	1 300	211 000
Technical improvement of <u>in vivo</u> procedures with isotopic agents	1.2	0.5	109 800	42 500	37 000	3 700	193 000
Activation analysis of elements of biomedical significance	0.2	0.5	33 900	12 500	50 000	6 600	103 000
Linguistic services	-	-	-	-	-	28 000	28 000
Printing and publishing services	-	-	-	-	-	33 000	33 000
Data processing services	-	-	-	-	-	5 000	5 000
Laboratory services	-	-	-	-	-	450 000	450 000
Conference services	-	-	-	-	-	15 000	15 000
TOTAL	3.2	2.2	331 300	85 000	234 000	550 700	1 201 000

Dosimetry for intentional radiation exposures

## Summary by programme components

Table G.5

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Network of Secondary Standards Dosimetry Laboratories (SSDL Network)	1.0	1.1	122 500	-	78 000	11 500	212 000
Dose intercomparison services	0.8	1.1	96 700	-	-	3 300	100 000
Dose intercomparison development	0.5	1.1	71 700	13 000	43 000	1 300	129 000
Dosimetry for industrial radiation processing	1.0	1.0	110 300	16 000	32 000	2 700	161 000
<hr/>							
Linguistic services	-	-	-	-	-	14 000	14 000
Printing and publishing services	-	-	-	-	-	86 000	86 000
Data processing services	-	-	-	-	-	1 000	1 000
Laboratory services	-	-	-	-	-	242 000	242 000
Conference services	-	-	-	-	-	8 000	8 000
<b>TOTAL</b>	<b>3.3</b>	<b>4.3</b>	<b>401 200</b>	<b>29 000</b>	<b>153 000</b>	<b>369 800</b>	<b>953 000</b>

Radiation biology

## Summary by programme components

Table G.6

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Radiation sterilization of medical supplies including pharmaceuticals	0.3	0.2	28 800	-	25 000	3 200	57 000
Preparation of irradiated vaccines against some human diseases	1.0	0.7	103 600	-	80 000	4 400	188 000
Application of recent radio- biological research results in radiotherapy	1.0	0.6	98 500	-	40 000	1 500	140 000
Radiation treatment of domestic wastes	0.2	0.2	20 400	-	20 000	2 600	43 000
Comparative biological hazards of energy- related chemical pollutants and low-level radiation in the environment	0.8	0.6	82 600	-	45 000	400	128 000
<hr/>							
Linguistic services	-	-	-	-	-	7 000	7 000
Printing and publishing services	-	-	-	-	-	121 000	121 000
Conference services	-	-	-	-	-	1 000	1 000
<b>TOTAL</b>	<b>3.3</b>	<b>2.3</b>	<b>333 900</b>	<b>-</b>	<b>210 000</b>	<b>141 100</b>	<b>685 000</b>

Health-related environmental research

## Summary by programme component

Table G.7

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Health-related environmental research	2.2	1.2	186 200	13 000	90 000	8 800	298 000
Linguistic services	-	-	-	-	-	10 000	10 000
Printing and publishing services	-	-	-	-	-	23 000	23 000
Data processing services	-	-	-	-	-	1 000	1 000
Conference services	-	-	-	-	-	2 000	2 000
<b>TOTAL</b>	<b>2.2</b>	<b>1.2</b>	<b>186 200</b>	<b>13 000</b>	<b>90 000</b>	<b>44 800</b>	<b>334 000</b>

## TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630.

	<u>Paragraph</u>
1. Advisory Group on quality control of <u>in vivo</u> radionuclide procedures	G.1.3/5
2. Advisory Group on quality control in biomedical neutron activation analysis	G.1.4/5
3. Advisory Group on heavy charged-particle dosimetry	G.2.3/9
4. Advisory Group on applicability of nuclear methods for studying the contamination of man by environmental trace pollutants	G.4/9

H. PHYSICAL SCIENCES

## H. PHYSICAL SCIENCES

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table H.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	1 475 354	1 746 000
Consultants	66 159	82 000
Temporary assistance	9 443	6 700
Sub-total	1 550 956	1 834 700
Common staff costs	455 310	532 600
Travel	29 744	40 000
Meetings		
Conferences, symposia, seminars	60 159	91 000
Technical committees, advisory groups	75 650	93 000
Representation and hospitality	6 186	7 900
Scientific and technical contracts	350 725	326 000
Scientific supplies and equipment	16 961	25 800
Common services, supplies and equipment	16 928	5 000
Other items of expenditure		
Losses from exchange of currency	23 628	-
Transfer of costs:		
Linguistic services	140 921	103 000
Printing and publishing services	667 542	623 000
Data processing services	156 474	130 000
Laboratory services	2 511 180	2 425 000
Conference services	60 538	64 000
TOTAL	6 122 902	6 301 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
81 000	-	81 000	1 827 000	1 957 000	2 102 000
10 000	(6 000)	4 000	86 000	90 200	94 700
600	-	600	7 300	7 400	7 500
91 600	(6 000)	85 600	1 920 300	2 054 600	2 204 200
34 300	-	34 300	566 900	606 500	651 200
4 000	-	4 000	44 000	45 700	48 200
11 000	(2 000)	9 000	100 000	76 000	115 000
11 000	24 000	35 000	128 000	151 000	161 000
1 200	(600)	600	8 500	8 700	9 300
19 000	50 000	69 000	395 000	335 000	335 000
1 400	(13 200)	(11 800)	14 000	15 100	15 600
300	-	300	5 300	5 400	5 500
-	-	-	-	-	-
9 000	(17 000)	(8 000)	95 000	105 000	120 000
52 000	(78 000)	(26 000)	597 000	583 000	652 000
11 000	36 000	47 000	177 000	187 000	198 000
220 000	(203 000)	17 000	2 442 000	2 600 000	2 785 000
5 000	(24 000)	(19 000)	45 000	62 000	67 000
470 800	(233 800)	237 000	6 538 000	6 835 000	7 367 000

H. PHYSICAL SCIENCES

SUMMARY OF MANPOWER

Table H.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	6	6	7	-	7	7	7
P-4	11	11	10	-	10	10	10
P-3	7	7	7	-	7	7	7
P-2	3	3	3	-	3	3	3
Sub-total	28	28	28	-	28	28	28
GS	18	18	18	-	18	18	18
TOTAL	46	46	46	-	46	46	46

CHANGES IN COSTS AND MANPOWER

Costs

H/1. As will be seen from Table H.1 above, it is expected that the cost of this programme will increase by \$ 237 000 as a net result of salary and other price increases of \$ 470 800 partly offset by a programme decrease of \$ 233 800.

H/2. Programme decreases are foreseen in respect of consultants' services (\$ 6 000), hospitality (\$ 600) and scientific supplies and equipment (\$ 13 200, for the provision of nuclear targets). The programme increase of \$ 50 000 in respect of scientific and technical contracts is mainly related to the "Industrial applications and chemistry" and the "Isotope hydrology" sub-programmes. It is planned to hold one conference and one seminar in 1982 and to co-sponsor one international conference; this will result in a programme decrease of \$ 2 000 as compared with the 1981 budget, which included allowance for one conference, one symposium and one seminar. An increase in the number of Technical Committee and Advisory Group meetings from 11 in 1981 to 15 in 1982 results in a programme increase of \$ 24 000.

H/3. As regards the allocation of service costs, programme decreases are foreseen in respect of linguistic services (\$ 17 000) printing and publishing services (\$ 78 000) and laboratory services (\$ 203 000), while there will be a programme increase in data processing services, the need for which was indicated by the actual requirements in 1980. The programme reduction of \$ 24 000 in conference services is related to the reduction in the number of conferences, symposia and seminars planned for 1982 as compared with 1981.

H/4. As can be seen from Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), it is expected that Australia will make a contribution (under RCA) of \$ 90 000, that the Federal Republic of Germany will support the "Isotope hydrology" sub-programme with a contribution of \$ 50 000 and that the United States will contribute an amount of \$ 60 000 to the core conversion project in the "Physics" sub-programme.

H/5. It is expected that income from CINDA publications will be \$ 25 000 in 1982.

Manpower

H/6. As will be seen from Table H.2 above, one P-4 post from this programme is transferred to the "Life Sciences" programme in exchange for a P-5 post in the 1981 adjusted manning table, in order to allow for an approved upgrading of a post in the "Physics" sub-programme.

H/7. No further manpower changes are foreseen for 1982, 1983 and 1984.

## THE PROGRAMME

## OBJECTIVE

H/8. The objective is to stimulate research, to co-ordinate the activities of scientists and to promote the exchange of information among Member States, particularly developing countries, on selected topics in the fields of physics, chemistry, the industrial application of isotopes, nuclear data and isotope hydrology.

## STRUCTURE

H/9. The programme consists of the four sub-programmes shown in Table H.3.

## CHANGES IN THE ORIGINAL PROGRAMME

H/10. Detailed information on the activities planned for 1982 is provided in 630/H. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

Physics

(630/H.1)

H.1/1. To support the work of the technical advisory missions on research reactor core conversion (see 630/H.1.2/5), a guidebook dealing with the safety and licensing aspects of such conversions will be prepared.

Industrial applications and chemistry

(630/H.2)

H.2/1. A co-ordinated research programme on nuclear analytical techniques for mineral exploration, mining and processing will be initiated, the emphasis being on the transfer of the relevant technology to developing countries.

Isotope hydrology

(630/H.3)

H.3/1. The IAEA/WMO survey of isotopes in precipitation (see 630/H.3.1/4) will continue, but efforts will be made to phase out the analytical work done at the Agency's Laboratory by encouraging Member States that have suitable facilities to take over the analysis of samples collected within their own territories.

H.3/2. The RCA project on isotope applications in groundwater studies (see 600/H.3.3/6) will be supported for an additional year from Regular Budget funds and its scope will be somewhat extended.

H. PHYSICAL SCIENCES

Nuclear data

(630/H.4)

H.4/1. The Technical Document on nuclear data requirements in the biomedical field (see 630/H.4.1/11) has already been prepared with the aid of consultants, thus obviating the need for an Advisory Group meeting. The subject of the document has been restricted to the requirements and availability of nuclear data for medical radioisotope production.

Summary of manpower and costs by sub-programme

Table H.3

Sub-programme	1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs	Man-years P	GS	Costs
Physics	4.3	2.3	875 000	4.3	2.3	910 000	4.3	2.3	1 016 000
Industrial applications and chemistry	5.2	2.2	2 593 000	5.2	2.2	2 610 000	5.2	2.2	2 840 000
Isotope hydrology	4.2	3.2	1 347 000	4.2	3.2	1 472 000	4.2	3.2	1 545 000
Nuclear data	14.3	10.3	1 723 000	14.3	10.3	1 843 000	14.3	10.3	1 966 000
<b>TOTAL</b>	<b>28.0</b>	<b>18.0</b>	<b>6 538 000</b>	<b>28.0</b>	<b>18.0</b>	<b>6 835 000</b>	<b>28.0</b>	<b>18.0</b>	<b>7 367 000</b>

Physics

Summary by programme components

Table H.4

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear physics	2.3	0.8	194 500	18 000	35 000	3 500	251 000
Utilization of research reactors	1.0	0.5	84 500	1 000	35 000	4 500	125 000
Plasma physics and controlled fusion research	1.0	1.0	101 500	113 000	35 000	11 500	261 000
Linguistic services	-	-	-	-	-	8 000	8 000
Printing and publishing services	-	-	-	-	-	201 000	201 000
Data processing services	-	-	-	-	-	2 000	2 000
Conference services	-	-	-	-	-	27 000	27 000
<b>TOTAL</b>	<b>4.3</b>	<b>2.3</b>	<b>380 500</b>	<b>132 000</b>	<b>105 000</b>	<b>257 500</b>	<b>875 000</b>

Industrial applications and chemistry

## Summary by programme components

Table H.5

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Materials testing and analysis	1.6	0.6	139 900	32 000	60 000	6 100	238 000
Production and industrial use of radiation sources	2.0	0.6	172 300	16 000	40 000	1 700	230 000
Chemistry	1.6	1.0	151 400	20 000	30 000	3 600	205 000
Linguistic services	-	-	-	-	-	41 000	41 000
Printing and publishing services	-	-	-	-	-	103 000	103 000
Data processing services	-	-	-	-	-	1 000	1 000
Laboratory services	-	-	-	-	-	1 762 000	1 762 000
Conference services	-	-	-	-	-	13 000	13 000
<b>TOTAL</b>	<b>5.2</b>	<b>2.2</b>	<b>463 600</b>	<b>68 000</b>	<b>130 000</b>	<b>1 931 400</b>	<b>2 593 000</b>

Isotope hydrology

## Summary by programme components

Table H.6

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Precipitation	0.5	1.1	59 700	-	10 000	1 300	71 000
Surface water	0.8	0.5	71 200	-	10 000	1 800	83 000
Groundwater	2.4	1.0	215 400	-	55 000	8 600	279 000
Techniques	0.5	0.6	53 700	12 000	15 000	2 300	83 000
Linguistic services	-	-	-	-	-	5 000	5 000
Printing and publishing services	-	-	-	-	-	118 000	118 000
Data processing services	-	-	-	-	-	26 000	26 000
Laboratory services	-	-	-	-	-	680 000	680 000
Conference services	-	-	-	-	-	2 000	2 000
<b>TOTAL</b>	<b>4.2</b>	<b>3.2</b>	<b>400 000</b>	<b>12 000</b>	<b>90 000</b>	<b>845 000</b>	<b>1 347 000</b>

## H. PHYSICAL SCIENCES

Nuclear data

## Summary by programme components

Table H.7

Programme component	Man-years		1982 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear reaction data	9.1	6.1	773 600	6 000	43 000	19 400	842 000
Nuclear structure and decay data	2.1	2.1	198 300	10 000	8 000	700	217 000
Atomic and molecular data	3.1	2.1	271 200	-	19 000	6 800	297 000
<hr/>							
Linguistic services	-	-	-	-	-	41 000	41 000
Printing and publishing services	-	-	-	-	-	175 000	175 000
Data processing services	-	-	-	-	-	148 000	148 000
Conference services	-	-	-	-	-	3 000	3 000
<b>TOTAL</b>	<b>14.3</b>	<b>10.3</b>	<b>1 243 100</b>	<b>16 000</b>	<b>70 000</b>	<b>393 900</b>	<b>1 723 000</b>

## TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630.

	<u>Paragraph</u>
1. Advisory Group on data acquisition systems in nuclear science and technology	H.1.1/6
2. Technical Committee on research reactor in-core instrumentation, fuel conversion and safety codes	H.1.2/4
3. International Tokamak Reactor Workshop	H.1.3/6
4. Technical Committee on operating plans for large tokamak experiments	H.1.3/8
5. Technical Committee on neutral beam system development	H.1.3/8
6. Technical Committee on inertial confinement experiments	H.1.3/8
7. Technical Committee on large open confinement experiments	H.1.3/8
8. Technical Committee on environmental effects of fusion reactors	H.1.3/8
9. Technical Committee on numerical simulation in plasma theory	H.1.3/8
10. Technical Committee on quality control and regulatory problems in the preparation and utilization of radiopharmaceuticals	H.2.2/13
11. Advisory Group on accelerator-produced short-lived radionuclides for medical applications	H.2.2/13
12. Advisory Group on stable isotope availability and applications	H.2.3/5
13. Advisory Group on chemical aspects of fusion reactor technology	H.2.3/8
14. Advisory Group on new methods in isotope hydrology	H.3.4/10
15. Meeting of the Nuclear Structure and Decay Data Network	H.4.2/4

I. THE LABORATORY

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table I.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	2 707 979	3 016 000
Overtime	14 106	2 800
Temporary assistance	8 544	18 800
Sub-total	2 730 629	3 037 600
Common staff costs	837 209	919 500
Travel	5 238	12 400
Scientific and technical contracts	6 962	13 000
Scientific supplies and equipment	436 281	363 000
Common services, supplies and equipment	1 096 575	1 234 000
Other items of expenditure	4 729	7 500
Losses from exchange of currency	111 496	-
Transfer of costs:		
Linguistic services	8 911	16 000
Printing and publishing services	29 222	31 000
Data processing services	28 724	20 000
Laboratory services	(5 295 976)	(5 654 000)
TOTAL	-	-

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
230 000	-	230 000	3 246 000	3 448 000	3 693 000
200	18 500	18 700	21 500	21 600	21 600
1 300	(5 100)	(3 800)	15 000	18 400	20 400
231 500	13 400	244 900	3 282 500	3 488 000	3 735 000
87 000	-	87 000	1 006 500	1 068 500	1 145 000
1 600	1 000	2 600	15 000	18 000	18 000
1 000	4 500	5 500	18 500	19 500	20 500
37 000	(60 000)	(23 000)	340 000	399 000	427 000
148 000	(282 000)	(134 000)	1 100 000	1 193 000	1 293 000
500	(3 500)	(3 000)	4 500	4 000	5 500
-	-	-	-	-	-
1 400	15 600	17 000	33 000	36 000	30 000
3 000	(12 000)	(9 000)	22 000	25 000	27 000
2 000	17 000	19 000	39 000	39 000	39 000
(513 000)	306 000	(207 000)	(5 861 000)	(6 290 000)	(6 740 000)
-	-	-	-	-	-

I. THE LABORATORY

SUMMARY OF MANPOWER

Table I.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
P-5	4	4	4	-	4	4	4
P-4	11	11	11	-	11	11	11
P-3	6	6	6	1	7	7	7
P-2	3	3	3	(1)	2	2	2
P-1	1	1	1	-	1	1	1
Sub-total	25	25	25	-	25	25	25
GS	60 (2) <sup>a/</sup>	60 (2)	59 (2)	-	59 (2)	59 (2)	59 (2)
M+O	27 (7)	27 (7)	27 (7)	-	27 (7)	27 (7)	27 (7)
TOTAL	112 (9)	112 (9)	111 (9)	-	111 (9)	111 (9)	111 (9)

a/ FAO staff in brackets

CHANGES IN COSTS AND MANPOWER

Costs

I/1. As will be seen from Table I.1 above, the cost of the Laboratory's services is allocated to the programmes for which they are provided. The total cost of these services is expected to increase by \$ 207 000 as a net result of salary and other price increases of \$ 513 000 partly offset by a programme decrease of \$ 306 000.

I/2. A programme increase of \$ 18 500 for overtime (mainly in the form of compensation payments for staff "on call" in connection with governmental licensing requirements) is partly offset by a programme reduction of \$ 5 100 in temporary assistance. Programme increases are foreseen in respect of travel (\$ 1 000) and scientific and technical contracts (\$ 4 500, for contractual services). It is expected that a programme decrease of \$ 60 000 can be achieved in respect of scientific supplies and equipment (mainly in the "Isotope hydrology" and "Medical applications" sub-programmes), in addition to a programme decrease of \$ 282 000 in common services, supplies and equipment. The programme decrease of \$ 3 500 under "Other items of expenditure" relates to training activities.

I/3. As regards the allocation of service costs, programme increases foreseen in respect of linguistic services (\$15 600) and data processing services (\$ 17 000) are partly offset by a programme reduction in printing and publishing services (\$ 12 000).

I/4. It is expected that income from the provision of laboratory services will amount to \$ 105 000 in 1982.

Manpower

I/5. As will be seen from Table I.2 above, one GS post is transferred to another programme in the adjusted manning table for 1981. For 1982, the reclassification of one Professional post from the P-2 to the P-3 level is foreseen. Detailed justifications are provided in Annex IV.

I/6. No further changes in manpower are foreseen for 1983 and 1984.

THE PROGRAMME

OBJECTIVE

I/7. The objective is to support (through such activities as the provision of analytical services, the calibration of radionuclides and the development of techniques) the Agency's regular technical programmes (including safeguards) and its technical assistance programme.

STRUCTURE

I/8. This programme consists of the six sub-programmes shown in Table I.3.

CHANGES IN THE ORIGINAL PROGRAMME

I/9. Detailed information on the activities planned for 1982 is provided in 630/I. The following addition to activities under the sub-programme indicated below is foreseen.

Agriculture

(630/I.5)

I.5/1. Since the production goals foreseen for 1981 have been attained at the Mexican medfly facility (see 630/I.5.3/5), work at the Agency's Laboratory will be switched to the development of a genetic sexing method for use with the sterile insect technique (SIT). The application of such a method would eliminate the necessity to release female flies (which usually cause damage to commercial fruit) and enable the costs of SIT programmes to be reduced by about 50%. This work, which is expected to last two years, will be partially funded through the Agency's technical assistance programme.

Summary of manpower and costs by laboratory sub-programme

Table I.3

Sub-programme	1982 Estimate				1983 Preliminary estimate				1984 Preliminary estimate			
	Man-years			Costs	Man-years			Costs	Man-years			Costs
	P	GS	M&O		P	GS	M&O		P	GS	M&O	
<b>Chemistry</b>												
Quality control of radiochemical analysis	2.1	2.5	0.7	450 000	2.1	2.5	0.7	480 000	2.1	2.5	0.7	520 000
Support in analytical chemistry to Member States, other units within the Agency and other United Nations organizations	1.1	4.3	1.4	335 000	1.1	4.3	1.4	360 000	1.1	4.3	1.4	385 000
Support in chemistry to the Agriculture Section of the Laboratory	-	1.1	0.2	30 000	-	1.1	0.2	32 000	-	1.1	0.2	35 000
Sub-total	3.2	7.9	2.3	815 000	3.2	7.9	2.3	872 000	3.2	7.9	2.3	940 000
<b>Isotope hydrology</b>												
Analytical services in support of the "Isotope hydrology" sub-programme of the "Physical Sciences" programme	4.1	8.9	1.0	630 000	4.1	8.9	1.0	675 000	4.1	8.9	1.0	720 000
Preparation and distribution of standards and intercalibration of measurements	-	1.0	-	50 000	-	1.0	-	55 000	-	1.0	-	60 000
Sub-total	4.1	9.9	1.0	680 000	4.1	9.9	1.0	730 000	4.1	9.9	1.0	780 000
<b>Medical applications</b>												
Instrumentation for nuclear medicine in developing countries	1.0	-	-	195 000	1.0	-	-	210 000	1.0	-	-	225 000
Activation analysis of elements of biomedical significance	1.1	4.7	2.0	375 000	1.1	4.7	2.0	404 000	1.1	4.7	2.0	430 000
Whole-body counting	-	1.0	0.3	43 000	-	1.0	0.3	46 000	-	1.0	0.3	50 000
Sub-total	2.1	5.7	2.3	613 000	2.1	5.7	2.3	660 000	2.1	5.7	2.3	705 000
<b>Agriculture</b>												
Services to the "Soil fertility, irrigation and crop production" sub-programme of the "Food and Agriculture" programme	2.1	2.7	1.8	350 000	2.1	2.7	1.8	375 000	2.1	2.7	1.8	400 000
Services to the "Plant breeding and genetics" sub-programme of the "Food and Agriculture" programme	2.1	3.6	3.7	360 000	2.1	3.6	3.7	385 000	2.1	3.6	3.7	415 000
Services to the "Insect and pest control" sub-programme of the "Food and Agriculture" programme	4.1	2.9	4.5	735 000	4.1	2.9	4.5	790 000	4.1	2.9	4.5	845 000
Sub-total	8.3	9.2	10.0	1 445 000	8.3	9.2	10.0	1 550 000	8.3	9.2	10.0	1 660 000
<b>Safeguards Analytical Laboratory (SAL)</b>												
Analytical and other support for safeguards activities	4.9	11.6	7.4	1 100 000	4.9	11.6	7.4	1 180 000	4.9	11.6	7.4	1 265 000
Analytical services in support of other Agency services	0.2	0.5	0.3	408 000	0.2	0.5	0.3	435 000	0.2	0.5	0.3	465 000
Sub-total	5.1	12.1	7.7	1 508 000	5.1	12.1	7.7	1 615 000	5.1	12.1	7.7	1 730 000
<b>Electronics and measurements services</b>												
For the general laboratory	1.8	10.6	2.7	665 000	1.8	10.6	2.7	718 000	1.8	10.6	2.7	770 000
For the Department of Safeguards	0.4	3.6	1.0	135 000	0.4	3.6	1.0	145 000	0.4	3.6	1.0	155 000
Sub-total	2.2	14.2	3.7	800 000	2.2	14.2	3.7	863 000	2.2	14.2	3.7	925 000
<b>TOTAL</b>	<b>25.0</b>	<b>59.0</b>	<b>27.0</b>	<b>5 861 000</b>	<b>25.0</b>	<b>59.0</b>	<b>27.0</b>	<b>6 290 000</b>	<b>25.0</b>	<b>59.0</b>	<b>27.0</b>	<b>6 740 000</b>

## Laboratory services: Breakdown of costs by programme

Table I.4

	1980 Actual obligations	1981 Adjusted budget	1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Food and agriculture	1 209 660	1 386 000	1 492 000	1 620 000	1 735 000
Life sciences	652 002	677 000	692 000	745 000	800 000
Physical sciences	2 511 180	2 425 000	2 442 000	2 600 000	2 785 000
Safeguards	923 134	1 166 000	1 235 000	1 325 000	1 420 000
<b>TOTAL</b>	<b>5 295 976</b>	<b>5 654 000</b>	<b>5 861 000</b>	<b>6 290 000</b>	<b>6 740 000</b>

Apportionment of total laboratory costs to relevant sub-programmes

Table I.5

Sub-programme	1982 Estimate				1983 Preliminary estimate				1984 Preliminary estimate			
	Man-years			Costs	Man-years			Costs	Man-years			Costs
	P	GS	M&O		P	GS	M&O		P	GS	M&O	
<b>Food and agriculture</b>												
Soil fertility, irrigation and crop production	2.1	2.7	1.8	358 000	2.2	2.7	1.8	389 000	2.2	2.7	1.8	416 000
Plant breeding and genetics	2.1	3.6	3.7	373 000	2.2	3.6	3.7	405 000	2.2	3.6	3.7	434 000
Insect and pest control	4.8	4.5	5.5	761 000	4.6	4.5	5.5	826 000	4.6	4.5	5.5	885 000
Sub-total	9.0	10.8	11.0	1 492 000	9.0	10.8	11.0	1 620 000	9.0	10.8	11.0	1 735 000
<b>Life sciences</b>												
Medical applications	2.3	6.8	2.6	450 000	2.3	6.8	2.6	485 000	2.3	6.8	2.6	520 000
Dosimetry for intentional radiation exposures <sup>a</sup>	-	-	-	242 000	-	-	-	260 000	-	-	-	280 000
Sub-total	2.3	6.8	2.6	692 000	2.3	6.8	2.6	745 000	2.3	6.8	2.6	800 000
<b>Physical sciences</b>												
Industrial applications and chemistry	1.8	12.9	3.5	1 762 000	1.8	12.9	3.5	1 872 000	1.8	12.9	3.5	2 005 000
Isotope hydrology	6.6	13.3	1.5	680 000	6.6	13.3	1.5	728 000	6.6	13.3	1.5	780 000
Sub-total	8.4	26.2	5.0	2 442 000	8.4	26.2	5.0	2 600 000	8.4	26.2	5.0	2 785 000
<b>Safeguards</b>	5.3	15.2	8.4	1 235 000	5.3	15.2	8.4	1 325 000	5.3	15.2	8.4	1 420 000
<b>TOTAL</b>	25.0	59.0	27.0	5 861 000	25.0	59.0	27.0	6 290 000	25.0	59.0	27.0	6 740 000

<sup>a</sup> Staff included in Life sciences programme.

J. INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table J.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Other items of expenditure	742 000	776 000
Printing and publishing services	181 463	190 000
<b>TOTAL</b>	<b>923 463</b>	<b>966 000</b>

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
155 000	69 000	224 000	1 000 000	1 000 000	1 000 000
17 000	-	17 000	207 000	220 000	230 000
172 000	69 000	241 000	1 207 000	1 220 000	1 230 000

## SUMMARY OF MANPOWER

Table J.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
P-5	1	1	1	-	1	1	1
P-4	2	2	2	-	2	2	2
P-3	2	2	2	-	2	2	2
Sub-total	5	5	5	-	5	5	5
GS	17	17	17	-	17	17	18
TOTAL	22	22	22	-	22	22	23

## CHANGES IN COSTS AND MANPOWER

Costs

J/1. Table J.1 above shows the Regular Budget contribution towards the financing of the Trieste Centre. It consists of a basic contribution and of a contribution to meet publishing costs. It is expected that the cost of the programme under the Regular Budget will increase by \$ 241 000, of which \$ 172 000 will be required to cover price increases and \$ 69 000 will be a programme increase.

J/2. The total costs of this programme are presented in Annex V. Details of extrabudgetary resources will be found in Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982).

Manpower

J/3. No changes in manpower are foreseen for 1982 and 1983. In 1984 one additional GS post will be required.

## THE PROGRAMME

## OBJECTIVE

J/4. The objective is to foster, through research and training for research, the advancement of physics and - to a lesser extent - work in applicable mathematics, with special regard to the needs of developing countries so as to encourage scientists from those countries to continue and expand their research work.

THE ORIGINAL PROGRAMME

J/5. In 1982 the activities under this programme will continue as outlined in 630/J.

WORKSHOPS AND OTHER MEETINGS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, it is planned to hold the meetings listed below. The references are to the relevant paragraph in the programme in document GC(XXIV)/630.

	<u>Paragraph</u>
1. Spring college on condensed matter physics and material sciences	J.1.1/2
2. Workshop on condensed matter physics	J.1.1/2
3. Winter college on nuclear and reactor physics	J.2.1/2
4. Topical meeting on high-energy physics	J.3.1/2
5. Autumn college on applicable mathematics and systems analysis	J.4.2/2
6. Autumn course on geophysics	J.5/3
7. Solar energy (in French)	
8. Workshop on relativistic astrophysics	
9. Conference on solid state physics	
10. Conference on particle physics	
11. College in biomechanics.	
12. Finite element methods in oceanography	
13. Systems analysis (in collaboration with the Asian Institute of Technology)	



K. INTERNATIONAL LABORATORY OF MARINE RADIOACTIVITY

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table K.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	603 690	680 000
Consultants	3 383	7 000
Temporary assistance	822	-
Sub-total	607 895	687 000
Common staff costs	189 151	207 300
Travel	13 678	11 000
Representation and hospitality	858	1 700
Scientific and technical contracts	3 146	-
Scientific supplies and equipment	75 717	44 000
Common services, supplies and equipment	5 739	17 000
Other items of expenditure	-	-
Losses from exchange of currency	9 619	-
Transfer of costs:		
Linguistic services	133	1 000
Printing and publishing services	1 708	2 000
TOTAL	907 644	971 000

## K. INTERNATIONAL LABORATORY OF MARINE RADIOACTIVITY

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
103 000	-	103 000	783 000	886 000	950 000
1 000	7 000	8 000	15 000	9 000	10 000
-	500	500	500	4 000	4 500
104 000	7 500	111 500	798 500	899 000	964 500
35 400	-	35 400	242 700	274 600	294 100
1 400	2 600	4 000	15 000	16 500	17 500
200	(100)	100	1 800	1 900	1 900
-	35 000	35 000	35 000	37 000	40 000
4 000	16 000	20 000	64 000	70 000	75 000
2 000	29 000	31 000	48 000	51 000	55 000
-	-	-	-	38 000	-
-	-	-	-	-	-
-	-	-	1 000	1 000	2 000
-	-	-	2 000	2 000	2 000
147 000	90 000	237 000	1 208 000	1 391 000	1 452 000

## SUMMARY OF MANPOWER

Table K.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
P-5	2	2	2	-	2	2	2
P-4	3	3	3	-	3	3	3
P-3	1	1	1	-	1	1	1
P-2	-	-	-	2	2	2	2
P-1	3	3	3	(2)	1	1	1
Sub-total	9	9	9	-	9	9	9
GS	14	14	14	-	14	14	14
TOTAL	23	23	23	-	23	23	23

## CHANGES IN COSTS AND MANPOWER

Costs

K/1. As will be seen from Table K.1 above, the cost of this programme under the Regular Budget is expected to increase by \$ 237 000, of which \$ 147 000 will be required to cover salary and other price increases and \$ 90 000 will be a programme increase.

K/2. Programme increases are foreseen in respect of consultants' services (\$ 7 000), temporary assistance (\$ 500), travel (\$ 2 600), scientific supplies and equipment (\$ 16 000) and common services, supplies and equipment (\$ 29 000). The programme increase of \$ 35 000 in respect of scientific and technical contracts reflects the transfer of responsibility for the transuranic research programme from the "Waste management" sub-programme of the "Nuclear Fuel Cycle" programme to the Monaco laboratory.

K/3. As can be seen from Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), the contribution from the Monegasque Government is expected to be \$ 125 000.

Manpower

K/4. As will be seen from Table K.2 above, the upgrading of two Professional posts from the P-1 to the P-2 level is foreseen for 1982.

K/5. No further changes are foreseen for 1983 and 1984.

THE PROGRAMME

OBJECTIVE

- K/6. The objective is:
- (i) to study the occurrence and behaviour of radioactive substances and other forms of pollution in the marine environment;
  - (ii) to ensure the quality and comparability of studies of radioactive substances and other forms of pollution in the marine environment carried out by national laboratories through inter-laboratory comparisons, calibration and standardization of methodology; and
  - (iii) to assist Member States by training personnel, establishing co-ordinated research programmes and providing advice and assistance.

STRUCTURE

K/7. This programme consists of the three sub-programmes shown in Table K.3.

THE ORIGINAL PROGRAMME

K/8. In 1982 the activities under this programme will continue as outlined in 630/K.

Summary of manpower and costs by sub-programme

Table K.3

Sub-programme	1982 Estimate				
	Man-years		Costs		
	P	GS	Staff	Other	Total
Marine biology	2.5	5.0	252 000	42 000	294 000
Marine chemistry	3.5	4.0	396 900	77 100	474 000
Marine geochemistry	3.0	5.0	392 300	47 700	440 000
TOTAL	9.0	14.0	1 041 200	166 800	1 208 000

K. INTERNATIONAL LABORATORY OF MARINE RADIOACTIVITY

1983 Preliminary estimate					1984 Preliminary estimate				
Man-years		Costs			Man-years		Costs		
P	GS	Staff	Other	Total	P	GS	Staff	Other	Total
2.5	5.0	284 500	58 500	343 000	2.5	5.0	305 800	50 200	356 000
3.5	4.0	446 400	96 600	543 000	3.5	4.0	479 700	90 300	570 000
3.0	5.0	442 700	62 300	505 000	3.0	5.0	473 100	52 900	526 000
9.0	14.0	1 173 600	217 400	1 391 000	9.0	14.0	1 258 600	193 400	1 452 000



L. SAFEGUARDS

## L. SAFEGUARDS

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table L.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	9 172 838	12 943 000
Consultants	28 746	50 200
Overtime	2 538	5 000
Temporary assistance	2 098	8 100
Sub-total	9 206 220	13 006 300
Common staff costs	2 825 837	3 947 000
Travel	1 474 471	1 799 000
Meetings		
Conferences, symposia, seminars	44 341	33 000
Technical committees, advisory groups	116 205	197 000
Representation and hospitality	10 937	15 700
Scientific and technical contracts	178 994	590 000
Scientific supplies and equipment	799 781	1 135 000
Common services, supplies and equipment	299 308	138 000
Other items of expenditure	62 173	17 000
Losses from exchange of currency	142 556	-
Transfer of costs:		
Linguistic services	105 868	233 000
Printing and publishing services	117 839	168 000
Data processing services	1 767 175	2 361 000
Laboratory services	923 134	1 166 000
Legal services	160 000	172 000
Conference services	23 434	25 000
TOTAL	18 258 273	25 003 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
1 188 000	23 000	1 211 000	14 154 000	16 385 000	18 448 000
6 100	233 700	239 800	290 000	298 000	302 000
500	2 400	2 900	7 900	8 300	8 700
600	43 100	43 700	51 800	60 800	63 800
1 195 200	302 200	1 497 400	14 503 700	16 752 100	18 822 500
436 400	8 000	444 400	4 391 400	5 079 800	5 718 900
215 500	768 500	984 000	2 783 000	3 570 000	4 025 500
4 000	37 000	41 000	74 000	35 000	36 000
24 000	(67 000)	(43 000)	154 000	239 000	245 000
2 100	4 100	6 200	21 900	23 900	24 900
35 000	145 000	180 000	770 000	805 000	883 000
113 000	373 000	486 000	1 621 000	4 000 000	4 000 000
12 000	344 000	356 000	494 000	584 200	659 200
-	(17 000)	(17 000)	-	-	-
-	-	-	-	-	-
22 000	14 000	36 000	269 000	307 000	354 000
16 000	47 000	63 000	231 000	315 000	276 000
209 000	(182 000)	27 000	2 388 000	2 400 000	2 550 000
107 000	(38 000)	69 000	1 235 000	1 325 000	1 420 000
14 000	-	14 000	186 000	200 000	216 000
2 000	21 000	23 000	48 000	28 000	28 000
2 407 200	1 759 800	4 167 000	29 170 000	35 664 000	39 259 000

## L. SAFEGUARDS

## SUMMARY OF MANPOWER

Table L.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
DDG	1	1	1	-	1	1	1
D	4	4	4	-	4	4	4
P-5	46	51	52	-	52	54	58
P-4	95	103	103	5	108	115	121
P-3	60	62	62	1	63	68	73
Sub-total	206	221	222	6	228	242	257
GS	118	133	133	7	140	151	158
TOTAL	324	354	355	13	368	393	415

## CHANGES IN COSTS AND MANPOWER

Costs

L/1. As will be seen from Table L.1 above, it is expected that the cost of this programme will increase by \$ 4 167 000, of which \$ 2 407 200 will be required to cover salary and other price increases and \$ 1 759 800 will be a programme increase.

L/2. The programme increases of \$ 23 000 in respect of salaries for established posts and \$ 8 000 in respect of common staff costs are the net result of the addition of six Professional and 7 GS posts in the manning table for 1982 and the transfer of one Professional post to this programme in the adjusted manning table for 1981 (\$ 388 000), partly offset by the lapse of existing manning table posts (\$ 365 000).

L/3. Programme increases are foreseen in respect of consultants' services (\$ 233 700, in "Safeguards development and technical support" and "International plutonium storage study"), overtime (\$ 2 400, in the "Safeguards information treatment" and "Safeguards effectiveness evaluation" sub-programmes), and temporary assistance (\$ 43 100 resulting from an increase in respect of "International plutonium storage study" and a decrease in the "Safeguards operations" sub-programme). The programme increase of \$ 768 500 in travel is related mainly to inspection travel in the "Safeguards operations" sub-programme. The programme increase of \$ 37 000 for symposia and seminars is attributable to the addition of one symposium for 1982 in the "Safeguards development and technical support" sub-programme; it is offset by a programme decrease in Technical Committees and Advisory Groups (\$ 67 000, in the "Safeguards development and technical support" and "Safeguards information treatment" sub-programmes). The programme increase of \$ 4 100 in respect of representation and hospitality is due mainly to the additional symposium and the "International plutonium storage study".

L/4. Programme increases are foreseen in respect of scientific and technical contracts (\$ 145 000) and scientific supplies and equipment (\$ 373 000). The programme increase of \$ 344 000 in common services,

supplies and equipment is partly related to the establishment of a second regional office under the "Safeguards operations" sub-programme, and partly to the requirements of "Safeguards development and technical support", "Safeguards information treatment" and "International plutonium storage study". The programme decrease of \$ 17 000 under "Other items of expenditure" is related to training activities, which are now shown under "Travel".

L/5. As regards the allocation of service costs, programme decreases are foreseen in respect of data processing services (\$ 182 000) and laboratory services (\$ 38 000), while there will be programme increases in linguistic services (\$ 14 000), printing and publishing services (\$ 47 000) and conference services (\$ 21 000).

L/6. In addition to the funds provided for the "International plutonium storage study", which can be seen in detail in Table L.11 below, unused funds derived from special voluntary contributions in support of the study in 1981 will be carried forward to 1982 to cover meeting and travel costs.

L/7. As can be seen from Table 1 (THE CONSOLIDATED BUDGET - 1982) and Table 5 (EXTRABUDGETARY RESOURCES 1980-1982), it is expected that the "Safeguards" programme will be supported by contributions amounting to \$ 1 930 000, consisting of \$ 30 000 from Australia, \$ 200 000 from Canada, \$ 200 000 from the Federal Republic of Germany, \$ 100 000 from the United Kingdom, \$ 400 000 from the Soviet Union and \$ 1 million from the United States.

L/8. It is expected that income in the form of amounts recoverable under safeguards agreements from non-member States will total \$ 80 000 in 1982.

#### Manpower

L/9. As will be seen from Table L.2 above, one Professional post is transferred to this programme in the adjusted manning table for 1981. The addition of six Professional and seven GS posts is foreseen for 1982. Detailed justifications are provided in Annex IV.

L/10. For 1983, the addition of 14 Professional and 11 GS posts is foreseen. In 1984, the further addition of 15 Professional and 7 GS posts will be required.

#### THE PROGRAMME

##### OBJECTIVE

L/11. The objective is to apply safeguards under agreements to which the Agency is a party. To achieve this objective in the most efficient and effective way, safeguards concepts and criteria are developed and adopted, procedures are established and implemented, and new safeguards techniques and equipment are developed and tested.

##### CHANGES IN THE ORIGINAL PROGRAMME

L/12. Detailed information on the activities planned for 1980 is provided in 630/L. The following additions to, and changes in, activities under the sub-programmes indicated below are foreseen.

#### Safeguards development and technical support

(630/L.2)

L.2/1. The activities related to the design and building of safeguards equipment (see 630/L.2/10) will include the development and implementation of a special light amplifier device for use in Cerenkov glow measurements for the verification of spent fuel.

L. SAFEGUARDS

L.2/2. The report on spent fuel measurements by means of portable NDA instruments (see 630/L.2/11 and L.2/10(f)) will be prepared with the aid of consultants, so that no Advisory Group meeting will be required.

L.2/3. As part of the activities of the System Studies Section (see 630/L.2/13), concepts will be developed for the application of safeguards to heavy-water production facilities.

L.2/4. The Advisory Group originally planned to consider the safeguarding of nuclear facilities handling plutonium and highly enriched uranium (see 630/L.2/14) will now be concerned with the more specific subject of the safeguarding of mixed-oxide and highly enriched uranium fuel element fabrication plants.

L.2/5. In view of the new information that is expected to become available from the Hexapartite Project on safeguarding ultracentrifuge enrichment plants, the subject for the Advisory Group originally intended to consider the application of safeguards to multiple-facility fuel cycles (see 630/L.2/14) has been changed to the safeguarding of enrichment facilities.

L.2/6. Initial work on the report containing recommendations on particular aspects of SSAC operation (see 630/L.2/14) will now be undertaken with the aid of consultants. The Advisory Group meeting has been postponed to 1983.

Safeguards information treatment

(630/L.3)

L.3/1. An interchange of subjects between 1981 and 1982 means that the safeguards information treatment Advisory Group meeting in 1982 (see 630/L.3/16) will be concerned with evaluating the quality of NDA safeguards measurements.

TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

	<u>Paragraph</u>
1-2. Standing Advisory Group on Safeguards Implementation	L/15
3. Advisory Group on containment and surveillance instrumentation	L.2/11
4. Advisory Group on safeguarding fuel element fabrication plants (mixed oxide and highly enriched uranium)	
5. Advisory Group on safeguarding enrichment facilities	
6. Advisory Group on the evaluation of the quality of safeguards non-destructive assay measurement	L.3/16

Summary of manpower by organization unit and category

Table L.3

Organization unit	1980 Adjusted budget			1981 Adjusted budget			1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	P	GS	Total	P	GS	Total	P	GS	Total	P	GS	Total	P	GS	Total
Programme co-ordination	2	5	7	4	7	11	4	8	12	4	8	12	5	9	14
Safeguards operations A	57	20	77	67	22	89	71	23	94	78	25	103	85	28	113
Safeguards operations B	81	24	105	82	25	107	82	25	107	85	27	112	88	28	116
Safeguards development and technical support	29	17	46	30	20	50	31	22	53	33	26	59	35	27	62
Standardization and administrative support	6	4	10	7	5	12	7	6	13	7	7	14	8	7	15
Safeguards information treatment	22	42	64	23	46	69	24	48	72	25	49	74	26	50	76
Safeguards effectiveness evaluation	9	6	15	9	8	17	9	8	17	10	9	19	10	9	19
<b>TOTAL</b>	<b>206</b>	<b>118</b>	<b>324</b>	<b>222</b>	<b>133</b>	<b>355</b>	<b>228</b>	<b>140</b>	<b>368</b>	<b>242</b>	<b>151</b>	<b>393</b>	<b>257</b>	<b>158</b>	<b>415</b>

Costs of safeguards programme co-ordination

Table L.4

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	350 190	377 000
Overtime		900
Sub-total	350 190	377 900
Common staff costs	108 394	115 000
Travel	19 473	15 600
Meetings		
Conferences, symposia, seminars	998	-
Technical committees, advisory groups	63 172	72 000
Representation and hospitality	2 500	2 500
Common services, supplies and equipment	203 784	4 000
Other items of expenditure		
Losses from exchange of currency	5 608	-
Transfer of costs:		
Linguistic services	34 979	54 000
Printing and publishing services	15 470	38 000
Conference services	3 906	4 000
TOTAL	808 474	683 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
30 000 100	19 000 (100)	49 000 -	426 000 900	456 000 900	536 000 1 000
30 100	18 900	49 000	426 900	456 900	537 000
11 300	6 000	17 300	132 300	141 400	166 200
1 600	17 200	18 800	34 400	36 000	38 000
-	-	-	-	-	-
9 000	-	9 000	81 000	86 000	91 000
-	900	900	3 400	3 500	3 600
700	28 300	29 000	33 000	36 200	40 200
-	-	-	-	-	-
5 000	4 000	9 000	63 000	70 000	99 000
4 000	24 000	28 000	66 000	79 000	91 000
300	13 700	14 000	18 000	13 000	12 000
62 000	113 000	175 000	858 000	922 000	1 078 000

## L. SAFEGUARDS

Costs of safeguards operations A

Table L.5

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	2 517 469	3 513 000
Overtime	-	700
Temporary assistance	241	2 200
Sub-total	2 517 710	3 515 900
Common staff costs	775 595	1 072 100
Travel	659 251	719 000
Representation and hospitality	2 489	3 000
Common services, supplies and equipment	55 158	100 000
Other items of expenditure	56 552	9 000
Losses from exchange of currency	37 568	-
Transfer of costs:		
Linguistic services	37 506	41 000
Printing and publishing services	4 661	17 000
Legal services	80 000	86 000
TOTAL	4 226 490	5 563 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
405 000	73 000	478 000	3 991 000	4 774 000	5 550 000
-	-	-	700	700	800
200	(2 400)	(2 200)	-	2 000	2 000
405 200	70 600	475 800	3 991 700	4 776 700	5 552 800
142 900	23 000	165 900	1 238 000	1 480 300	1 720 200
97 000	243 000	340 000	1 059 000	1 348 000	1 486 000
500	(200)	300	3 300	3 500	3 500
9 000	116 000	125 000	225 000	257 500	278 500
-	(9 000)	(9 000)	-	-	-
-	-	-	-	-	-
4 000	(7 000)	(3 000)	38 000	45 000	48 000
2 000	4 000	6 000	23 000	25 000	27 000
7 000	-	7 000	93 000	100 000	108 000
667 600	440 400	1 108 000	6 671 000	8 036 000	9 224 000

Costs of safeguards operations B

Table L.6

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Salaries and wages		
Established posts	2 693 030	4 197 000
Overtime	39	700
Temporary assistance	-	3 300
Sub-total	2 693 069	4 201 000
Common staff costs	829 753	1 280 000
Travel	753 676	963 000
Representation and hospitality	932	3 000
Common services, supplies and equipment	23 142	13 000
Other items of expenditure	5 621	8 000
Losses from exchange of currency	43 130	-
Transfer of costs:		
Linguistic services	1 330	38 000
Printing and publishing services	11 377	17 000
Legal services	80 000	86 000
TOTAL	4 442 030	6 609 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
265 000	(125 000)	140 000	4 337 000	4 927 000	5 429 000
100	-	100	800	900	1 000
200	(3 200)	(3 000)	300	3 300	3 300
265 300	(128 200)	137 100	4 338 100	4 931 200	5 433 300
104 600	(39 000)	65 600	1 345 600	1 527 800	1 683 400
106 000	515 000	621 000	1 584 000	2 033 000	2 342 000
500	(200)	300	3 300	3 500	3 800
1 000	16 000	17 000	30 000	33 500	37 500
-	(8 000)	(8 000)	-	-	-
-	-	-	-	-	-
4 000	(4 000)	-	38 000	45 000	48 000
2 000	4 000	6 000	23 000	25 000	27 000
7 000	-	7 000	93 000	100 000	108 000
490 400	355 600	846 000	7 455 000	8 699 000	9 683 000

## L. SAFEGUARDS

Costs of safeguards development and technical support

Table L.7

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	1 379 926	1 864 000
Consultants	1 834	28 000
Overtime	232	700
Sub-total	1 381 992	1 892 700
Common staff costs	424 006	569 300
Travel	33 895	67 000
Meetings		
Conferences, symposia, seminars	-	-
Technical committees, advisory groups	28 112	99 000
Representation and hospitality	2 816	4 000
Scientific and technical contracts	178 994	560 000
Scientific supplies and equipment	799 781	1 135 000
Common services, supplies and equipment	7 342	13 000
Other items of expenditure		
Losses from exchange of currency	22 100	-
Transfer of costs:		
Linguistic services	8 512	54 000
Printing and publishing services	35 810	55 000
Laboratory services	923 134	1 166 000
Conference services	7 811	9 000
TOTAL	3 854 305	5 624 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
175 000	18 000	193 000	2 057 000	2 424 000	2 727 000
3 300	41 700	45 000	73 000	66 000	60 000
100	-	100	800	900	900
178 400	59 700	238 100	2 130 800	2 490 900	2 787 900
62 600	6 000	68 600	637 900	751 600	845 100
7 000	(4 000)	3 000	70 000	95 000	100 000
-	40 000	40 000	40 000	-	-
12 000	(52 000)	(40 000)	59 000	81 000	81 000
700	1 600	2 300	6 300	7 500	8 000
33 000	147 000	180 000	740 000	775 000	853 000
113 000	373 000	486 000	1 621 000	4 000 000	4 000 000
1 000	141 000	142 000	155 000	201 000	247 000
-	-	-	-	-	-
5 000	1 000	6 000	60 000	66 000	74 000
5 000	(5 000)	-	55 000	121 000	66 000
107 000	(38 000)	69 000	1 235 000	1 298 000	1 370 000
700	7 300	8 000	17 000	5 000	5 000
525 400	677 600	1 203 000	6 827 000	9 892 000	10 437 000

Costs of safeguards standardization and administrative support

Table L.8

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	348 589	459 000
Overtime	-	700
Sub-total	348 589	459 700
Common staff costs	107 898	140 400
Travel	-	3 200
Representation and hospitality	515	700
Other items of expenditure		
Losses from exchange of currency	5 583	-
Transfer of costs:		
Linguistic services	14 896	27 000
Printing and publishing services	30 907	24 000
TOTAL	508 388	655 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
46 000 100	20 000 -	66 000 100	525 000 800	578 000 900	659 000 1 000
46 100	20 000	66 100	525 800	578 900	660 000
16 500	6 000	22 500	162 900	179 300	204 000
300	-	300	3 500	3 800	4 000
100	-	100	800	1 000	1 000
-	-	-	-	-	-
3 000 1 000	(5 000) (20 000)	(2 000) (19 000)	25 000 5 000	30 000 5 000	32 000 5 000
67 000	1 000	68 000	723 000	798 000	906 000

## L. SAFEGUARDS

Costs of safeguards information treatment

Table L.9

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
<b>Salaries and wages</b>		
Established posts	1 465 124	1 951 000
Consultants	26 912	22 200
Overtime	1 535	400
Temporary assistance	1 857	2 600
<hr/>		
Sub-total	1 495 428	1 976 200
Common staff costs	450 650	595 800
Travel	8 176	26 000
<b>Meetings</b>		
Conferences, symposia, seminars	43 343	33 000
Technical committees, advisory groups	24 921	26 000
Representation and hospitality	1 533	2 000
Scientific and technical contacts	-	30 000
Common services, supplies and equipment	9 882	4 000
<b>Other items of expenditure</b>		
Losses from exchange of currency	21 865	-
<b>Transfer of costs:</b>		
Linguistic services	7 714	19 000
Printing and publishing services	13 258	17 000
Data processing services	1 767 175	2 361 000
Conference services	11 717	12 000
<hr/>		
<b>TOTAL</b>	<b>3 855 662</b>	<b>5 102 000</b>

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
204 000	18 000	222 000	2 173 000	2 472 000	2 723 000
2 800	(3 000)	(200)	22 000	22 000	22 000
-	1 500	1 500	1 900	2 000	2 000
200	700	900	3 500	3 500	3 500
207 000	17 200	224 200	2 200 400	2 499 500	2 750 500
72 500	6 000	78 500	674 300	766 100	844 000
3 000	(3 000)	-	26 000	26 000	26 000
4 000	(3 000)	1 000	34 000	35 000	36 000
3 000	(15 000)	(12 000)	14 000	27 000	28 000
300	-	300	2 300	2 400	2 500
2 000	(2 000)	-	30 000	30 000	30 000
200	40 800	41 000	45 000	50 000	50 000
-	-	-	-	-	-
1 000	(5 000)	(4 000)	15 000	20 000	21 000
2 000	9 000	11 000	28 000	29 000	29 000
209 000	(182 000)	27 000	2 388 000	2 400 000	2 550 000
1 000	(4 000)	(3 000)	9 000	7 000	8 000
505 000	(141 000)	364 000	5 466 000	5 892 000	6 375 000

## L. SAFEGUARDS

Costs of safeguards effectiveness evaluation

Table L.10

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	418 510	582 000
Overtime	732	900
Sub-total	419 242	582 900
Common staff costs	129 541	174 400
Travel	-	5 200
Representation and hospitality	152	500
Common services, supplies and equipment	-	4 000
Other items of expenditure		
Losses from exchange of currency	6 702	-
Transfer of costs:		
Linguistic services	931	-
Printing and publishing services	6 356	-
TOTAL	562 924	767 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
63 000	-	63 000	645 000	754 000	824 000
100	1 000	1 100	2 000	2 000	2 000
63 100	1 000	64 100	647 000	756 000	826 000
26 000	-	26 000	200 400	233 300	256 000
600	300	900	6 100	6 200	6 500
-	-	-	500	500	500
100	(3 100)	(3 000)	1 000	1 000	1 000
-	-	-	-	-	-
-	-	-	-	-	-
-	1 000	1 000	1 000	1 000	1 000
89 800	(800)	89 000	856 000	998 000	1 091 000

## L. SAFEGUARDS

Costs of International Plutonium Storage Study

Table L.11

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Consultants	-	-
Temporary assistance	-	-
Sub-total	-	-
Travel	-	-
Meetings		
Technical committees, advisory groups	-	-
Representation and hospitality	-	-
Common services, supplies and equipment	-	-
Transfer of costs:		
Linguistic services	-	-
Printing and publishing services	-	-
Conference services	-	-
TOTAL	-	-

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
-	195 000	195 000	195 000	210 000	220 000
-	48 000	48 000	48 000	52 000	55 000
	243 000	243 000	243 000	262 000	275 000
-	-	-	-	22 000	23 000
-	-	-	-	45 000	45 000
-	2 000	2 000	2 000	2 000	2 000
-	5 000	5 000	5 000	5 000	5 000
-	30 000	30 000	30 000	31 000	32 000
-	30 000	30 000	30 000	30 000	30 000
-	4 000	4 000	4 000	3 000	3 000
-	314 000	314 000	314 000	400 000	415 000

Nuclear installations subject to safeguards or containing safeguarded material  
1980-84

Table L.12

Type of installation	1980		1981		1982		1983		1984	
	NPT agreements	Other agreements								
Power reactors	103	24	110	29	120	33	130	38	148	42
Research reactors and critical assemblies	147	28	148	29	149	29	150	30	152	30
Conversion plants	3	1	3	1	4	1	5	1	5	1
Fuel fabrication plants	31	7	31	8	31	8	32	8	32	8
Reprocessing plants	4	3	4	3	5	3	5	3	5	3
Enrichment plants	4	0	5	0	5	0	6	0	7	0
Separate storage facilities	15	6	16	3	16	3	16	3	16	3
Other facilities (> 1 ekq)	40	0	40	0	40	0	40	0	40	0
Other locations (< 1 ekq)	340	18	340	18	340	18	340	18	340	18
<b>TOTAL</b>	<b>687</b>	<b>87</b>	<b>697</b>	<b>91</b>	<b>710</b>	<b>95</b>	<b>724</b>	<b>101</b>	<b>745</b>	<b>105</b>

M. INFORMATION AND TECHNICAL SERVICES

## M. INFORMATION AND TECHNICAL SERVICES

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table M.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	2 695 618	3 058 000
Consultants	6 286	9 000
Overtime	14 682	15 200
Temporary assistance	35 296	33 400
Sub-total	2 751 882	3 115 600
Common staff costs	833 378	933 000
Travel	23 382	30 000
Meetings		
Conferences, symposia, seminars	14 065	21 000
Technical committees, advisory groups	32 265	42 000
Representation and hospitality	1 906	3 300
Scientific and technical contracts	80 969	32 000
Common services, supplies and equipment	2 446 296	2 588 500
Other items of expenditure	28 840	29 600
Losses from exchange of currency	79 915	-
Transfer of costs:		
Linguistic services	65 170	90 000
Printing and publishing services	1 111 721	1 035 000
Data processing services	(2 940 633)	(3 228 000)
Conference services	13 670	13 000
<b>TOTAL</b>	4 542 826	4 705 000

M. INFORMATION AND TECHNICAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
282 000	87 000	369 000	3 427 000	3 807 000	4 202 000
1 000	1 500	2 500	11 500	20 300	23 900
1 100	3 300	4 400	19 600	20 500	21 800
2 100	19 800	21 900	55 300	119 500	127 700
286 200	111 600	397 800	3 513 400	3 967 300	4 375 400
101 900	26 400	128 300	1 061 300	1 182 200	1 302 200
3 400	900	4 300	34 300	45 300	49 900
2 000	(2 000)	-	21 000	23 000	25 000
5 000	20 000	25 000	67 000	47 000	48 000
500	200	700	4 000	5 200	5 400
2 800	26 200	29 000	61 000	117 000	119 000
239 200	233 800	473 000	3 061 500	2 894 800	2 942 100
3 400	9 500	12 900	42 500	63 200	68 000
-	-	-	-	-	-
8 000	(24 000)	(16 000)	74 000	76 000	86 000
89 000	(49 000)	40 000	1 075 000	1 228 000	1 350 000
(285 000)	(432 000)	(717 000)	(3 945 000)	(3 961 000)	(4 227 000)
1 000	(2 000)	(1 000)	12 000	17 000	16 000
457 400	(80 400)	377 000	5 082 000	5 705 000	6 160 000

## M. INFORMATION AND TECHNICAL SERVICES

## SUMMARY OF MANPOWER

Table M.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	4	5	5	-	5	5	5
P-4	11	10	11	-	11	11	11
P-3	14	15	16	-	16	18	19
P-2	5	4	4	-	4	4	5
P-1	2	2	3	-	3	3	3
Sub-total	37	37	40	-	40	42	44
GS	79	80	80	1	81	84	86
TOTAL	116	117	120	1	121	126	130

## CHANGES IN COSTS AND MANPOWER

Costs

M/1. As will be seen from Table M.1 above, it is expected that the cost of this programme will increase by \$ 377 000 as a net result of salary and other price increases of \$ 457 400 and a programme decrease of \$ 80 400.

M/2. The programme increase of \$ 113 400 in respect of salaries for established posts and common staff costs is attributable to the transfer to this programme of two Professional posts and one GS post in the 1981 adjusted manning table and to the addition of one GS post in 1982. These posts, with the exception of one Professional post for the "INIS" sub-programme, are in support of the "Computer services" sub-programme. Programme increases are foreseen in respect of consultants' services (\$ 1 500), overtime (\$ 3 300), temporary assistance (\$ 19 800, mainly for the "Computer services" sub-programme) and travel (\$ 900).

M/3. With regard to the cost of meetings, a programme decrease of \$ 2 000 is foreseen in respect of the INIS seminar, but there will be a programme increase of \$ 20 000 resulting from the rise in the number of Technical Committee and Advisory Group meetings in the "INIS" sub-programme. The programme increases in respect of scientific and technical contracts (\$ 26 200) and common services, supplies and equipment (\$ 233 800) are connected mainly with the "Computer services" sub-programme. The latter amount is directly attributable to an enlargement of the data processing facilities, which has resulted in higher allocated costs to the Agency's programmes and to other organizations under "Cost of work for others". It is expected that the expenditure relating to computer hardware will decrease considerably in 1983 and 1984. The programme increase of \$ 9 500 for training under "Other items of expenditure" is related to both the "INIS" and the "Computer services" sub-programme.

M/4. As regards the allocation of service costs, programme decreases are foreseen in linguistic services for the "Scientific journals" sub-programme (\$ 24 000), in printing and publishing services (\$ 49 000) for the "Scientific journals" sub-programme, partly offset by an increase in these services for INIS and in conference services for "INIS" (\$ 2 000). The amount of \$ 432 000 which appears under "Data processing services" in Table M.1 represents a programme increase in computer services provided to other programmes. In addition, there is a programme increase in respect of services provided to other sub-programmes of the present programme. The total programme increase in respect of the "Computer services" sub-programme, as shown in Table M.4, amounts to \$ 457 000.

M/5. It is expected that income from INIS publications will be \$ 500 000 in 1982.

#### Manpower

M/6. As will be seen from Table M.2 above, two Professional posts and one GS post are transferred to this programme in the 1981 adjusted manning table, and one GS post is exchanged for a Professional post from another programme. In 1982, one additional GS post is required. Detailed justifications are provided in Annex IV.

M/7. For 1983, the addition of two Professional and two GS posts for the "Computer services" sub-programme and of one GS post for "INIS" is foreseen. For 1984, it is expected that one extra Professional and two extra GS posts will be required for "Computer services" and one extra Professional post for "INIS".

## M. INFORMATION AND TECHNICAL SERVICES

Costs of the Office of the Director

Table M.3

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	97 719	105 000
Sub-total	97 719	105 000
Common staff costs	30 247	31 800
Travel	4 007	2 600
Representation and hospitality	502	400
Common services, supplies and equipment	768	1 200
Other items of expenditure		
Losses from exchange of currency	1 565	-
Transfer of costs:		
Printing and publishing services	7 250	5 000
TOTAL	142 058	146 000

## M. INFORMATION AND TECHNICAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
10 000	-	10 000	115 000	123 000	132 000
10 000	-	10 000	115 000	123 000	132 000
3 500	-	3 500	35 300	38 600	40 900
300	2 300	2 600	5 200	5 600	6 000
100	-	100	500	600	700
100	(300)	(200)	1 000	1 200	1 400
-	-	-	-	-	-
500	(500)	-	5 000	6 000	7 000
14 500	1 500	16 000	162 000	175 000	188 000

Costs of scientific journals

Table M.4

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	99 958	102 000
Consultants	-	5 300
Temporary assistance	2 024	1 800
Sub-total	101 982	109 100
Common staff costs	30 940	30 900
Travel	1 128	400
Representation and hospitality	-	300
Scientific and technical contracts	18 300	10 000
Common services, supplies and equipment	572	1 300
Other items of expenditure		
Losses from exchange of currency	1 601	-
Transfer of costs:		
Linguistic services	53 998	67 000
Printing and publishing services	497 206	361 000
Data processing services	5 597	5 000
TOTAL	711 324	585 000

M. INFORMATION AND TECHNICAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
3 000	-	3 000	105 000	112 000	121 000
500	(2 800)	(2 300)	3 000	3 000	3 300
100	400	500	2 300	2 500	2 700
3 600	(2 400)	1 200	110 300	117 500	127 000
1 700	-	1 700	32 600	35 200	37 500
100	1 600	1 700	2 100	2 100	2 100
-	200	200	500	600	700
1 000	-	1 000	11 000	12 000	12 000
100	(900)	(800)	500	600	700
-	-	-	-	-	-
6 000	(24 000)	(18 000)	49 000	54 000	60 000
30 000	(143 000)	(113 000)	248 000	274 000	301 000
500	(500)	-	5 000	6 000	7 000
43 000	(169 000)	(126 000)	459 000	502 000	548 000

Costs of INIS activities

Table M.5

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	977 844	1 068 000
Consultants	3 061	2 100
Overtime	1 747	1 500
Temporary assistance	6 562	9 100
Sub-total	989 214	1 080 700
Common staff costs	301 272	325 800
Travel	11 782	13 300
Meetings		
Conferences, symposia, seminars	14 065	21 000
Technical committees, advisory groups	32 265	42 000
Representation and hospitality	1 404	2 600
Scientific and technical contracts	4 900	10 000
Common services, supplies and equipment	223 704	250 000
Other items of expenditure	2 208	2 600
Losses from exchange of currency	15 659	-
Transfer of costs:		
Linguistic services	10 773	21 000
Printing and publishing services	536 852	624 000
Data processing services	753 557	739 000
Conference services	13 670	13 000
TOTAL	2 911 325	3 145 000

## M. INFORMATION AND TECHNICAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
112 000	-	112 000	1 180 000	1 305 000	1 423 000
300	600	900	3 000	3 300	3 500
100	-	100	1 600	1 700	1 800
700	3 200	3 900	13 000	16 000	17 000
113 100	3 800	116 900	1 197 600	1 326 000	1 445 300
40 100	-	40 100	365 900	405 000	440 700
1 700	1 000	2 700	16 000	20 000	22 000
2 000	(2 000)	-	21 000	23 000	25 000
5 000	20 000	25 000	67 000	47 000	48 000
400	-	400	3 000	4 000	4 000
800	(800)	-	10 000	15 000	17 000
25 000	8 000	33 000	283 000	313 000	320 000
300	3 600	3 900	6 500	10 000	11 000
-	-	-	-	-	-
2 000	-	2 000	23 000	20 000	24 000
54 000	69 000	123 000	747 000	870 000	961 000
70 000	51 000	121 000	860 000	900 000	950 000
1 000	(2 000)	(1 000)	12 000	17 000	16 000
315 400	151 600	467 000	3 612 000	3 970 000	4 284 000

Costs of the Library

Table M.6

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	290 920	363 000
Consultants	2 000	1 600
Overtime	-	700
Temporary assistance	11 202	6 500
Sub-total	304 122	371 800
Common staff costs	89 993	110 900
Travel	-	2 300
Common services, supplies and equipment	251 846	201 000
Other items of expenditure	2 600	1 000
Losses from exchange of currency	10 572	-
Transfer of costs:		
Linguistic services	399	2 000
Printing and publishing services	55 525	30 000
Data processing services	63 062	110 000
<b>TOTAL</b>	<b>778 119</b>	<b>829 000</b>

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
37 000	-	37 000	400 000	416 000	446 000
200	(300)	(100)	1 500	2 000	2 100
-	(700)	(700)	-	800	1 000
-	(6 500)	(6 500)	-	6 000	6 000
37 200	(7 500)	29 700	401 500	424 800	455 100
12 600	-	12 600	123 500	129 400	138 100
100	(1 400)	(1 300)	1 000	2 600	2 800
22 000	(53 000)	(31 000)	170 000	340 000	370 000
100	(100)	-	1 000	1 200	2 000
-	-	-	-	-	-
-	-	-	2 000	2 000	2 000
3 000	23 000	26 000	56 000	58 000	60 000
9 500	(25 500)	(16 000)	94 000	100 000	110 000
84 500	(64 500)	20 000	849 000	1 058 000	1 140 000

## M. INFORMATION AND TECHNICAL SERVICES

Costs of computer services

Table M.7

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	1 229 177	1 420 000
Consultants	1 225	-
Overtime	12 935	13 000
Temporary assistance	15 508	16 000
Sub-total	1 258 845	1 449 000
Common staff costs	380 926	433 600
Travel	6 465	11 400
Scientific and technical contracts	57 769	12 000
Common services, supplies and equipment	1 969 406	2 135 000
Other items of expenditure	24 032	26 000
Losses from exchange of currency	50 518	-
Transfer of costs:		
Printing and publishing services	14 888	15 000
Data processing services	(3 762 849)	(4 082 000)
TOTAL	-	-

M. INFORMATION AND TECHNICAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
120 000	87 000	207 000	1 627 000	1 851 000	2 080 000
-	4 000	4 000	4 000	12 000	15 000
1 000	4 000	5 000	18 000	18 000	19 000
1 300	22 700	24 000	40 000	95 000	102 000
122 300	117 700	240 000	1 689 000	1 976 000	2 216 000
44 000	26 400	70 400	504 000	574 000	645 000
1 200	(2 600)	(1 400)	10 000	15 000	17 000
1 000	27 000	28 000	40 000	90 000	90 000
192 000	280 000	472 000	2 607 000	2 240 000	2 250 000
3 000	6 000	9 000	35 000	52 000	55 000
-	-	-	-	-	-
1 500 (365 000)	2 500 (457 000)	4 000 (822 000)	19 000 (4 904 000)	20 000 (4 967 000)	21 000 (5 294 000)
-	-	-	-	-	-

## M. INFORMATION AND TECHNICAL SERVICES

## Computer services: Breakdown of costs by programme

Table M.8

	1980 Actual obligations	1981 Adjusted budget	1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Allocated to other programmes:					
Technical assistance	134 443	65 000	205 000	158 000	155 000
Nuclear power	145 170	80 000	115 000	121 000	133 000
Nuclear fuel cycle	42 796	30 000	65 000	71 000	77 000
Nuclear safety	12 496	22 000	50 000	61 000	72 000
Food and agriculture	8 632	42 000	35 000	40 000	45 000
Life sciences	3 470	2 000	8 000	9 000	10 000
Physical sciences	156 474	130 000	177 000	187 000	198 000
The Laboratory	28 724	20 000	39 000	39 000	39 000
Safeguards	1 767 175	2 361 000	2 388 000	2 400 000	2 550 000
Executive management and technical programme planning	12 617	-	8 000	8 000	8 000
Administration	543 554	375 000	693 000	690 000	747 000
General services	39 567	28 000	25 000	30 000	37 000
Service activities	45 515	73 000	137 000	147 000	156 000
Sub-total, allocated data processing services (see Table M.1)	2 940 633	3 228 000	3 945 000	3 961 000	4 227 000
Remaining as a charge to the programme Information and technical services:					
Scientific journals	5 597	5 000	5 000	6 000	7 000
INIS	753 557	739 000	860 000	900 000	950 000
Library	63 062	110 000	94 000	100 000	110 000
<b>TOTAL</b>	<b>3 762 849</b>	<b>4 082 000</b>	<b>4 904 000</b>	<b>4 967 000</b>	<b>5 294 000</b>

Summary of manpower by organization unit and category

Table M.9

Organization unit	1980 Adjusted budget			1981 Adjusted budget			1982 Estimate			1983 Preliminary estimate			1984 Preliminary estimate		
	P	GS	Total	P	GS	Total	P	GS	Total	P	GS	Total	P	GS	Total
Office of the Director	1	1	2	1	2	3	1	2	3	1	2	3	1	2	3
Scientific journals	1	3	4	1	3	4	1	3	4	1	3	4	1	3	4
INIS Section	14	24	38	14	25	39	14	25	39	14	26	40	15	26	41
Library	4	10	14	4	10	14	4	10	14	4	10	14	4	10	14
Computer Section	17	41	58	20	40	60	20	41	61	22	43	65	23	45	68
<b>TOTAL</b>	<b>37</b>	<b>79</b>	<b>116</b>	<b>40</b>	<b>80</b>	<b>120</b>	<b>40</b>	<b>81</b>	<b>121</b>	<b>42</b>	<b>84</b>	<b>126</b>	<b>44</b>	<b>86</b>	<b>130</b>

## THE PROGRAMME

## OBJECTIVE

M/8. 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 and to provide library and computer support to all organizations located in the Vienna International Centre.

## CHANGES IN THE ORIGINAL PROGRAMME

M/9. Detailed information on the activities planned for 1982 is provided in 630/M. The following change in activities under the sub-programme indicated below is foreseen.

Computer Services

(630/M.3)

M.3/1. The proposed experiments with satellite communication links for data transmission (see 630/M.3/9) will not now be carried out as the expected cost-free services and facilities have proved to be unavailable and it is considered inadvisable to initiate this costly project at a time of budgetary restrictions.

## TECHNICAL COMMITTEES AND ADVISORY GROUPS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630.

	<u>Paragraph</u>
1. Technical Committee on INIS input/output procedures	M.1/9,10,12
2. Tenth consultative meeting of INIS Liaison Officers	M.1/15
3. Fourth Advisory Committee for INIS	M.1/16



N. POLICY-MAKING ORGANS

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table N.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	187 690	211 000
Overtime	12 266	30 600
Temporary assistance	19 851	21 400
Sub-total	219 807	263 000
Common staff costs	57 368	64 000
Meetings		
Interpretation for sessions	152 797	95 000
Common services, supplies and equipment	101 398	151 000
Other items of expenditure	68 402	59 000
Losses from exchange of currency	3 006	-
Transfer of costs:		
Linguistic services	1 526 102	1 471 000
Printing and publishing services	460 995	512 000
Conference services	115 218	68 000
TOTAL	2 705 093	2 683 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
6 000	-	6 000	217 000	249 000	268 000
1 900	(14 000)	(12 100)	18 500	20 500	22 500
1 600	(1 000)	600	22 000	13 600	15 100
9 500	(15 000)	(5 500)	257 500	283 100	305 600
3 500	-	3 500	67 500	76 900	83 400
17 000	88 000	105 000	200 000	210 000	220 000
15 000	(42 000)	(27 000)	124 000	131 000	138 000
8 000	8 000	16 000	75 000	80 000	85 000
-	-	-	-	-	-
131 000	75 000	206 000	1 677 000	1 780 000	1 950 000
44 000	29 000	73 000	585 000	625 000	675 000
6 000	48 000	54 000	122 000	129 000	143 000
234 000	191 000	425 000	3 108 000	3 315 000	3 600 000

N. POLICY-MAKING ORGANS

SUMMARY OF MANPOWER

Table N.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	1	1	1	-	1	1	1
P-2	1	1	1	-	1	1	1
Sub-total	3	3	3	-	3	3	3
GS	2	2	2	-	2	3	3
<b>TOTAL</b>	5	5	5	-	5	6	6

## CHANGES IN COSTS AND MANPOWER

Costs

N/1. As will be seen from Table N.1 above, the cost of this programme is expected to increase by \$ 425 000, of which \$ 234 000 will be required to cover salary and other price increases and \$ 191 000 is a programme increase.

N/2. Programme decreases are foreseen in respect of overtime (\$ 14 000), temporary assistance (\$ 1 000) and common services and supplies (\$ 42 000). The programme increase of \$ 8 000 under "Other items of expenditure" relates to external audit activities and is in line with the actual requirements in 1980.

N/3. As a result of additional meetings of the Board of Governors and its committees, programme increases in interpretation (\$ 88 000) and in conference services (\$ 48 000) are foreseen. Further programme increases will be required in respect of linguistic services (\$75 000) and printing and publishing services (29 000).

Manpower

N/4. For 1983, the addition of one GS post is foreseen.

## THE PROGRAMME

N/5. 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 the Secretariat of the Policy-making Organs, which undertakes the organizational and administrative work involved, and three Divisions in the Agency's Secretariat. The Division of Languages translates documents and prepares records of proceedings; the Division of Publications reproduces and circulates the documents; and the Division of External Relations provides the conference and interpretation facilities and services needed for the meetings of the two organs and their committees. In all work concerning the General Conference and the Board of Governors, the Secretariat of the Policy-making Organs reports to the Director General. Certain matters related to internal administration are co-ordinated with the Head of the Department of Administration.

N. POLICY-MAKING ORGANS

Distribution of costs between the General Conference and the Board

Table N.3

Organ	1980 Actual obligations	1981 Adjusted budget
General Conference	1 257 166	1 037 000
Board of Governors	1 447 927	1 646 000
<b>TOTAL</b>	<b>2 705 093</b>	<b>2 683 000</b>

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
90 600	146 400	237 000	1 274 000	1 377 000	1 498 000
143 400	44 600	188 000	1 834 000	1 938 000	2 102 000
234 000	191 000	425 000	3 108 000	3 315 000	3 600 000



O. EXECUTIVE MANAGEMENT  
AND TECHNICAL PROGRAMME PLANNING

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table O.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	905 935	1 026 000
Consultants	88 054	104 900
Overtime	9 167	12 800
Temporary assistance	7 273	-
Sub-total	1 010 429	1 143 700
Common staff costs	279 336	314 500
Travel	64 660	83 400
Meetings		
Technical committees, advisory groups	102 737	39 000
Representation and hospitality	23 787	23 600
Common services, supplies and equipment	4 067	10 800
Other items of expenditure		
Losses from exchange of currency	14 509	-
Transfer of costs:		
Linguistic services	25 536	46 000
Printing and publishing services	8 602	16 000
Data processing services	12 617	-
Conference services	3 906	-
<b>TOTAL</b>	<b>1 550 186</b>	<b>1 677 000</b>

## O. EXECUTIVE MANAGEMENT AND TECHNICAL PROGRAMME PLANNING

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
67 000	(50 000)	17 000	1 043 000	1 111 000	1 183 000
12 600	(5 900)	6 700	111 600	117 200	122 900
1 000	700	1 700	14 500	15 400	16 100
-	2 000	2 000	2 000	2 000	2 200
80 600	(53 200)	27 400	1 171 100	1 245 600	1 324 200
23 800	(15 000)	8 800	323 300	345 000	367 300
10 100	(1 100)	9 000	92 400	100 400	108 900
4 000	-	4 000	43 000	47 000	51 000
200	3 200	3 400	27 000	27 000	27 000
400	-	400	11 200	12 000	12 600
-	-	-	-	-	-
4 000	(2 000)	2 000	48 000	40 000	54 000
1 000	2 000	3 000	19 000	22 000	23 000
-	8 000	8 000	8 000	8 000	8 000
-	1 000	1 000	1 000	1 000	1 000
124 100	(57 100)	67 000	1 744 000	1 848 000	1 977 000

## SUMMARY OF MANPOWER

Table O.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
DG	1	1	1	-	1	1	1
DDG	3	3	3	-	3	3	3
D	1	1	1	-	1	1	1
P-5	1	1	1	-	1	1	1
P-4	2	2	1	-	1	1	1
P-3	1	1	1	-	1	1	1
P-2	3	3	3	-	3	3	3
P-1	1	1	1	-	1	1	1
Sub-total	13	13	12	-	12	12	12
GS	11	11	11	-	11	11	11
TOTAL	24	24	23	-	23	23	23

## 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 \$ 67 000 as a net result of salary and other price increases of \$ 124 100 and a programme decrease of \$ 57 100.

O/2. The programme decrease of \$ 65 000 in respect of salaries for established posts and common staff costs is attributable to the transfer of one P-4 post from this programme to the "Information and Technical Services" programme in the 1981 adjusted manning table. Programme increases in respect of overtime (\$ 700), temporary assistance (\$ 2 000) and hospitality (\$ 3 200) will be offset by programme decreases in consultants' services and travel.

O/3. As regards the allocation of service costs, a programme decrease is foreseen in linguistic services (\$ 2 000), while there will be programme increases in respect of printing and publishing services (\$ 2 000), data processing services (\$ 8 000) and conference services (\$ 1 000).

Manpower

O/4. As will be seen from Table O.2 above, one P-4 post has been transferred from this programme in the 1981 adjusted manning table for redeployment in another programme.

O/5. No further changes are foreseen for 1982, 1983 and 1984.

THE PROGRAMME

OBJECTIVE

O/6. 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 coordination of the Agency's work.

O/7. 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.



P. ADMINISTRATION

## P. ADMINISTRATION

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table P.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	4 914 475	5 505 000
Consultants	66 459	46 800
Overtime	17 912	16 400
Temporary assistance	108 826	87 300
Sub-total	5 107 672	5 655 500
Common staff costs	1 516 107	1 679 400
Travel	54 019	56 600
Meetings		
Technical committees, advisory groups	414	60 000
Representation and hospitality	16 459	18 900
Common services, supplies and equipment	128 865	175 400
Other items of expenditure	394	5 200
Losses from exchange of currency	80 815	-
Transfer of costs:		
Linguistic services	363 785	461 000
Printing and publishing services	660 306	628 000
Data processing services	543 554	375 000
To other: Safeguards	(160 000)	(172 000)
PNE	(48 000)	(52 000)
Conference services	(460 871)	(452 000)
TOTAL	7 803 519	8 439 000

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
504 000	(42 000)	462 000	5 967 000	6 428 000	6 878 000
2 600	(34 400)	(31 800)	15 000	86 000	101 000
1 100	(600)	500	16 900	20 500	23 600
5 800	(15 200)	(9 400)	77 900	109 500	127 000
513 500	(92 200)	421 300	6 076 800	6 644 000	7 129 600
185 100	(13 000)	172 100	1 851 500	1 990 000	2 130 000
6 700	8 900	15 600	72 200	72 000	81 000
4 000	(27 000)	(23 000)	37 000	6 000	-
2 000	(300)	1 700	20 600	24 100	26 300
17 800	(51 100)	(33 300)	142 100	191 400	213 900
600	-	600	5 800	6 500	7 200
-	-	-	-	-	-
40 000	29 000	69 000	530 000	516 000	471 000
50 000	(72 000)	(22 000)	606 000	692 000	707 000
35 000	283 000	318 000	693 000	690 000	747 000
(14 000)	-	(14 000)	(186 000)	(200 000)	-
-	52 000	52 000	-	-	(216 000)
(36 000)	-	(36 000)	(488 000)	(518 000)	(554 000)
804 700	117 300	922 000	9 361 000	10 114 000	10 743 000

## SUMMARY OF MANPOWER

Table P.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
DDG	1	1	1	-	1	1	1
D	6	6	6	-	6	6	6
P-5	15	15	15	-	15	15	15
P-4	17	17	17	-	17	17	18
P-3	14	16	15	-	15	15	15
P-2	12	10	9	-	9	9	9
P-1	2	2	2	(1)	1	1	1
Sub-total	67	67	65	(1)	64	64	65
GS	115	115	119	-	119	124	124
M+O	3	3	3	-	3	3	3
TOTAL	185	185	187	(1)	186	191	192

## CHANGES IN COSTS AND MANPOWER

Costs

P/1. As will be seen from Table P.1 above, it is expected that the cost of this programme will increase by \$ 922 000, of which \$ 804 700 will be required to cover salary and other price increases and \$ 117 300 will be a programme increase.

P/2. The programme decrease of \$ 55 000 in respect of salaries for established posts and common staff costs is the net result of several transfers of posts between "Administration" and other programmes. Programme decreases are also foreseen in respect of consultants' services (\$ 34 400, mainly in the Divisions of Budget and Finance and of Public Information), overtime (\$ 600) and temporary assistance (\$ 15 200, mainly in the Division of Budget and Finance). The programme increase of \$ 8 900 in respect of duty travel relates to several Divisions.

P/3. There will be a programme decrease of \$ 27 000 in connection with meetings organized by the Legal Division, accompanied by a decrease of \$ 300 in hospitality. The programme decrease of \$ 51 100 in common services, supplies and equipment relates to the Division of Public Information and to "Medical services".

P/4. Programme increases are foreseen in respect of linguistic services (\$ 29 000) and data processing services (\$ 283 000); these are partly offset by a programme decrease in respect of printing and publishing services (\$ 72 000). The programme increase of \$ 52 000 under "To other: PNE" is related to the discontinuation of services previously provided by the Legal Division and the Division of Public Information to the "Nuclear Explosions for Peaceful Purposes" programme, for which that programme was charged.

Manpower

P/5. As will be seen from Table P.2 above, one P-3 and one P-2 post are transferred to other programmes in the adjusted manning table for 1981, while four GS posts are transferred from other programmes to the "Administration" programme. One P-1 post will be relinquished in 1982. Detailed explanations are provided in Annex IV.

P/6. For 1983, five additional GS posts will be required: one each for the Office of Internal Audit and Management Services and "Medical services", and three for the Division of Budget and Finance. For 1984, one additional P-4 post for a Medical Officer is foreseen.

## THE PROGRAMME

## OBJECTIVE

P/7. 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 to 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.

## CHANGES IN THE ORIGINAL PROGRAMME

P/8. Detailed information on the activities planned for 1982 is provided in 630/P. The following addition to activities under the sub-programme indicated below is foreseen.

Legal Services

(630/P.5)

P/9. At its nineteenth Regular Session, in 1975, the General Conference welcomed the stated intention of the Secretariat to make regular reviews of the recommendations on the physical protection of nuclear material. An Advisory Group meeting is to be held in 1982 to initiate a revision of the 1977 edition of the Agency's publication on this subject for issue later in the same year.

## MEETINGS IN 1982

Within the limits of the appropriations and subject to the requirements of the programme as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

	<u>Paragraph</u>
1. Standing Committee on Civil Liability for Nuclear Damage	P.5/6
2. Expert Group on International Spent Fuel Management	P.5/17
3. Advisory Group on physical protection of nuclear material (to revise INFCIRC/225/Rev.1)	

P. ADMINISTRATION

Summary of total costs by organization unit

Table P.3

Item of expenditure	1980 Actual obligations	1981 Adjusted budget	Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
			Price	Programme	Total			
Office of the Deputy Director General for Administration	309 454	336 000	45 000	1 000	46 000	382 000	409 000	437 000
Office of Internal Audit and Management Services	407 836	484 000	25 100	20 900	46 000	530 000	587 000	623 000
Division of Budget and Finance	2 706 117	2 940 000	296 000	112 000	408 000	3 348 000	3 604 000	3 854 000
Division of External Relations	1 112 722	1 162 000	85 000	25 000	110 000	1 272 000	1 387 000	1 482 000
Division of Public Information	1 095 879	1 208 000	122 600	(58 600)	64 000	1 272 000	1 403 000	1 490 000
Legal Division	531 675	558 000	62 000	63 000	125 000	683 000	685 000	630 000
Division of Personnel								
Personnel services	1 362 695	1 383 000	134 500	17 500	152 000	1 535 000	1 675 000	1 804 000
Medical services	277 141	368 000	34 500	(63 500)	(29 000)	339 000	364 000	423 000
<b>TOTAL</b>	<b>7 803 519</b>	<b>8 439 000</b>	<b>804 700</b>	<b>117 300</b>	<b>922 000</b>	<b>9 361 000</b>	<b>10 114 000</b>	<b>10 743 000</b>

Summary of manpower by organization unit and category

Table P.4

Organization unit	1980 Adjusted budget				1981 Adjusted budget				1982 Estimate				1983 Preliminary estimate				1984 Preliminary estimate			
	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total
Office of the Deputy Director General for Administration	3	3	-	6	3	2	-	5	3	2	-	5	3	2	-	5	3	2	-	5
Office of Internal Audit and Management Services	5	4	-	9	5	5	-	10	5	5	-	10	5	6	-	11	5	6	-	11
Division of Budget and Finance	24	43	-	67	22	47	-	69	21	47	-	68	21	50	-	71	21	50	-	71
Division of External Relations	13	20	-	33	13	20	-	33	13	20	-	33	13	20	-	33	13	20	-	33
Division of Public Information	4	7	-	11	4	7	-	11	4	7	-	11	4	7	-	11	4	7	-	11
Legal Division	7	4	-	11	7	4	-	11	7	4	-	11	7	4	-	11	7	4	-	11
Division of Personnel																				
Personnel services	8	22	-	30	8	22	-	30	8	22	-	30	8	22	-	30	8	22	-	30
Medical services	3	12	3	18	3	12	3	18	3	12	3	18	3	13	3	19	4	13	3	20
<b>TOTAL</b>	<b>67</b>	<b>115</b>	<b>3</b>	<b>185</b>	<b>65</b>	<b>119</b>	<b>3</b>	<b>187</b>	<b>64</b>	<b>119</b>	<b>3</b>	<b>186</b>	<b>64</b>	<b>124</b>	<b>3</b>	<b>191</b>	<b>65</b>	<b>124</b>	<b>3</b>	<b>192</b>

Q. GENERAL SERVICES.

## Q. GENERAL SERVICES

## COSTS OF THE PROGRAMME

Summary by items of expenditure: Table Q.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	2 179 332	2 345 000
Consultants	44 361	-
Overtime	27 722	18 500
Temporary assistance	105 973	31 700
Sub-total	2 357 388	2 395 200
Common staff costs	671 110	714 200
Travel	990	1 100
Representation and hospitality	324	200
Scientific and technical contracts	26 896	-
Common services, supplies and equipment	7 168 122	9 898 300
Other items of expenditure	133	-
Losses from exchange of currency	31 874	-
Transfer of costs:		
Linguistic services	2 394	10 000
Printing and publishing services	78 404	266 000
Data processing services	39 567	28 000
TOTAL	10 377 202	13 313 000

## Q. GENERAL SERVICES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
170 000	(20 000)	150 000	2 495 000	2 606 000	2 794 000
-	-	-	-	-	-
1 500	(5 000)	(3 500)	15 000	33 000	33 000
2 500	60 800	63 300	95 000	100 000	90 000
174 000	35 800	209 800	2 605 000	2 739 000	2 917 000
65 400	(5 000)	60 400	774 600	807 500	866 400
100	(200)	(100)	1 000	5 000	5 000
-	200	200	400	500	600
-	-	-	-	-	-
1 083 700	(1 247 000)	(163 300)	9 735 000	11 103 000	12 451 000
-	-	-	-	-	-
-	-	-	-	-	-
1 000	(3 000)	(2 000)	8 000	4 000	6 000
16 000	(117 000)	(101 000)	165 000	126 000	195 000
2 000	(5 000)	(3 000)	25 000	30 000	37 000
1 342 200	(1 341 200)	1 000	13 314 000	14 815 000	16 478 000

Q. GENERAL SERVICES

SUMMARY OF MANPOWER

Table Q.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	2	2	1	-	1	1	1
P-4	3	3	3	-	3	3	3
P-3	1	1	1	-	1	1	1
P-2	1	1	1	-	1	1	1
Sub-total	8	8	7	-	7	7	7
GS	69	69	68	-	68	68	68
M + O	30	30	30	(1)	29	29	29
TOTAL	107	107	105	(1)	104	104	104

CHANGES IN COSTS AND MANPOWER

Costs

Q/1. As will be seen from Table Q.1 above, it is expected that the cost of this programme will increase by \$ 1 000 as a net result of price increases of \$ 1 342 200 and a programme decrease of \$ 1 341 200.

Q/2. The programme decrease of \$ 25 000 in respect of salaries for established posts and common staff costs is related to the M&O post which will be relinquished in 1982. The financial impact of the transfer of other posts has been taken into account in the 1981 adjusted budget. A programme increase of \$ 60 800 is foreseen in respect of temporary assistance, as indicated by the actual requirements in 1980. It will be partly offset by a programme decrease of \$ 5 000 in overtime.

Q/3. All possible efforts are being made to reduce the energy consumption at the VIC and thus decrease the operating costs. Measures taken include: shortening of the hours of operation of the air conditioning and heating systems; rewiring of electrical circuits to reduce consumption on lighting; and the application of reflecting foil to windows. Consideration is being given to the idea of altering the window frames to enable them to be opened during certain periods of the year so that the air conditioning can be turned off. A programme decrease in common services, supplies and equipment of \$ 1 247 000 is foreseen.

Q/4. As regards the allocation of service costs, decreases are expected in respect of linguistic services (\$ 3 000), printing services (\$ 117 000) and data processing services (\$ 5 000).

Manpower

Q/5. As will be seen from Table Q.2 above, one P-5 and one GS post are transferred to other programmes in the adjusted manning table for 1981. In addition, one M&O post is being relinquished in 1982. Detailed explanations are provided in Annex IV.

Q/6. No further changes are foreseen for 1983 and 1984.

Costs of common services, supplies and equipment

Table Q.3

	1980 Actual obligations	1981 Adjusted budget	1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
<u>Division of General Services</u>					
<u>Services:</u>					
Communications	644 212	852 000	760 000	830 000	920 000
Freight and transportation	41 053	63 000	65 000	72 000	85 000
Rental of premises	16 585	29 000	38 000	39 000	41 000
Servicing of office equipment	67 773	92 000	95 000	103 000	116 000
Utilities	2 044 230	2 790 000	2 865 000	3 315 000	3 834 000
Maintenance services (contractual)	2 101 856	3 563 000	3 031 700	3 559 700	3 903 700
Maintenance services (in house)	830 573	890 000	1 050 000	1 145 000	1 248 000
Security services (in house)	780 715	860 000	1 030 000	1 123 000	1 224 000
Sinking Fund, major repairs	-	33 300	33 300	33 300	33 300
Other	36 484	-	41 000	45 000	55 000
Sub-total	6 563 481	9 172 300	9 009 000	10 265 000	11 460 000
<u>Supplies:</u>					
Building and maintenance supplies	232 242	270 000	276 000	304 000	333 000
Office supplies	149 544	179 000	181 000	201 000	234 000
Expendable equipment	130 532	137 000	120 000	140 000	180 000
Other	3 749	5 000	6 000	8 000	9 000
Sub-total	516 067	591 000	583 000	653 000	756 000
<u>Equipment:</u>					
Building, property and maintenance equipment	4 400	-	-	-	-
Office furniture and equipment	84 174	97 000	120 000	160 000	210 000
Transportation equipment	-	38 000	23 000	25 000	25 000
Other	-	-	-	-	-
Sub-total	88 574	135 000	143 000	185 000	235 000
TOTAL	7 168 122	9 898 300	9 735 000	11 103 000	12 451 000

## THE PROGRAMME

## OBJECTIVE

Q/7. The objective is to provide support services to the Agency (in particular the following: purchase and supply services, including such services for the Agency's Laboratories in Seibersdorf, the Monaco Laboratory and the Trieste Centre; telecommunications and transport services; archive services; registry, mailing and mail distribution services; and electronics services for Agency meetings), to carry out inventory checks on Agency property, and to operate the Commissary and provide a housing service for the international organizations at VIC and the Permanent Missions in Vienna.



## R. SERVICE ACTIVITIES

### THE PROGRAMME

R/1. This programme consists of the two sub-programmes which are dealt with separately below. Since each sub-programme is solely concerned with the provision of services in support of the Agency's functional programmes, the total cost in each case is entirely apportioned between those programmes which require the services.

#### Linguistic services

(Translation and records services and interpretation services)

## R. SERVICE ACTIVITIES

## COSTS OF TRANSLATION AND RECORDS SERVICES

Summary by items of expenditure: Table R.1

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	2 369 041	2 580 000
Overtime	14 641	32 500
Temporary assistance	244 340	220 000
Sub-total	2 628 022	2 832 500
Common staff costs	733 150	786 600
Travel	389	1 900
Scientific and technical contracts	6 476	31 000
Common services, supplies and equipment	34	-
Other items of expenditure		
Losses from exchange of currency	97 265	-
Transfer of costs:		
Linguistic services	(3 469 292)	(3 661 000)
Printing and publishing services	2 134	3 000
Data processing services	1 822	6 000
TOTAL	-	-

## R. SERVICE ACTIVITIES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
222 000	(50 000)	172 000	2 752 000	2 948 000	3 145 000
2 000	(16 500)	(14 500)	18 000	20 000	22 000
18 000	1 000	19 000	239 000	293 000	295 000
242 000	(65 500)	176 500	3 009 000	3 261 000	3 462 000
82 400	(15 000)	67 400	854 000	913 800	974 500
200	(100)	100	2 000	2 200	2 500
1 400	(20 400)	(19 000)	12 000	22 000	15 000
-	-	-	-	-	-
-	-	-	-	-	-
(326 000)	75 000	(251 000)	(3 912 000)	(4 237 000)	(4 494 000)
-	-	-	3 000	3 000	3 000
-	26 000	26 000	32 000	35 000	37 000
-	-	-	-	-	-

R. SERVICE ACTIVITIES

SUMMARY OF MANPOWER (TRANSLATION AND RECORDS SERVICES)

Table R.2

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	4	4	4	-	4	4	4
P-4	11	11	11	-	11	11	11
P-3	23	23	23	-	23	23	23
Sub-total	39	39	39	-	39	39	39
GS	37	37	35	-	35	35	35
M + O	1	1	1	-	1	1	1
TOTAL	77	77	75	-	75	75	75

## LINGUISTIC SERVICES: BREAKDOWN OF COSTS BY PROGRAMME

Table R.3

	1980 Actual obligations	1981 Adjusted budget	1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Technical assistance	223 573	375 000	318 000	320 000	416 000
Nuclear power	98 420	95 000	93 000	105 000	96 000
Nuclear fuel cycle	115 555	73 000	79 000	72 000	73 000
Nuclear safety	689 472	462 000	504 000	650 000	500 000
Nuclear explosions for peaceful purposes	1 463	5 000	5 000	3 000	3 000
Food and agriculture	58 158	178 000	113 000	153 000	260 000
Life sciences	39 309	37 000	59 000	63 000	67 000
Physical sciences	140 921	103 000	95 000	105 000	120 000
The Laboratory	8 911	16 000	33 000	36 000	30 000
International Laboratory of Marine Radioactivity	133	1 000	1 000	1 000	2 000
Safeguards	105 868	233 000	269 000	307 000	354 000
Information and technical services	65 170	90 000	74 000	76 000	86 000
Policy-making Organs	1 526 102	1 471 000	1 677 000	1 780 000	1 950 000
Executive management and technical programme planning	25 536	46 000	48 000	40 000	54 000
Administration	363 785	461 000	530 000	516 000	471 000
General services	2 394	10 000	8 000	4 000	6 000
Services activities	4 522	5 000	6 000	6 000	6 000
<b>TOTAL</b>	<b>3 469 292</b>	<b>3 661 000</b>	<b>3 912 000</b>	<b>4 237 000</b>	<b>4 494 000</b>

R. SERVICE ACTIVITIES

SUMMARY OF MANPOWER (INTERPRETATION SERVICES)

Table R.4

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
P-5	1	1	1	-	1	1	1
P-4	4	4	4	-	4	4	4
P-3	3	3	3	-	3	3	3
Sub-total	8	8	8	-	8	8	8
GS	1	1	1	-	1	1	1
TOTAL	9	9	9	-	9	9	9

R. SERVICE ACTIVITIES

CHANGES IN COSTS AND MANPOWER

Costs

R/2. As will be seen from Table R.1 above, the total cost of linguistic services (translation and records services provided by the Division of Languages) will be charged to the programmes for which these services are provided. Interpretation costs are not included in Table R.1 but are charged direct to meetings requiring interpretation. The manning table of the Interpretation Section is, however, shown (Table R.4).

R/3. The costs of linguistic services are expected to increase by \$ 251 000 as a net result of salary and other price increases of \$ 326 000 and a programme decrease of \$ 75 000. As a result of the introduction of word processing, for which a programme increase of \$ 26 000 is shown under data processing services, the manpower for linguistic services is reduced by two GS posts in the adjusted manning table for 1981. The programme reduction of \$ 65 000 in respect of salaries for established posts and common staff costs relates mainly to this change. Programme reductions are expected for overtime (\$ 16 500) and contractual translation services (\$ 20 400), in line with the actual requirements in 1980. A programme increase of \$ 1 000 is foreseen for temporary assistance.

Manpower

R/4. As will be seen from Table R.2 above, two GS posts are transferred to another programme in the 1981 adjusted manning table. Detailed explanations are given in Annex IV.

R/5. No further changes are foreseen for 1982, 1983 and 1984.

## R. SERVICE ACTIVITIES

Printing and publishing services

## COSTS OF THE SUB-PROGRAMME

Summary by items of expenditure: Table R.5

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	2 511 229	2 876 000
Overtime	57 702	25 000
Temporary assistance	105 023	65 000
Sub-total	2 673 954	2 966 000
Common staff costs	778 329	878 600
Travel	5 012	3 200
Representation and hospitality	-	200
Scientific and technical contracts	992	5 000
Common services, supplies and equipment	1 752 026	1 579 000
Other items of expenditure	378	-
Losses from exchange of currency	102 580	-
Transfer of costs:		
Linguistic services	4 522	5 000
Printing and publishing services	(5 361 486)	(5 504 000)
Data processing services	43 693	67 000
TOTAL	-	-

## R. SERVICE ACTIVITIES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
223 000	(15 000)	208 000	3 084 000	3 325 000	3 554 000
2 000	(4 000)	(2 000)	23 000	81 000	80 000
1 000	(52 000)	(51 000)	14 000	96 000	84 000
226 000	(71 000)	155 000	3 121 000	3 502 000	3 718 000
82 200	(5 000)	77 200	955 800	1 030 800	1 102 800
400	1 400	1 800	5 000	7 000	7 000
-	-	-	200	200	200
400	(2 400)	(2 000)	3 000	5 000	5 000
146 000	(99 000)	47 000	1 626 000	1 725 000	1 828 000
-	1 000	1 000	1 000	1 000	1 000
-	-	-	-	-	-
-	1 000	1 000	6 000	6 000	6 000
(461 000)	142 000	(319 000)	(5 823 000)	(6 389 000)	(6 787 000)
6 000	32 000	38 000	105 000	112 000	119 000
-	-	-	-	-	-

## R. SERVICE ACTIVITIES

## SUMMARY OF MANPOWER

Table R.6

Grade of post	Number of established posts						
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate
D	1	1	1	-	1	1	1
P-5	1	1	1	-	1	1	1
P-4	1	1	1	-	1	1	1
P-3	4	4	4	-	4	4	4
P-2	6	6	6	-	6	6	6
P-1	1	1	-	-	-	-	-
Sub-total	14	14	13	-	13	13	13
GS	111	112	113	-	113	113	113
M + O	19	19	19	(1)	18	18	18
TOTAL	144	145	145	(1)	144	144	144

## CHANGES IN COSTS AND MANPOWER

Costs

R/6. As will be seen from Table R.5 above, the cost of printing and publishing services will be charged to the programmes for which services are provided. The total cost of the "Printing and publishing" sub-programme is expected to increase by \$ 319 000 as a net result of salary and other price increases of \$ 461 000 and a programme decrease of \$ 142 000.

R/7. The programme decrease of \$ 20 000 in respect of salaries for established posts and common staff costs is related to the cancellation of one M&O post in 1982. Programme decreases are foreseen in respect of overtime (\$ 4 000), temporary assistance (\$ 52 000) and contractual services (\$ 2 400); these are partly offset by increases in respect of travel (\$ 1 400) and training (\$ 1 000) under "Other items of expenditure". A programme decrease of \$ 99 000 is foreseen in respect of common services, supplies and equipment.

R/8. As regards the allocation of service costs, increases are foreseen in respect of linguistic services (\$ 1 000) and data processing services (\$ 32 000, related mainly to word processor activities).

R/9. It is expected that income from the sale of publications will amount to \$ 880 000 in 1982.

Manpower

R/10. As will be seen from Table R.6 above, one P-1 post is transferred to another programme in exchange for a GS post in the adjusted manning table for 1981. One M&O post is dropped in 1982. Detailed explanations are provided in Annex IV.

R/11. No further changes in manpower are foreseen for 1983 and 1984.

## R. SERVICE ACTIVITIES

Summary of costs by programme component

Table R.7

Programme component	1980 Actual obligations	1981 Adjusted budget
Publishing services	1 263 570	1 253 000
Reproduction and distribution services	1 963 187	2 156 000
Common printing services	2 134 729	2 095 000
Sub-total	5 361 486	5 504 000
<u>Less:</u>		
Transfer to other programmes	5 361 486	5 504 000
TOTAL	-	-

## R. SERVICE ACTIVITIES

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
97 000	3 000	100 000	1 353 000	1 463 000	1 566 000
162 000	94 000	256 000	2 412 000	2 593 000	2 740 000
202 000	(239 000)	(37 000)	2 058 000	2 333 000	2 481 000
461 000	(142 000)	319 000	5 823 000	6 389 000	6 787 000
461 000	(142 000)	319 000	5 823 000	6 389 000	6 787 000
-	-	-	-	-	-

## R. SERVICE ACTIVITIES

## PRINTING AND PUBLISHING SERVICES: BREAKDOWN OF COSTS BY PROGRAMME

Table R.8

	1980 Actual obligations	1981 Adjusted budget	1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Technical assistance	101 789	144 000	156 000	177 000	222 000
Nuclear power	500 997	263 000	477 000	520 000	550 000
Nuclear fuel cycle	508 652	311 000	338 000	369 000	334 000
Nuclear safety	478 013	627 000	632 000	718 000	597 000
Nuclear explosions for peaceful purposes	13 868	2 000	3 000	3 000	3 000
Food and agriculture	219 529	420 000	442 000	478 000	513 000
Life sciences	218 702	263 000	263 000	283 000	428 000
Physical sciences	667 542	623 000	597 000	583 000	652 000
Laboratory	29 222	31 000	22 000	25 000	27 000
International Centre for Theoretical Physics	181 463	190 000	207 000	220 000	230 000
International Laboratory of Marine Radioactivity	1 708	2 000	2 000	2 000	2 000
Safeguards	117 839	168 000	231 000	315 000	276 000
Information and technical services	1 111 721	1 035 000	1 075 000	1 228 000	1 350 000
Policy-making Organs	460 995	512 000	585 000	625 000	675 000
Executive management and technical programme planning	8 602	16 000	19 000	22 000	23 000
Administration	660 306	628 000	606 000	692 000	707 000
General services	78 404	266 000	165 000	126 000	195 000
Services activities	2 134	3 000	3 000	3 000	3 000
<b>TOTAL</b>	<b>5 361 486</b>	<b>5 504 000</b>	<b>5 823 000</b>	<b>6 389 000</b>	<b>6 787 000</b>

S. COST OF WORK FOR OTHERS

S. COST OF WORK FOR OTHERS

Summary of costs by sub-programme

Table S.1

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Cost of work for others	3 127 769	3 063 000
<b>TOTAL</b>	<b>3 127 769</b>	<b>3 063 000</b>

Summary of costs by sub-programme

Table S.2

Item of expenditure	1980 Actual obligations	1981 Adjusted budget
Library services	622 096	750 000
Data processing services	838 015	779 000
Medical services	367 664	322 000
Printing services	1 299 994	1 212 000
<b>TOTAL</b>	<b>3 127 769</b>	<b>3 063 000</b>

## S. COST OF WORK FOR OTHERS

Increase or (decrease) from 1980			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
282 000	1 034 000	1 316 000	4 379 000	4 691 000	5 085 000
282 000	1 034 000	1 316 000	4 379 000	4 691 000	5 085 000

Increase or (decrease) from 1980			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
58 000	7 000	65 000	815 000	1 002 000	1 072 000
84 000	901 000	985 000	1 764 000	1 808 000	1 943 000
30 000	59 000	89 000	411 000	461 000	525 000
110 000	67 000	177 000	1 389 000	1 420 000	1 545 000
282 000	1 034 000	1 316 000	4 379 000	4 691 000	5 085 000

## S. COST OF WORK FOR OTHERS

Summary of costs by items of expenditure

Table S.3

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	1 088 600	1 046 000
Consultants	-	-
Overtime	46 800	24 000
Temporary assistance	150 801	243 000
Sub-total	1 286 201	1 313 000
Common staff costs	348 996	319 000
Travel	-	7 000
Scientific and technical contracts		-
Common services, supplies and equipment	1 446 267	1 424 000
Other items of expenditure	1 800	-
Losses from exchange of currency	44 505	-
<b>TOTAL</b>	<b>3 127 769</b>	<b>3 063 000</b>

## S. COST OF WORK FOR OTHERS

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
105 000	301 000	406 000	1 452 000	1 568 000	1 689 000
-	4 500	4 500	4 500	10 000	12 100
2 000	32 000	34 000	58 000	62 800	86 000
2 500	(173 500)	(171 000)	72 000	136 000	139 000
109 500	164 000	273 500	1 586 500	1 776 800	1 926 100
38 000	93 000	131 000	450 000	485 900	523 600
200	1 300	1 500	8 500	12 100	13 300
-	5 000	5 000	5 000	120 000	130 000
134 300	754 700	889 000	2 313 000	2 275 000	2 468 000
-	16 000	16 000	16 000	21 200	24 000
-	-	-	-	-	-
282 000	1 034 000	1 316 000	4 379 000	4 691 000	5 085 000

## S. COST OF WORK FOR OTHERS

UNIDO staff on loan and UN funded staff assigned  
to the Agency-operated Common Services  
(not included in the Agency's manning table)

Table S.4

COMMON SERVICES	UNIDO staff of loan	U.N. funded staff	Total additional staff
<u>LIBRARY SERVICES</u>			
P4	1	-	1
P3	1	2	3
P2	1	-	1
P1	-	1	1
Sub-total	3	3	6
GS	4	4	8
<b>TOTAL</b>	<b>7</b>	<b>7</b>	<b>14</b>
<u>PRINTING SERVICES</u>			
GS	8	-	8
M&O	1	-	1
<b>TOTAL</b>	<b>9</b>	<b>-</b>	<b>9</b>

## CHANGES IN COSTS

S/1. As will be seen from Table S.1 above, the cost of work for others is expected to increase by \$ 1 316 000, of which \$ 282 000 will be required to cover salary and other price increases and \$ 1 034 000 is a programme increase. As can be seen from Table S.2 above, the programme increase consists of: \$ 7 000 in respect of the Library, \$ 901 000 for data processing services, \$ 59 000 for medical services, and \$ 67 000 for printing services.

S/2. The programme increase for the computer relates to the data processing services now provided to the United Nations Postal Administration and UNRWA, in addition to the services provided in previous years to UNIDO. The estimate for "Cost of work for others" also includes the expenditure of about \$ 100 000 for data processing equipment assigned exclusively to use by UNIDO. This amount was previously charged directly to UNIDO, but with the consolidation of computer equipment resulting from the establishment of common services in the VIC, it now appears under "Cost of work for others" and is fully reimbursable by UNIDO. In addition to the above factors, part of the programme increase in computer services is directly attributable to an enlargement of the data processing facilities which has resulted in higher allocated costs to the Agency's programmes and to other organizations under "Cost of work for others". It is expected that the expenditure for computer hardware will decrease considerably from 1983.

S/3. The programme increases for the library, medical and printing services are smaller; the need for these increases is indicated by the actual requirements in 1980.

Manpower

S/4. The staff working for the Agency-operated common services are, in as far as they fill Agency manning table posts, shown on the manning tables of the respective Agency programmes. With the establishment of common services, the Agency staff in the library and printing services was merged with staff from UNIDO. In addition, the United Nations provided funds for extra-budgetary employment of staff in the Library. There are, however, no manning table posts available in the Agency. In order to regularize this temporary arrangement, the staff on loan to the Agency under the terms of the Memorandum of Understanding for Common Services at the Vienna International Centre, and the staff for whom funds are provided by the United Nations, are shown in this programme. As will be seen from Table S.4 above, there are 6 Professional, 16 GS and 1 M&O staff involved. The total staff costs shown in Table S.3 for work for others, however, do not relate to the staff in Table S.4, but represent a true share of the total cost of manpower working in Agency-operated common services, comprising that of Agency staff and the staff shown in Table S.4.



T. ADJUSTMENT OF PROGRAMME COST ESTIMATES

T. ADJUSTMENT OF PROGRAMME COST ESTIMATES

T. ADJUSTMENT OF PROGRAMME COST ESTIMATES

Item of expenditure	1981 Adjusted budget	Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
		Price	Programme	Total			
Adjustment of programme cost estimates	-	(12 620 000)	-	(12 620 000)	(12 620 000)	(14 260 000)	(15 500 000)
	-	(12 620 000)	-	(12 620 000)	(12 620 000)	(14 260 000)	(15 500 000)

CHANGES IN COSTS

T/1. The cost estimates in the earlier part of this programme budget are based on an exchange rate of 12.90 Austrian schillings to the United States dollar. Because of the substantial increase in the dollar/schilling exchange rate during recent months, however, an amount of \$ 12 620 000 has been deducted for the adjustment of programme cost estimates - in order to compensate for an assumed average exchange rate of AS 15.50 to the dollar in 1982.

T/2. The draft resolution on the Regular Budget appropriations for 1982 contained in Annex VII is accordingly based on the assumed exchange rate of AS 15.50 to the dollar.

ANNEXES I-VI

## ANNEX I

### CONFERENCES, SYMPOSIA AND SEMINARS IN 1982

Within the limits of the appropriations and subject to the requirements of the individual programmes as outlined for 1982, 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(XXIV)/630. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

#### Nuclear power

1. International conference on nuclear power experience
2. Symposium on nuclear power plant control and instrumentation B.3.1/7
3. Symposium on water chemistry and corrosion problems of nuclear power systems and components B.3.1/7

#### Nuclear fuel cycle

4. Symposium on conditioning of radioactive waste for storage and disposal C.2.1/10
5. Seminar on testing and operation of off-gas cleaning systems at nuclear facilities C.2.1/11
6. Symposium on management of waste from uranium mining and milling C.2.1/12

#### Nuclear safety

7. Seminar on emergency preparedness for developing countries D.1.5/10
8. Seminar on siting of nuclear power plants for developing countries D.2.4/4

#### Food and agriculture

9. FAO/IAEA regional seminar on utilization of induced mutations for crop improvement in Latin America F.2.3/7
10. FAO/IAEA regional seminar on control and/or eradication of the Mediterranean fruit fly by use of the SIT as a basis for an integrated pest management programme in Latin America F.4.1/3
11. FAO/IAEA symposium on isotope techniques in comparative studies of food and environmental contamination F.5.2/3

#### Life sciences

12. Symposium on radioimmunoassay and related procedures in medicine G.1.1/8 and G.1.2/8
13. Seminar on the quality assurance of in vivo techniques in nuclear medicine
14. Seminar on high-dose dosimetry in industrial radiation processing G.2.4/6

Physical sciences

- |     |   |         |
|-----|---|---------|
| 15. | Conference on plasma physics and controlled nuclear fusion research                                     | H.1.3/9 |
| 16. | Seminar on nuclear analytical technology and applications in mineral exploration, mining and processing | H.2.1/7 |

Safeguards

- |     |  |                      |
|-----|--|----------------------|
| 17. | Symposium on recent advances in nuclear materials safeguards | L.2/7 and<br>H.2.3/4 |
| 18. | Safeguards workshop seminar                                  | L.3/11               |

Information and technical services

- |     |                             |        |
|-----|-----------------------------|--------|
| 19. | INIS/AGRIS training seminar | M.1/13 |
|-----|-----------------------------|--------|

## ANNEX II

### CONFERENCES, SYMPOSIA AND SEMINARS IN 1983

The following list of scientific meetings considered by the Scientific Advisory Committee is presented for 1983.

#### Nuclear power

1. Symposium on reliability of reactor pressure components
2. Seminar on quality assurance for nuclear power plants for developing countries in Latin America

#### Nuclear fuel cycle

3. Conference on waste management
4. Seminar on technical and environmental aspects of spent fuel management
5. Seminar on transfer in the terrestrial environment of radionuclides released from nuclear fuel cycle facilities

#### Nuclear safety

6. Symposium on operational safety of nuclear power plants
7. Seminar on management of nuclear power plants
8. Seminar on radiation protection in the mining and milling of radioactive ores for developing countries in Africa
9. Seminar on exempt shipments of radioactive material transported by post

#### Food and agriculture

10. FAO/IAEA symposium on isotope and radiation techniques in soil physics and irrigation studies
11. FAO/IAEA regional seminar on food irradiation in Latin America

#### Life sciences

12. Symposium on biological effects of low-level radiation with special regard to the stochastic and non-stochastic effects
13. Seminar on calibration procedures in Secondary Standard Dosimetry Laboratories

#### Physical sciences

14. Symposium on use of isotope techniques in water resources development

15. Seminar on research reactor utilization and experience with reduced enrichment cores and research and training programmes in developing countries
16. Seminar on radiation detectors

Safeguards

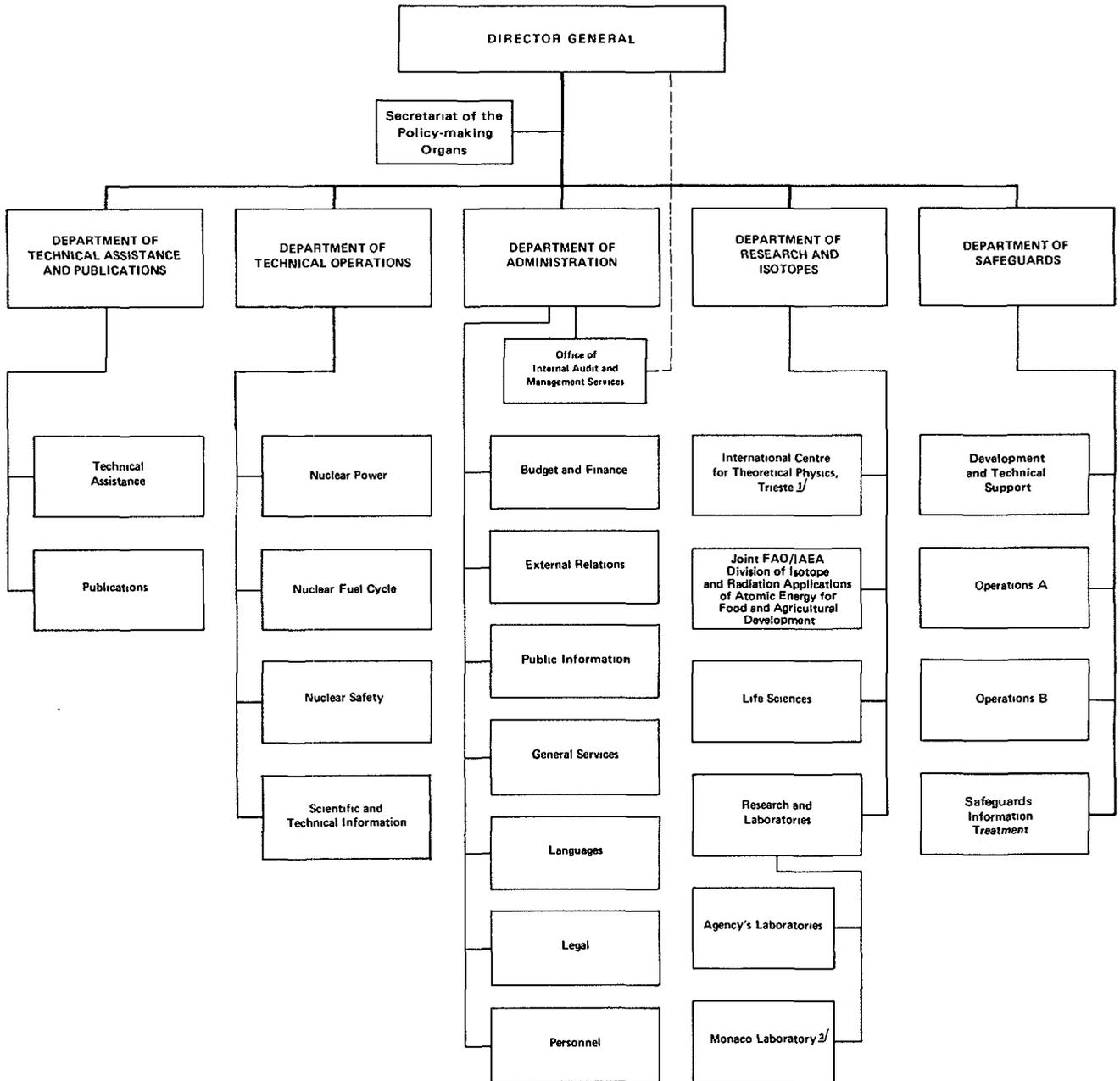
17. Safeguards workshop

Information and technical services

18. INIS training seminar

ANNEX III

ORGANIZATIONAL CHART



<sup>1/</sup> Jointly operated by the Agency and UNESCO.

<sup>2/</sup> With the participation of UNESCO and UNEP.

ANNEX IV

THE MANNING TABLE  
Manning Table for 1982

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	5	-	10
Secretariat of the Policy-making Organs	-	-	1	1	-	-	1	-	3	2	-	5
Department of Technical Assistance and Publications	-	1	-	1	3	-	2	-	7	7	-	14
Division of Technical Assistance	-	-	1	8	8	8	5	-	30	39	-	69
Division of Publications	-	-	1	1	1	4	6	-	13	113	18	144
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	9	7	5	-	-	22	12	-	34
Nuclear Fuel Cycle Division	-	-	1	7	12	-	-	-	20	13	-	33
Division of Nuclear Safety	-	-	1	13	10	3	-	-	27	20	-	47
Division of Scientific and Technical Information	-	-	1	5	11	16	4	3	40	81	-	121
Department of Research and Isotopes	-	1	-	-	-	-	1	-	2	2	-	4
Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development	-	-	-	7	6	1	1	-	15	8	-	23
Division of Life Sciences	-	-	1	4	6	1	-	-	12	10	-	22
Division of Research and Laboratories	-	-	1	7	10	7	3	-	28	18	-	46
The Agency's Laboratory	-	-	-	4	11	7	2	1	25	59	27	111
The Monaco Laboratory	-	-	-	2	3	1	2	1	9	14	-	23
International Centre for Theoretical Physics	-	-	-	1	2	2	-	-	5	17	-	22
Department of Safeguards	-	1	-	8	8	3	-	-	20	22	-	42
Division of Development and Technical Support	-	-	1	11	17	2	-	-	31	22	-	53
Division of Operations A	-	-	1	12	33	25	-	-	71	23	-	94
Division of Operations B	-	-	1	13	38	30	-	-	82	25	-	107
Division of Safeguards Information Treatment	-	-	1	8	12	3	-	-	24	48	-	72
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	1	2	1	-	5	5	-	10
Division of Budget and Finance	-	-	1	4	6	7	2	1	21	47	-	68
Division of General Services	-	-	1	1	3	1	1	-	7	68	29	104
Division of External Relations	-	-	2	5	6	4	4	-	21	21	-	42
Division of Public Information	-	-	1	-	1	1	1	-	4	7	-	11
Division of Languages	-	-	1	4	11	23	-	-	39	35	1	75
Legal Division	-	-	1	3	2	1	-	-	7	4	-	11
Division of Personnel	-	-	1	2	5	3	-	-	11	34	3	48
<b>TOTAL</b>	<b>1</b>	<b>5</b>	<b>22</b>	<b>144</b>	<b>234</b>	<b>161</b>	<b>38</b>	<b>7</b>	<b>612</b>	<b>785</b>	<b>78</b>	<b>1 475</b>

Summary of Manpower by Grade of Post and by Department

Table 1.a

Grade of post	Number of established posts								
	1980 Adjusted	1981	1981 Adjusted	Change	1982	1983 Preliminary estimate	1984 Preliminary estimate		
DG	1	1	1	-	1	1	1		
DDG	5	5	5	-	5	5	5		
D	21	22	22	-	22	22	22		
P-5	138	145	145	(1)	144	146	150		
P-4	223	229	229	5	234	243	251		
P-3	153	158	158	3	161	168	174		
P-2	41	37	37	1	38	39	40		
P-1	10	10	10	(3)	7	7	7		
Sub-total	592	607	607	5	612	631	650		
GS	756	774	774	11	785	810	822		
M&O	80	80	80	(2)	78	78	78		
TOTAL	1428	1461	1461	14	1475	1519	1550		
				P	GS	M&O			
Department:									
Office of the Director General	15	15	15	-	-	-	15	16	16
Department of Technical Assistance and Publications	222	224	225	-	3	(1)	227	231	233
Department of Technical Operations	235	236	238	-	2	-	240	249	254
Department of Research and Isotopes	254	254	252	(1)	-	-	251	251	252
Department of Safeguards	324	354	355	6	7	-	368	393	415
Department of Administration	378	378	376	(1)	-	(1)	374	379	380
TOTAL	1428	1461	1461	4	12	(2)	1475	1519	1550

Extrabudgetary posts for Agency-operated common services - 1982

(not included in the Agency's manning table)

Table 1.b

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
Department of technical Assistance and Publications												
Division of Publications												
<u>Common Printing Services</u>												
(on loan from UNIDO)												
	-	-	-	-	-	-	-	-	-	8	1	9
Department of Technical Operations												
Division of Scientific and Technical Information												
<u>Library</u>												
(on loan from UNIDO)												
	-	-	-	-	1	1	1	-	3	4	-	7
(UN funded)												
	-	-	-	-	-	2	-	1	3	4	-	7
<b>TOTAL</b>	-	-	-	-	1	3	1	1	6	16	1	23

Total staff in "Common Services" - 1982

Table 1.c

	Agency staff			Other staff			Total staff			Charged to Agency				"Cost of Work for Others"			
	P	GS	M&O	P	GS	M&O	P	GS	M&O	P	GS	M&O	Total	P	GS	M&O	Total
Library	4	10	-	6	8	-	10	18	-	5	8	-	13	5	10	-	15
Computer	20	41	-	-	-	-	20	41	-	16	35	-	51	4	6	-	10
Medical	3	12	3	-	-	-	3	12	3	1.5	5	1.5	8	1.5	7	1.5	10
Printing	1	51	12	-	8	1	1	59	13	0.6	35	7.4	43	0.4	24	5.6	30

New posts for 1982

Table 2

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
<b>Department of Technical Assistance and Publications</b>	-	-	-	-	-	-	-	-	-	1	-	1
Division of Technical Assistance	-	-	-	-	-	-	-	-	-	2	-	2
Division of Publications	-	-	-	-	-	-	-	-	-	-	(1)	(1)
<b>Department of Technical Operations</b>												
Division of Nuclear Safety	-	-	-	-	-	-	-	-	-	1	-	1
Division of Scientific and Technical Information	-	-	-	-	-	-	-	-	-	1	-	1
<b>Department of Research and Isotopes</b>												
Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development	-	-	-	(1)	-	-	-	-	(1)	-	-	(1)
<b>Department of Safeguards</b>	-	-	-	-	-	-	-	-	-	2	-	2
Division of Development and Technical Support	-	-	-	-	1	-	-	-	1	2	-	3
Division of Operations A	-	-	-	-	2	2	-	-	4	1	-	5
Division of Operations B	-	-	-	-	1	(1)	-	-	-	-	-	-
Division of Safeguards Information Treatment	-	-	-	-	1	-	-	-	1	2	-	3
<b>Department of Administration</b>												
Division of Budget and Finance	-	-	-	-	-	-	-	(1)	(1)	-	-	(1)
Division of General Services	-	-	-	-	-	-	-	-	-	-	(1)	(1)
<b>TOTAL</b>	-	-	-	(1)	5	1	-	(1)	4	12	(2)	14

ADDITIONAL PROFESSIONAL POSTS IN 1982

Department of Safeguards

Division of Development and Technical Support (1 P-4)

An additional Professional officer (at the P-4 level) is needed for the Section for Development of Instruments, Methods and Techniques to establish direct liaison with research and development specialists in Member States and to initiate research agreements and development contracts.

Division of Safeguards Information Treatment (1 P-4)

An additional Professional officer (at the P-4 level) is needed for the Data Evaluation Services Section to plan and co-ordinate safeguards data evaluation.

Divisions of Operations (3 P-4,  
1 P-3)

The Professional staff requirements of the Divisions of Operations have been calculated according to the criteria previously given in connection with new posts for 1981 (GC(XXIV)/630, p. 314): three additional P-4 posts and one additional P-3 post are needed in 1982.

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6

Deduct: two redundant posts to be abolished in 1982:  
one P-5 post in the Joint FAO/IAEA Division  
and one P-1 post in the Division of Budget and  
Finance

2

Net addition

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4

ADDITIONAL GS POSTS IN 1982

Division of Technical Assistance and  
Programme Co-ordination Section (3 GS)

An additional GS post is required in the Programme Co-ordination Section to support the work involved in the computer handling of technical assistance information.

The Experts Section requires an additional GS post for work related to the recruitment of experts.

An extra GS post is needed in the Training Courses Section for a clerk to aid in the administration of the increasingly large number of courses arranged.

Division of Nuclear Safety (1 GS)

The Radiation Protection Service of Seibersdorf Laboratory requires an additional GS post for a health physics technician to assist with the increasing workload.

Division of Scientific and Technical Information (1 GS)

Owing to the extension of the hours when teleprocessing services are made available, an additional GS post is needed for a second operator.

Department of Safeguards (2 GS)

An additional GS post is required in the Section for Standardization and Administrative Support for a clerk to assist in the computer handling of reports and operational statistics.

The Safeguards Training Unit requires an additional GS post in connection with the administration and organization of training courses.

Division of Development and Technical Support (2 GS)

An additional GS post is required in the Technical Services Section for a technician to maintain and repair NDA instruments.

The Technical Services Section requires an additional GS post for a clerk to assist in maintaining records of equipment location and operational status and in preparing instruments for shipment.

Division of Safeguards Information Treatment (2 GS)

An additional GS post is required for the Data Processing Operations Section for a clerk to take charge of work on the editing and processing of input data from reports and the analysis of output reports for correctness in form and content.

The Data Processing Development Section needs a clerk at the GS level to compile and provide to members of the Department of Safeguards documentation on the maintenance and use of the Safeguards Information System.

Division of Operations A (1 GS)

The field office in Japan will require a GS post for a clerk to provide administrative and secretarial assistance to the inspectors.

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TOTAL 12

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 Technical Assistance and Publications	-	-	-	-	-	-	1	-	1	(1)	-	-
Department of Technical Operations												
Division of Nuclear Power	-	-	-	-	-	1	(1)	-	-	-	-	-
Department of Research and Isotopes												
The Agency's Laboratory	-	-	-	-	-	1	(1)	-	-	-	-	-
The Monaco Laboratory	-	-	-	-	-	-	2	(2)	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-	2	1	(2)	1	(1)	-	-

RECLASSIFICATIONS OF PROFESSIONAL POSTS IN 1982

Department of Technical Assistance and Publications  
(Programme Co-ordination Section)

One GS post to P-2 (Senior Statistical Assistant) (1 P-2)

The responsibilities of the post are appropriate to the Professional rather than the General Service category. The incumbent is responsible for liaison between the Division and the Division of Budget and Finance on all matters concerned with the financial monitoring of Agency technical assistance funded from other than UNDP resources. The incumbent also "translates" the informational requirements of the Division into a form suitable for data processing and develops, in co-operation with the Computer Section, relevant applications of information processing techniques. These responsibilities are appropriate to a P-2 grade.

Division of Nuclear Power

One P-2 to P-3 (Nuclear Engineer) (1 P-3)

The incumbent is responsible for data collection and the preparation of three annual publications: "Power Reactors in Member States", "Operating Experience with Nuclear Power Stations in Member States" and "Performance Analysis Report". A new activity involves the collection of information on abnormal occurrences in nuclear power plants. As a consequence, the grading of the post at the P-2 level is no longer considered appropriate.

The Agency's Laboratory

One P-2 to P-3 (Analytical Chemist)

(1 P-3)

The incumbent is responsible for the receipt and flow-control of analytical samples in the Safeguards Analytical Laboratory and acts as a working supervisor for the wet chemical assay of uranium, plutonium and thorium samples submitted by safeguards inspectors. The post also involves the development of more accurate methods of wet chemical assay and plant-specific safeguarding procedures for the verification of input solution samples by the resin bead technique. The present grading is not in line with the responsibilities of this post.

Monaco Laboratory

One P-1 to P-2 (Research Scientist; Biology)

(1 P-2)

The post has been identified in the past as a trainee position but has not in fact been utilized in that way. The incumbent is expected to act as a fully independent research worker with responsibility for defining problems (in co-operation with the supervisor) and for carrying out and reporting research on the behaviour of transuranic elements and heavy metals in marine biota. These responsibilities are such that the P-1 grade is no longer considered appropriate.

One P-1 to P-2 (Research Scientist; Radiochemistry)

(1 P-2)

This post has also been identified in the past as a trainee position but has not been utilized in that way. The incumbent acts as an independent research worker concerned with the development of new radiochemical procedures for radionuclide measurements and the application of these and other procedures to environmental samples in studies of the behaviour of radionuclides in the environment. These responsibilities are such that a P-1 grade is no longer considered appropriate.

## Adjusted Manning Table for 1981

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	-	1	-	5	5	-	10
Secretariat of the Policy-making Organs	-	-	1	1	-	-	1	-	3	2	-	5
Department of Technical Assistance and Publications	-	1	-	1	3	-	1	-	6	7	-	13
Division of Technical Assistance	-	-	1	8	8	8	5	-	30	37	-	67
Division of Publications	-	-	1	1	1	4	6	-	13	113	19	145
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	9 <sup>a/</sup>	7	4	1	-	22	12	-	34
Nuclear Fuel Cycle Division	-	-	1	7	12	-	-	-	20	13	-	33
Division of Nuclear Safety	-	-	1	13	10	3	-	-	27	19	-	46
Division of Scientific and Technical Information	-	-	1	5	11	16	4	3	40	80	-	120
Department of Research and Isotopes	-	1	-	-	-	-	1	-	2	2	-	4
Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development	-	-	-	8	6	1	1	-	16	8	-	24
Division of Life Sciences	-	-	1	4	6	1	-	-	12	10	-	22
Division of Research and Laboratories	-	-	1	7	10	7	3	-	28	18	-	46
The Agency's Laboratory	-	-	-	4	11	6	3	1	25	59	27	111
The Monaco Laboratory	-	-	-	2	3	1	-	3	9	14	-	23
International Centre for Theoretical Physics	-	-	-	1	2	2	-	-	5	17	-	22
Department of Safeguards	-	1	-	8	8	3	-	-	20	20	-	40
Division of Development and Technical Support	-	-	1	11	16	2	-	-	30	20	-	50
Division of Operations A	-	-	1	12	31	23	-	-	67	22	-	89
Division of Operations B	-	-	1	13	37	31	-	-	82	25	-	107
Division of Safeguards Information Treatment	-	-	1	8	11	3	-	-	23	46	-	69
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	1	2	1	-	5	5	-	10
Division of Budget and Finance	-	-	1	4	6	7	2	2	22	47	-	69
Division of General Services	-	-	1	1	3	1	1	-	7	68	30	105
Division of External Relations	-	-	2	5 <sup>a/</sup>	6	4	4	-	21	21	-	42
Division of Public Information	-	-	1	-	1	1	1	-	4	7	-	11
Division of Languages	-	-	1	4	11	23	-	-	39	35	1	75
Legal Division	-	-	1	3	2	1	-	-	7	4	-	11
Division of Personnel	-	-	1	2	5	3	-	-	11	34	3	48
<b>TOTAL</b>	<b>1</b>	<b>5</b>	<b>22</b>	<b>145</b>	<b>229</b>	<b>158</b>	<b>37</b>	<b>10</b>	<b>607</b>	<b>774</b>	<b>80</b>	<b>1 461</b>

<sup>a/</sup> One staff member has the rank of "Principal Officer".

Proposed changes in 1981

Table 5

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub-total	GS	M&O	Total
Department of Technical Assistance and Publications	-	-	-	-	-	-	-	-	-	-	-	-
Division of Technical Assistance	-	-	-	-	-	-	1	-	1	-	-	1
Division of Publications	-	-	-	-	-	-	-	(1)	(1)	1	-	-
Department of Technical Operations	-	-	-	-	-	-	-	-	-	-	-	-
Unit for Peaceful Nuclear Explosions Services	-	-	-	(1)	-	-	-	-	(1)	-	-	(1)
Division of Nuclear Power	-	-	-	-	-	-	-	-	-	(1)	-	(1)
Nuclear Fuel Cycle Division	-	-	-	-	-	-	-	-	-	1	-	1
Division of Nuclear Safety	-	-	-	1	-	-	-	-	1	(1)	-	-
Division of Scientific and Technical Information	-	-	-	-	1	1	-	1	3	-	-	3
Department of Research and Isotopes	-	-	-	-	(1)	-	-	-	(1)	-	-	(1)
Division of Life Sciences	-	-	-	(1)	1	-	-	-	-	-	-	-
Division of Research and Laboratories	-	-	-	1	(1)	-	-	-	-	-	-	-
The Agency's Laboratory	-	-	-	-	-	-	-	-	-	(1)	-	(1)
Department of Safeguards	-	-	-	2	-	-	-	-	2	1	-	3
Division of Development and Technical Support	-	-	-	(2)	-	-	-	-	(2)	(1)	-	(3)
Division of Operations A	-	-	-	1	4	1	-	-	6	1	-	7
Division of Operations B	-	-	-	-	(4)	(1)	-	-	(5)	(1)	-	(6)
Department of Administration	-	-	-	-	-	-	-	-	-	(1)	-	(1)
Office of Internal Audit and Management	-	-	-	-	-	-	-	-	-	1	-	1
Division of Budget and Finance	-	-	-	-	-	(1)	(1)	-	(2)	4	-	2
Division of General Services	-	-	-	(1)	-	-	-	-	(1)	(1)	-	(2)
Division of Languages	-	-	-	-	-	-	-	-	-	(2)	-	(2)
<b>TOTAL</b>	-	-	-	-	-	-	-	-	-	-	-	-

In order to make use of available Manning Table posts, following the annual survey of manpower requirements the Director General has approved a number of transfers of posts within the Secretariat. The explanations are given below.

- One P-2 post from the Division of Budget and Finance is transferred to the Division of Technical Assistance. The post is required in the Fellowships and Training Section as a result of the considerable increase in workload resulting from a proposed new technical assistance programme related to nuclear power manpower development and involving the provision of practical training under the Agency's auspices.
- One P-1 post from the Division of Publications is exchanged for a GS post from the Computer Section in the Division of Scientific and Technical Information in accordance with the staffing requirements of the two Divisions.
- One P-5 post from the Unit for Peaceful Nuclear Explosions Services is transferred to the Division of Nuclear Safety, where an additional senior staff member is required for the expanded emergency assistance programme in the Radiological Safety Section.

- One GS post from the Division of Nuclear Power has been transferred to the Computer Section in the Division of Scientific and Technical Information to accommodate a programmer/analyst working exclusively on matters related to the "Nuclear Power" programme.
- One GS post is transferred from the Division of Nuclear Safety to the Nuclear Fuel Cycle Division in order to enable this Division to recruit an administrative assistant.
- In addition to the P-1 post mentioned above, the Computer Section requires two further Professional posts: a P-4 post for a data security specialist is being transferred from the Office of the Deputy Director General for Research and Isotopes, where it is no longer required; and one P-3 post for an analyst/programmer to work on the Management Information System is being transferred from the Division of Budget and Finance.
- One P-5 post from the Division of Life Sciences is exchanged for a P-4 post from the Division of Research and Laboratories in order to accommodate the upgrading to the P-5 level of a post in the Physics Section, as recommended by a manpower survey.
- One GS post from the Agency's Laboratory no longer required in the Entomology Section is transferred to the Office of Internal Audit and Management, which needs the extra person in order to extend its transaction audit work in compliance with a request from the External Auditor.
- The Safeguards Training Unit, which was previously part of the Division of Development and Technical Support within the Department of Safeguards, has been established as a Unit in the Deputy Director General's Office; this change requires the transfer of two P-5 posts and one GS post. As regards the Divisions of Operations, four P-4 posts, one P-3 post and one GS post are transferred from Division of Operations B to Division of Operations A.
- A redundant P-5 post from the Division of General Services is transferred to Division of Operations A to satisfy part of the additional manpower requirements of the Department of Safeguards in 1982.
- The Division of Budget and Finance, which is relinquishing three Professional posts, as described above, receives four GS posts: one from the Office of the Deputy Director General for Administration, one from the Division of General Services, and two from the Division of Languages, where it is expected that the use of word processing facilities will result in savings in manpower. The four GS posts are needed to strengthen the day-to-day operation of the Division of Budget and Finance. One of the posts is required in the Technical Assistance Unit in connection with the increased amount of expenditure control work. Another is needed for a costing clerk in the Cost Analysis Unit, primarily to deal with those common services at the VIC which come under the Agency's responsibility (specifically the library, medical and computer services). The need to strengthen activities related to the establishment of policies and procedures calls for an additional GS post for work connected with the computerized accounting and payroll system and the introduction of improvements in cost measurement and allocation. The fourth GS post is needed in the Programme and Budget Section for a clerk to assist with the preparation of the programme budget and preliminary budget estimates and with work related to the accumulation of statistical data and the verification of budgetary and financial statements and schedules.

Preliminary Manning Table for 1983

Table 6

	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	5	-	10
Secretariat of the Policy-making Organs	-	-	1	1	-	-	1	-	3	3	-	6
Department of Technical Assistance and Publications	-	1	-	1	3	-	2	-	7	7	-	14
Division of Technical Assistance	-	-	1	8	8	8	6	-	31	42	-	73
Division of Publications	-	-	1	1	1	4	6	-	13	113	18	144
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	9	7	5	-	-	22	12	-	34
Nuclear Fuel Cycle Division	-	-	1	7	13	-	-	-	21	13	-	34
Division of Nuclear Safety	-	-	1	13	11	3	-	-	28	22	-	50
Division of Scientific and Technical Information	-	-	1	5	11	18	4	3	42	84	-	126
Department of Research and Isotopes	-	1	-	-	-	-	1	-	2	2	-	4
Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development	-	-	-	7	6	1	1	-	15	8	-	23
Division of Life Sciences	-	-	1	4	6	1	-	-	12	10	-	22
Division of Research and Laboratories	-	-	1	7	10	7	3	-	28	18	-	46
The Agency's Laboratory	-	-	-	4	11	7	2	1	25	59	27	111
The Monaco Laboratory	-	-	-	2	3	1	2	1	9	14	-	23
International Centre for Theoretical Physics	-	-	-	1	2	2	-	-	5	17	-	22
Department of Safeguards	-	1	-	9	8	3	-	-	21	24	-	45
Division of Development and Technical Support	-	-	1	12	18	2	-	-	33	26	-	59
Division of Operations A	-	-	1	12	37	28	-	-	78	25	-	103
Division of Operations B	-	-	1	13	39	32	-	-	85	27	-	112
Division of Safeguards Information Treatment	-	-	1	8	13	3	-	-	25	49	-	74
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	1	2	1	-	5	6	-	11
Division of Budget and Finance	-	-	1	4	6	7	2	1	21	50	-	71
Division of General Services	-	-	1	1	3	1	1	-	7	68	29	104
Division of External Relations	-	-	2	5	6	4	4	-	21	21	-	42
Division of Public Information	-	-	1	-	1	1	1	-	4	7	-	11
Division of Languages	-	-	1	4	11	23	-	-	39	35	1	75
Legal Division	-	-	1	3	2	1	-	-	7	4	-	11
Division of Personnel	-	-	1	2	5	3	-	-	11	35	3	49
<b>TOTAL</b>	<b>1</b>	<b>5</b>	<b>22</b>	<b>146</b>	<b>243</b>	<b>168</b>	<b>39</b>	<b>7</b>	<b>631</b>	<b>810</b>	<b>78</b>	<b>1 519</b>

Preliminary Manning Table for 1984

Table 7

	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	5	-	10
Secretariat of the Policy-making Organs	-	-	1	1	-	-	1	-	3	3	-	6
Department of Technical Assistance and Publications	-	1	-	1	3	-	2	-	7	7	-	14
Division of Technical Assistance	-	-	1	8	8	8	6	-	31	44	-	75
Division of Publications	-	-	1	1	1	4	6	-	13	113	18	144
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	9	7	5	-	-	22	12	-	34
Nuclear Fuel Cycle Division	-	-	1	7	13	-	-	-	21	13	-	34
Division of Nuclear Safety	-	-	1	13	12	3	-	-	29	22	-	51
Division of Scientific and Technical Information	-	-	1	5	11	19	5	3	44	86	-	130
Department of Research and Isotopes	-	1	-	-	-	-	1	-	2	2	-	4
Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development	-	-	-	7	6	1	1	-	15	8	-	23
Division of Life Sciences	-	-	1	4	6	1	-	-	12	10	-	22
Division of Research and Laboratories	-	-	1	7	10	7	3	-	28	18	-	46
The Agency's Laboratory	-	-	-	4	11	7	2	1	25	59	27	111
The Monaco Laboratory	-	-	-	2	3	1	2	1	9	14	-	23
International Centre for Theoretical Physics	-	-	-	1	2	2	-	-	5	18	-	23
Department of Safeguards	-	1	-	9	9	4	-	-	23	25	-	48
Division of Development and Technical Support	-	-	1	13	18	3	-	-	35	27	-	62
Division of Operations A	-	-	1	14	40	30	-	-	85	28	-	113
Division of Operations B	-	-	1	14	40	33	-	-	88	28	-	116
Division of Safeguards Information Treatment	-	-	1	8	14	3	-	-	26	50	-	76
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	1	2	1	-	5	6	-	11
Division of Budget and Finance	-	-	1	4	6	7	2	1	21	50	-	71
Division of General Services	-	-	1	1	3	1	1	-	7	68	29	104
Division of External Relations	-	-	2	5	6	4	4	-	21	21	-	42
Division of Public Information	-	-	1	-	1	1	1	-	4	7	-	11
Division of Languages	-	-	1	4	11	23	-	-	39	35	1	75
Legal Division	-	-	1	3	2	1	-	-	7	4	-	11
Division of Personnel	-	-	1	2	6	3	-	-	12	35	3	50
<b>TOTAL</b>	<b>1</b>	<b>5</b>	<b>22</b>	<b>150</b>	<b>251</b>	<b>174</b>	<b>40</b>	<b>7</b>	<b>650</b>	<b>822</b>	<b>78</b>	<b>1 550</b>

## ANNEX V

## International Centre for Theoretical Physics

Summary by items of expenditure

Item of expenditure	1980 Actual obligations	1981 Adjusted Budget
Salaries and wages		
Established posts	367 980	445 000
Consultants	62 462	71 000
Overtime	12 686	10 000
Temporary assistance	40 081	43 000
Sub-total	483 209	569 000
Common staff costs	98 129	133 000
Travel	21 819	12 000
Meetings		
Conferences, symposia, seminars	613 369	566 000
Technical committees, advisory groups	6 353	8 500
Representation and hospitality	10 774	9 500
Common services, supplies and equipment	391 807	390 000
Other items of expenditure	506 027	372 000
Transfer of costs:		
Printing and publishing services	181 463	190 000
Total	2 312 950	2 250 000
<u>Source of Funds:</u>		
Regular Budget	923 463	966 000
Extrabudgetary resources	1 389 487	1 284 000
TOTAL	2 312 950	2 250 000

a/ Consists of \$ 1 582 000 extrabudgetary resources and \$ 300 000 miscellaneous income.

Increase or (decrease) from 1981			1982 Estimate	1983 Preliminary estimate	1984 Preliminary estimate
Price	Programme	Total			
90 000	-	90 000	535 000	600 000	681 000
9 000	-	9 000	80 000	92 000	105 000
2 000	6 000	8 000	18 000	21 000	24 000
8 000	3 000	11 000	54 000	62 000	71 000
109 000	9 000	118 000	687 000	775 000	881 000
33 000	-	33 000	166 000	186 500	211 000
1 500	9 500	11 000	23 000	26 000	30 000
84 000	190 000	274 000	840 000	961 000	1 150 000
1 000	2 500	3 500	12 000	14 000	16 000
1 500	1 000	2 500	12 000	14 000	16 000
58 000	90 000	148 000	538 000	616 500	887 000
49 000	183 000	232 000	604 000	758 000	901 000
17 000	-	17 000	207 000	220 000	230 000
354 000	485 000	839 000	3 089 000	3 571 000	4 322 000
172 000	69 000	241 000	1 207 000	1 220 000	1 230 000
182 000	416 000	598 000	1 882 000 <sup>a/</sup>	2 851 000	3 592 000
354 000	485 000	839 000	3 089 000	3 571 000	4 322 000

ANNEX VI

Regular Budget Appropriations for 1982

Section	Estimates at 12.90	Adjustment of programme costs	Estimates at 15.50
1. Technical assistance and training	4 477 000	(600 000)	3 877 000
2. Nuclear power	3 276 000	(417 000)	2 859 000
Nuclear fuel cycle	3 160 000	(383 000)	2 777 000
Nuclear safety	5 395 000	(650 000)	4 745 000
Information and technical services	5 082 000	(672 000)	4 410 000
Nuclear explosions for peaceful purposes	14 000	(2 000)	12 000
Technical operations	16 927 000	(2 124 000)	14 803 000
3. Food and agriculture	4 383 000	(496 000)	3 887 000
Life sciences	3 173 000	(327 000)	2 846 000
Physical Sciences	6 538 000	(820 000)	5 718 000
Research and isotopes	14 094 000	(1 643 000)	12 451 000
4. International Centre for Theoretical Physics	1 207 000	(28 000)	1 179 000
International Laboratory of Marine Radioactivity	1 208 000	-	1 208 000
Operational Facilities	2 415 000	(28 000)	2 387 000
5. Safeguards	29 170 000	(3 477 000)	25 693 000
6. Policy-making organs	3 108 000	(414 000)	2 694 000
7. Executive management and technical programme planning	1 744 000	(221 000)	1 523 000
Administration	9 361 000	(1 277 000)	8 084 000
Executive management and administration	11 105 000	(1 498 000)	9 607 000
8. General services	13 314 000	(2 167 000)	11 147 000
9. Cost of work for others	4 379 000	(669 000)	3 710 000
<b>TOTAL</b>	<b>98 989 000</b>	<b>(12 620 000)</b>	<b>86 369 000</b>

ANNEX VII

Draft resolution

A. REGULAR BUDGET APPROPRIATIONS FOR 1982

The General Conference,

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 1982 [1],

1. Appropriates an amount of \$ 86 369 000 for the Regular Budget expenses of the Agency in 1982 as follows:

<u>Section</u>	<u>United States dollars</u>
1. Technical assistance and training	3 877 000
2. Technical operations [2]	14 803 000
3. Research and isotopes [3]	12 451 000
4. Operational facilities [4]	2 387 000
5. Safeguards	25 693 000
6. Policy-making organs	2 694 000
7. Executive management and administration [5]	9 607 000
8. General services	11 147 000
9. Cost of work for others	3 710 000
TOTAL	<u><u>86 369 000</u></u>

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

- (a) \$ 3 710 000 from income from work for others;
- (b) \$ 5 315 000 from other miscellaneous income; and
- (c) \$ 77 344 000 from contributions by Member States on the basis of the scale of assessment fixed by the General Conference in Resolution GC(XXV)/RES/ ; and

3. Authorizes the Director General:

- (a) To incur expenditures additional to those for which provision is made in the Regular Budget for 1982, 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 Budget for 1982; 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(XXV)/646, Table 2.

[2] For the financing of Nuclear power, Nuclear fuel cycle, Nuclear safety, 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 and Administration.

## B. TECHNICAL ASSISTANCE FUND ALLOCATION FOR 1982

### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's technical assistance programme for 1982;

1. Decides that for 1982 the target for voluntary contributions to the Technical Assistance Fund shall be \$ 16 million;
2. Notes that funds from other sources, estimated at \$ 700 000, are expected to be available for that programme;
3. Allocates the amount of \$ 16 700 000 for the Agency's technical assistance programme for 1982; and
4. Urges all Member States to make voluntary contributions for 1982 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.

## C. THE WORKING CAPITAL FUND IN 1982

### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's Working Capital Fund in 1982 [1],

1. Approves a level of \$ 2 million for the Agency's Working Capital Fund in 1982;
2. Decides that the Fund shall be financed, administered and used in 1982 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.

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[1] See document GC(XXV)/646, para 29 of the Introduction.

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



