

# THE AGENCY'S BUDGET FOR 1988

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GC(XXXI)/802

Printed by the  
International Atomic Energy Agency  
in Austria - August 1987



INTERNATIONAL ATOMIC ENERGY AGENCY



# THE AGENCY'S BUDGET FOR 1988

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## LIST OF ABBREVIATIONS

ABDF	Division of Budget and Finance
ADEX	Division of External Relations
ADGS	Division of General Services
ADIT	Internal Audit
ADLA	Division of Languages
ADPI	Division of Public Information
ADPR	Division of Personnel
AGM	Advisory group meeting
Agency	International Atomic Energy Agency
ARCAL	Regional Co-operative Arrangements for the Promotion of Nuclear Science and Technology in Latin America
ASSET	Analysis of Safety-Significant Events Team
BSS	Basic Safety Standards for Radiation Protection
CEC	Commission of the European Communities
CIAMDA	Computer Index of Atomic and Molecular Data
CIDA	Canadian International Development Agency
CINDA	Computer Index of Neutron Data
CM	Consultants' Meeting
CRP	Co-ordinated research programme
DDG AD; NE; RI; SG; TC	Deputy Director General for Administration; Nuclear Energy and Safety; Research and Isotopes; Safeguards; Technical Co-operation
Division of Food and Agriculture	Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development
Division of Standardization	Division for Standardization, Training and Administrative Support
DP	Data processing
EWG	Expert Working Group on International Co-operation in Nuclear Safety and Radiation Protection
FAO	Food and Agriculture Organization of the United Nations
GS	General Service category (staff)
IAEA	International Atomic Energy Agency
ICRP	International Commission on Radiological Protection
ICTP	International Centre for Theoretical Physics (in Trieste)
INIS	International Nuclear Information System
INTOR	International Tokamak Reactor

IRS	Incident Reporting System
IWG	International working group
Joint FAO/IAEA Division of Food and Agriculture	See Division of Food and Agriculture
M&O	Maintenance and Operatives Service category (staff)
m/m	Man-month
MOX	Mixed oxide
NEA/OECD	Nuclear Energy Agency of the Organisation for Economic Co-operation and Development
NENF	Division of Nuclear Fuel Cycle
NENP	Division of Nuclear Power
NENS	Division of Nuclear Safety
NESI	Division of Scientific and Technical Information
NNW	Non-nuclear weapon
NPT	Treaty on the Non-Proliferation of Nuclear Weapons (reproduced in document INFCIRC/140)
NUSSAG	Nuclear Safety Standards Advisory Group
NUSS programme	Agency's programme on nuclear safety standards for nuclear power plants
OSART	Operational Safety Review Team
P	Professional category (staff)
PRA	Probabilistic risk analysis
PRIS	Power Reactor Information System
PSA	Probabilistic safety assessment
RAPAT	Radiation Protection Advisory Team
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
RIAL	Agency's Laboratory (Seibersdorf)
RIFA	See Division of Food and Agriculture
RILS	Division of Life Sciences
RIML	International Laboratory of Marine Radioactivity (in Monaco)
RIPC	Division of Physical and Chemical Sciences
SAC	Scientific Advisory Committee
SAGSI	Standing Advisory Group on Safeguards Implementation
SAL	Safeguards Analytical Laboratory
SEC	Secretariat of the Policy-making Organs

SGDE	Division of Development and Technical Support
SGEV	Division of Safeguards Evaluation
SGIT	Division of Safeguards Information Treatment
SGOA	Division of Operations (A)
GOB	Division of Operations (B)
SGOC	Division of Operations (C)
SGSA	See Division of Standardization
SMPR	Small and medium power reactor
SNSP	Supplementary nuclear safety and radiation protection programme
SPM	Specialists' meeting
SSDL	Secondary Standard Dosimetry Laboratory
TCM	Technical committee meeting
TC	Technical co-operation
TCAC	Division of Technical Assistance and Co-operation
TCPU	Division of Publications
Tlatelolco Treaty	Treaty for the Prohibition of Nuclear Weapons in Latin America
TRCUD	Technical Review Committee on Underground Disposal
Trieste Centre	International Centre for Theoretical Physics (at Trieste)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
VIC	Vienna International Centre
WMO	World Meteorological Organization

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NOTE

All sums of money are expressed in United States dollars





## INTRODUCTION

### General

1. In accordance with Article XIV.A of the Statute, the Board of Governors hereby submits to the General Conference the Budget estimates for 1988. The Board requests the General Conference to adopt the draft resolutions set forth in Annex III.

2. The estimates for 1988 are based on the requirements for the second year of the biennium 1987-88, for which plans were presented in the Agency's Programme and Budget for 1987 and 1988, document GC(XXX)/777, and, in respect of the Expanded Nuclear Safety Activities, in document GC(XXX)/777/Add.1. Where appropriate, cross references are made in the present document to GC(XXX)/777 in the abbreviated form "777".

3. Only changes in the plans for 1988 are described in the present document. In view of the development which the Supplementary Nuclear Safety and Radiation Protection Programme (SNSP) has undergone in the course of the year as a result of various meetings of governmental experts and of the Board of Governors, a separate Appendix is given at the end of the document which contains the latest consolidated version of this programme. Since the meeting in November 1986 of the Expert Working Group on International Co-operation in Nuclear Safety and Radiation Protection (EWG), there has been further consideration and development of the content of the SNSP, with the result that a number of additional tasks have been included. To facilitate identification, such tasks are shown in the Appendix with a small letter following their number (e.g. 3a.).

### Exchange Rate

4. For the purpose of presenting the budget estimates for 1988, an exchange rate of 14.20 Austrian schillings to the United States dollar - the operational rate in effect at the time of the last session of the General Conference in September/October 1986 - has been used. In order to facilitate comparison, the 1987 budget estimates and the actual 1986 expenditures are presented at the same exchange rate, i.e. AS 14.20. All figures within the document are therefore directly comparable with those for 1988.

### The Regular Budget for 1988

5. The total of the Regular Budget estimates for 1988 as shown in Table 44, the Regular Budget by Appropriation Section, is \$137 337 000 at an exchange rate of 14.20 schillings to the dollar. The Regular Budget by Department is shown in Table 48 and by Item of Expenditure in Table 49.

6. The Regular Budget estimates for the Agency's programmes for 1988 show an expenditure increase at 1987 prices of 0.6% which is accounted for entirely by the SNSP. Table 47 presents a breakdown by Appropriation Section of the expenditure increases due to growth as distinct from increases/decreases resulting from various adjustments. Table 2(b) presents

the same breakdown by programme area/programme. These adjustments relate to a change in the policy of charging data processing services to users, the transfer of posts and functions between Appropriation Sections, and the presentation of Radiation Protection Services as a shared support service which, as of 1988, is allocated to Safeguards and to technical co-operation projects in proportion to the services supplied.

7. The Summary of Cost tables for each Appropriation Section in Part II of the document also show the breakdown of the expenditure increase (decrease) into the components "Adjustments" and true expenditure increases due to growth.

8. Price increases for the items of expenditure making up the Agency's Regular Budget are expected to amount to 2.7%. This low level of price increases is mainly due to the expectation that the freeze on Professional salaries will continue till late in 1988, based on the forecast of cost of living index movements.

9. Including some allowance for within-grade increments, P salaries are expected to increase by 2% and GS salaries by 3%, taking into account the latest combined consumer price and industrial wage index movements applicable to GS staff.

10. The price increase for total staff costs is expected to be 2.3%. For other items of expenditure, actual increases incurred during the past year have been used. On the basis of detailed analysis of the various types of equipment and supplies procured by the Agency and travel undertaken to the various destinations, increases were found to average 3%. The 4.1% increase in experts reflects the fact that the per diem rates which are established by the ICSC show considerable increases (for Vienna, for instance, 6.8% on an annual basis).

11. For general operating expenses an increase of 4% has been foreseen in line with UNIDO's forecast for VIC operating costs. In respect of hospitality which to a large extent is provided at the VIC, the recent price increase at the VIC and the statistics used by ICSC in fixing per diem rates have been used. The increases in the various shared services costs are derived from the increases in the individual items of expenditure.

12. It is proposed that the Regular Budget estimates for 1988 of \$137 337 000 be funded after deduction of estimated income of \$8 200 000 by an assessment on Member States of \$129 137 000 (see Table 3, The Regular Budget, Summary of Income). The assessment for 1988 represents an increase of \$6 613 000 over the assessment for 1987 at an exchange rate of AS 14.20.

13. A major concern of both Member States and the Secretariat is the need to make efficient and effective use of the limited resources at the Agency's disposal and to continue efforts to increase the productivity of the Agency. As mentioned in the Programme and Budget for 1987 and 1988 (GC(XXX)/777), an estimated increase in volume of 6.5% over the two year period was to be achieved with a 2.9% increase in resources for the same period. With the increase in the SNSP planned for 1988 the ratio volume of programme/resources is expected to show a further improvement. In respect of safeguards, the target figure for man-days of inspection for 1988 has been set

at 8700 against an adjusted figure of 8400 for 1987. On the basis of these figures the cost-effectiveness of safeguards activities remains about the same as for 1987.

#### Categories of Main Means in the 1988 Budget

14. The concept of "main means" is used in Part I of the budget document to categorize the principal activities involved in implementing the approved programmes. It is hoped that use of this concept, rather than of "items of expenditure", will make it clearer to Member States what final products they can expect to obtain from the Agency. "Items of expenditure", which are used in Part II of the budget document to show how much is required for salaries, travel, contracts or services by each Department or under each Appropriation Section, indicate how those final products are generated.

15. In this sense, small meetings such as advisory group and technical committee meetings are similar to "items of expenditure"; they are not associated directly with the generation of a "final product for Member States". Accordingly, they are not shown as a separate "main means" (see, in this connection, the second sentence of paragraph 16 and the third sentence of paragraph 17 below).

16. "Meetings" reflects the costs of providing a forum for the exchange of information (conferences, symposia, seminars), including the costs of manpower required for preparing and holding meetings. Meetings such as advisory group and technical committee meetings are included in this category only if they are associated with the planning of a conference, symposium or seminar.

17. "Publishing" reflects the costs of preparing reports, guidelines, proceedings, manuals and other publications. These costs include costs of staff, consultants and printing and editing. The costs of advisory group and technical committee meetings held in conjunction with the preparation of publications are included in this category.

18. The distinction between "Publishing" and "Standards and Regulations" will be defined more clearly in the next budget cycle. As in the case of "Publishing", the costs associated with "Standards and Regulations" include costs of staff, consultants, printing and editing, advisory group meetings and technical committee meetings.

19. "Data base" reflects the costs associated with setting up and maintaining specific data bases such as the Power Reactor Information System, Nuclear Fuel Cycle Information System, International Nuclear Information System, International Uranium Geology Information System and Computer Index of Atomic and Molecular Data. Included are staff costs, data processing and other computer costs and the costs of meetings held to exchange information or to provide data base training.

20. "Research and Development" reflects the costs of co-ordinated and other research programmes, including the costs of administration, staff, laboratory services, consultants and report preparation.

21. "Technical Co-operation Support and Advisory Services" reflects the staff costs involved in the support given by the technical Departments to the technical co-operation (TC) programme in selecting and briefing experts, designing training course programmes, evaluating equipment and similar activities. It also reflects the actual costs of those advisory services and missions which are financed from the Regular Budget.

22. "Inspecting" relates only to the Department of Safeguards and covers all safeguards implementation activities.

#### Manning Table

23. Requests for additional manpower and reclassification of existing posts have been scrutinized through the internal review process which has been established for the purpose of reviewing human resources requirements in the light of programme trends and developments as well as the overall workload situation and staff utilization.

24. As regards the Manning Table for 1987, preliminary manpower requirements for expanded nuclear safety activities were outlined in Annex 4 of document GC(XXX)/777/Add.1. On the basis of further development of the programme by governmental expert groups and the Board of Governors, a reduced number of posts, i.e. 8 P and 5 GS posts have been added to the 1987 manning table.

25. In order to make full use of available manning table positions, several posts have been redeployed. In addition, the manning table of the Radiation Protection Service, which is part of the Division of Nuclear Safety, is being moved to "Shared Support Services", in line with the decision to charge the Department of Safeguards and TC projects for Radiation Protection Services provided to them. The transfers are shown in Table 55(b), Proposed Transfer of Posts in 1987.

26. For 1988, a net increase of 7 Professional posts, and 10 General Services posts, a total of 17 posts, is considered necessary, together with the regularization of 13 long-term temporary assistance functions (10 in the GS and 3 in the M&O category).

#### Extrabudgetary Resources

27. As in previous years, information is provided on the total extrabudgetary resources expected to be available for the Agency to carry out its programme in 1988. Funds from other United Nations organizations are shown separately (see Table 1, Total Resources for Implementation in 1988).

28. The dollar amounts for extrabudgetary resources are tentative and represent the best estimates that can be made at present. Some amounts represent requests made by the Agency and some are reasonable expectations based on past experience; several are still subject to confirmation.

Target for Voluntary Contributions to the Technical Assistance and Co-operation Fund

29. The provision of technical assistance by the Agency to its developing Member States is financed from the Technical Assistance and Co-operation Fund, which receives its income mainly in the form of voluntary contributions for which a target is set each year. On the basis of an annual increase of 12% in the indicative planning figure, the Board agreed to recommend that the target for 1988 be established at \$38 million. Taking into account miscellaneous income, it is expected that the Fund will amount in total to \$39 million.

Working Capital Fund

30. The Agency's Working Capital Fund has, with minor variations, remained at the same level - namely US \$2 million - since 1958. In view of the cash difficulties being experienced by the Agency, it may be necessary to change the level of the Fund for 1988.

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

23. In accordance with Article XVI of the Agency's relationship agreement with the United Nations<sup>a/</sup>, the budget will be reviewed by the Advisory Committee on Administrative and Budgetary Questions, which will report on the administrative aspects thereof to the General Assembly of the United Nations.

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<sup>a/</sup> INFCIRC/II, Part I.



# TOTAL RESOURCES FOR IMPLEMENTATION IN 1988

Table 1

Programme Area / Programme	Regular Budget estimates	Funds from other UN organizations	TC resources a/	Other extra- budgetary resources b/	TOTAL	%
<b>1. NUCLEAR POWER AND THE FUEL CYCLE</b>						
A. Nuclear Power	5 692 000	-	2 600 000	-	8 292 000	4.1
B. Nuclear Fuel Cycle	2 021 000	-	2 100 000	-	4 121 000	2.1
C. Radioactive Waste Management	3 851 000	-	1 000 000	147 000	4 998 000	2.5
Sub-Total	11 564 000	-	5 700 000	147 000	17 411 000	8.7
<b>2. NUCLEAR APPLICATIONS</b>						
D. Food and Agriculture	6 956 000	1 409 000	10 300 000	1 067 000 c/	19 732 000	9.8
E. Human Health	4 260 000	232 000	5 000 000	359 000	9 851 000	4.9
F. Industry and Earth Sciences	2 018 000	686 000	6 400 000	-	9 104 000	4.5
G. Physical and Chemical Sciences	6 365 000	965 000	12 000 000	12 887 000	32 217 000	16.0
Sub-Total	19 599 000	3 292 000	33 700 000	14 313 000	70 904 000	35.2
<b>3. NUCLEAR SAFETY AND RADIATION PROTECTION</b>						
H. Radiation Protection	3 757 000	-	4 000 000	88 000	7 845 000	3.9
I. Safety of Nuclear Installations	5 434 000	-	2 600 000	176 000	8 210 000	4.1
Sub-Total	9 191 000	-	6 600 000	264 000	16 055 000	8.0
<b>4. SAFEGUARDS</b>						
J.1. Information Treatment	6 174 000	-	-	-	6 174 000	3.1
J.2. Safeguards Operations	22 714 000	-	-	-	22 714 000	11.3
J.3. Development and Technical Support	11 333 000	-	-	3 655 000	14 988 000	7.5
J.4. Safeguards Evaluation	2 432 000	-	-	-	2 432 000	1.2
J.5. Standardization, Training and Administrative Support	2 082 000	-	30 000	-	2 112 000	1.1
Sub-Total	44 735 000	-	30 000	3 655 000	48 420 000	24.2
<b>S. DIRECTION AND SUPPORT</b>						
S.1. General Management and Secretariat of the Policy-making Organs	7 987 000	-	-	-	7 987 000	4.0
S.2. Administration	10 242 000	-	-	-	10 242 000	5.1
S.3. Technical Co-operation Servicing and Co-ordination	7 155 000	-	130 000	-	7 285 000	3.6
S.4. General Services	14 411 000	-	-	-	14 411 000	7.2
S.5. Specialized Service Activities	6 469 000	-	340 000	-	6 809 000	3.4
S.6. Shared Support Services d/	1 284 000	-	-	-	1 284 000	0.6
Sub-Total	47 548 000	-	470 000	-	48 018 000	23.9
<b>Total Agency programmes</b>	<b>132 637 000</b>	<b>3 292 000</b>	<b>46 500 000</b>	<b>18 379 000</b>	<b>200 808 000</b>	<b>100.0</b>
<b>Services provided to others</b>	<b>4 700 000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4 700 000</b>	
<b>TOTAL</b>	<b>137 337 000</b>	<b>3 292 000</b>	<b>46 500 000</b>	<b>18 379 000</b>	<b>205 508 000</b>	
<b>SOURCE OF FUNDS</b>						
Assessment on Member States	129 137 000	-	-	-	129 137 000	
Income from work for others	4 700 000	-	-	-	4 700 000	
Other miscellaneous income	3 500 000	-	-	-	3 500 000	
Other UN organizations	-	3 292 000	3 500 000	-	6 792 000	
Technical Assistance and Co-operation Fund	-	-	37 000 000 e/	-	37 000 000	
Extrabudgetary Resources	-	-	6 000 000	18 379 000	24 379 000	
<b>TOTAL</b>	<b>137 337 000</b>	<b>3 292 000</b>	<b>46 500 000</b>	<b>18 379 000</b>	<b>205 508 000</b>	

a/ Funds from FAO, UNDP, UNEP, UNESCO, etc.

b/ TC resources include those foreseen for actual implementation in 1988. Allocations to individual programmes in this table are only indicative, based on extrapolations of past experience and do not prejudice in any way the priorities to be set by Member States.

c/ Includes \$ 350 000 for the upgrading of the training facilities at the Agency's Laboratories at Seibersdorf.

d/ Includes only the Library, all other services having been allocated to the user programmes.

e/ Represents the amount expected to be implemented.

# THE REGULAR BUDGET

## By programme area and programme

Table 2 (a)

Programme Area / Programme	1987 Budget	Expenditure increase(decrease) %	1988 at 1987 prices	Price increase %	1988 with price increase
1. NUCLEAR POWER AND THE FUEL CYCLE					
A. Nuclear Power	5 605 000	(55 000)	(1.0)	5 550 000	2.6 5 692 000
B. Nuclear Fuel Cycle	1 914 000	56 000	2.9	1 970 000	2.6 2 021 000
C. Radioactive Waste Management	3 598 000	152 000	4.2	3 750 000	2.7 3 851 000
Sub-Total	11 117 000	153 000	1.4	11 270 000	2.6 11 564 000
2. NUCLEAR APPLICATIONS					
D. Food and Agriculture	6 648 000	113 000	1.7	6 761 000	2.9 6 956 000
E. Human Health	4 255 000	(108 000)	(2.5)	4 147 000	2.7 4 260 000
F. Industry and Earth Sciences	1 961 000	2 000	0.1	1 963 000	2.8 2 018 000
G. Physical and Chemical Sciences	6 247 000	(89 000)	(1.4)	6 158 000	3.4 6 365 000
Sub-Total	19 111 000	(82 000)	(0.4)	19 029 000	3.0 19 599 000
3. NUCLEAR SAFETY AND RADIATION PROTECTION					
H. Radiation Protection	3 730 000	(63 000)	(1.7)	3 667 000	2.5 3 757 000
I. Safety of Nuclear Installations	4 414 000	888 000	20.1	5 302 000	2.5 5 434 000
Sub-Total	8 144 000	825 000	10.1	8 969 000	2.5 9 191 000
4. SAFEGUARDS					
J.1. Information Treatment	5 810 000	206 000	3.5	6 016 000	2.6 6 174 000
J.2. Safeguards Operations	22 050 000	142 000	0.6	22 192 000	2.4 22 714 000
J.3. Development & Technical Support	11 346 000	(307 000)	(2.7)	11 039 000	2.7 11 333 000
J.4. Safeguards Evaluation	2 299 000	80 000	3.5	2 379 000	2.2 2 432 000
J.5. Standardization, Training and Administrative Support	1 978 000	56 000	2.8	2 034 000	2.4 2 082 000
Sub-Total	43 483 000	177 000	0.4	43 660 000	2.5 44 735 000
S. DIRECTION AND SUPPORT					
S.1. General Management and Secretariat of the Policy-making Organs	7 788 000	8 000	0.1	7 796 000	2.4 7 987 000
S.2. Administration	10 139 000	(152 000)	(1.5)	9 987 000	2.6 10 242 000
S.3. Technical Co-operation Servicing and Co-ordination	6 831 000	153 000	2.2	6 984 000	2.4 7 155 000
S.4. General Services	13 921 000	-	-	13 921 000	3.5 14 411 000
S.5. Specialized Service Activities	6 578 000	(283 000)	(4.3)	6 295 000	2.8 6 469 000
S.6. Shared Support Services	1 246 000	(17 000)	(1.4)	1 229 000	4.5 1 284 000
Sub-Total	46 503 000	(291 000)	(0.6)	46 212 000	2.9 47 548 000
Total Agency programmes	128 358 000	782 000	0.6	129 140 000	2.7 132 637 000
Services provided to others	4 435 000	120 000	2.7	4 555 000	3.2 4 700 000
TOTAL REGULAR BUDGET	132 793 000	902 000	0.7	133 695 000	2.7 137 337 000
Less: Miscellaneous income					
Income from work for others	4 435 000	120 000	2.7	4 555 000	3.2 4 700 000
Other	5 834 000	(2 426 000)	(41.6)	3 408 000	2.7 3 500 000
Assessment on Member States	122 524 000	3 208 000	2.6	125 732 000	2.7 129 137 000



# THE REGULAR BUDGET

## By programme area and programme

Table 2 (b)

Programme Area / Programme	1987 Budget	Expenditure Increase/(decrease) %	Unadjusted 1988 at 1987 Prices	Adjustments a/	Adjusted 1988 estimates at 87 prices
1. NUCLEAR POWER AND THE FUEL CYCLE					
A. Nuclear Power	5 605 000	(116 000) (2.1)	5 489 000	61 000	5 550 000
B. Nuclear Fuel Cycle	1 914 000	48 000 2.5	1 962 000	8 000	1 970 000
C. Radioactive Waste Management	3 598 000	126 000 3.5	3 724 000	26 000	3 750 000
Sub-total	11 117 000	58 000 0.5	11 175 000	95 000	11 270 000
2. NUCLEAR APPLICATIONS					
D. Food and Agriculture	6 648 000	121 000 1.8	6 769 000	(8 000)	6 761 000
E. Human Health	4 255 000	(83 000) (2.0)	4 172 000	(25 000)	4 147 000
F. Industry and Earth Sciences	1 961 000	(1 000) (0.1)	1 960 000	3 000	1 963 000
G. Physical and Chemical Sciences	6 247 000	(19 000) (0.3)	6 228 000	(70 000)	6 158 000
Sub-total	19 111 000	18 000 0.1	19 129 000	(100 000)	19 029 000
3. NUCLEAR SAFETY AND RADIATION PROTECTION					
H. Radiation Protection	3 730 000	(63 000) (1.7)	3 667 000	-	3 667 000
I. Safety of Nuclear Installations	4 414 000	888 000 20.1	5 302 000	-	5 302 000
Sub-total	8 144 000	825 000 10.1	8 969 000	-	8 969 000
4. SAFEGUARDS	43 483 000	(23 000) b/(0.1)	43 460 000	200 000	43 660 000
S. DIRECTION AND SUPPORT	46 503 000	(96 000) (0.2)	46 407 000	(195 000)	46 212 000
Total Agency Programmes	128 358 000	782 000 0.6	129 140 000	-	129 140 000
Shared Support Services (Cost of Work for Others)	4 435 000	- -	4 435 000	120 000	4 555 000
TOTAL REGULAR BUDGET	132 793 000	782 000 0.6	133 575 000	120 000	133 695 000

a/ The 1988 estimates take into account several adjustments, the effect of which is shown separately from the expenditure increase. These adjustments relate to a different charging system for data processing services, transfers of staff and functions and an allocation of the radiation protection services to Safeguards and TC projects.

b/ This decrease arises because the Office of the DDG, for which an increase of \$ 23 000 is foreseen in 1988, is included in Appropriation Section 5, Safeguards, in Part II of the budget document (Tables 44 and 47), but is not shown under Programme Area 4 in Part I. In Part I, the Office of the DDG is included under Programme S, Direction and Support.

# THE REGULAR BUDGET

## Summary of Income <sup>a/</sup>

Table 3

Item	1986 Actuals	1987 Budget	Increase (decrease)	1988 Estimate
Assessed contributions on Member States	116 155 521	122 524 000	6 613 000	129 137 000 <sup>b/</sup>
Miscellaneous income				
(a) Income from work for others				
Data processing services	1 437 800	1 302 000	104 000	1 406 000
Printing services	1 156 011	1 575 000	(63 000)	1 512 000
Medical services	538 135	543 000	14 000	557 000
Library services	832 305	1 015 000	28 000	1 043 000
Radiation protection services	-	-	182 000	182 000
Sub-total	3 964 251	4 435 000	265 000	4 700 000
(b) Attributable to specific programmes				
Publications of the Agency	672 183	632 000	-	632 000
INIS publications including microfiches	527 095	549 000	-	549 000
CINDA publications	18 175	21 000	-	21 000
Advertising	18 194	25 000	-	25 000
Laboratory income	53 181	202 000	-	202 000
Sales of surplus property	7 311	10 000	(2 000)	8 000
Amounts recoverable under Safeguards agreements	170 525	250 000	-	250 000
UNDP programme support cost	651 854	770 000	(70 000)	700 000
SIDA programme support cost	5 263	-	2 000	2 000
Other programme support cost			-	
Sub-total	2 123 781	2 459 000	(70 000)	2 389 000
(c) Not attributable to specific programmes				
Investment and interest income	4 072 912	2 834 000	(2 184 000)	650 000
Gain on exchange of currencies	3 184 553	-	-	-
Other	459 192	541 000	(80 000)	461 000
Sub-total	7 716 657	3 375 000	(2 264 000)	1 111 000
Total miscellaneous income	13 804 689	10 269 000	(2 069 000)	8 200 000
TOTAL	129 960 210	132 793 000	4 544 000	137 337 000

<sup>a/</sup> An exchange rate of 14.20 Austrian schillings to the United States dollar was used.

<sup>b/</sup> Member States contributions will be reduced by their shares in the 1985 cash surplus.

# EXTRABUDGETARY RESOURCES 1987-1988

(as known on 1 July 1987)

a/

Table 4

(excluding contributions in kind)

	Unused balances as at 1 January 1987	1987 Estimate	1988 Estimate
<b>Technical Assistance and Co-operation</b>			
Australia (RCA)	65 440 b/	120 000 b/	60 000 b/
Austria	158 338 b/	-	-
Belgium	59 084 b/	-	-
Canada	2 130 b/	51 000 b/	-
Chile	767 b/	-	-
European Economic Community (ARCAL)	-	138 000 b/	86 000 b/
Finland	52 011 b/	-	-
France	5 668 b/	-	-
Germany, Federal Republic of	1 707 120 b/	236 000 b/	-
Italy	3 116 839 b/	-	-
Japan (RCA)	114 215 b/	260 000 b/	260 000 b/
Kuwait	-	350 000 b/	-
Norway	3 759 b/	-	-
Saudi Arabia	4 229 b/	-	-
Sweden	133 073 b/	222 000 b/	270 000 b/
Union of Soviet Socialist Republics	1 186 563 b/	1 023 000 b/	1 274 000 b/
United Kingdom of Great Britain and Northern Ireland	460 055 b/	816 000 b/	816 000 b/
United States of America	2 545 092 b/	1 500 000 b/	-
Sub-total	9 614 383 b/	4 716 000 b/	2 766 000 b/
<b>Nuclear Power</b>			
Small and Medium Sized Power Reactor (SMR) Study	5 613	-	-
<b>Nuclear Safety</b>			
Finland	22 083	81 000	88 000
Netherlands	-	88 000	88 000
United States of America	87 540	113 000	88 000
Sub-total	109 623	282 000	264 000
<b>Food and Agriculture</b>			
Australia (RCA)	38 261	94 000	-
Germany, Federal Republic of	109 033	120 000	-
International Consultative Group on Food Irradiation (ICGFI)	14 414	124 000	124 000
Italy	21 949	567 000 b/	-
Japan (RCA)	11 754	-	-
Netherlands	-	362 000	362 000
Sweden	116 336	231 000	231 000
United States of America	108 474	-	-
Sub-total	420 221	1 498 000	717 000
<b>Life Sciences</b>			
Italy	-	296 000	159 000
Japan (RCA)	208 239	210 000	200 000
United States of America	43 742	-	-
Sub-total	251 981	506 000	359 000
<b>Physical and Chemical Sciences</b>			
Germany, Federal Republic of	107 554	360 000	-
India	-	50 000	50 000
Italy	198 745	150 000	-
United States of America	30 769	-	-
Sub-total	337 068	560 000	50 000

Table 4 (continued)

	Unused balances as at 1 January 1987	1987 Estimate	1988 Estimate
<b>Agency's Laboratory, Seibersdorf</b>			
Austria	-	750 000	-
United States of America	-	300 000	350 000
Sub-total	-	1 050 000	350 000
<b>International Centre for Theoretical Physics</b>			
Brazil	-	10 000	10 000
Canada	171 118 <sup>d/</sup>	-	-
Iran, Islamic Republic of	-	20 000	20 000
Italy	4 163 584 <sup>e/</sup>	12 500 000 <sup>e/</sup>	12 500 000 <sup>e/</sup>
Japan	-	31 000	31 000
Kuwait	-	75 000	75 000
Qatar	-	10 000	10 000
Sweden	-	222 000	191 000
Sub-total	4 334 702	12 868 000	12 837 000
<b>International Laboratory of Marine Radioactivity</b>			
Denmark	10 912	9 000	-
Germany, Federal Republic of	83 706	66 000	-
Principality of Monaco	-	80 000	80 000
United States of America	137 312	94 000	67 000
Sub-total	231 930	249 000	147 000
<b>Safeguards</b>			
Canada	188 593	270 000	270 000
France	181 940	100 000	100 000
Germany, Federal Republic of	112 352	300 000	300 000
Italy	25 455	150 000	150 000
Japan	13 389	300 000	300 000
Sweden	12 155	155 000	155 000
Union of Soviet Socialist Republics	428 003	100 000	100 000
United Kingdom of Great Britain and Northern Ireland	58 411	72 000	80 000
United States of America	2 653 132	2 200 000	2 200 000
Sub-total	3 673 430	3 647 000	3 655 000
<b>Administration</b>			
Public Information			
United States of America	48 055	-	-
TOTAL	9 412 623	20 660 000	18 379 000

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

<sup>b/</sup> These figures are not included in the total extrabudgetary resources since they are already incorporated in the TC resources shown in Table 1.

<sup>c/</sup> Transfer from Italy's unobligated balance in Technical Assistance and Co-operation which was originally intended for the project on the Eradication of the Mediterranean Fruit Fly from Egypt.

<sup>d/</sup> Represents Canada's contribution to the Third World Academy of Sciences.

<sup>e/</sup> Includes Italy's contributions to the Third World Academy of Sciences.

P A R T    I

THE PROGRAMME BUDGET



## PROGRAMME AREA 1

### NUCLEAR POWER AND THE FUEL CYCLE

#### Summary of resources by programme

Table 5

Programme	Man-years		Planned expenditure for the implementation of the programme in 1988				
	P	GS	Regular Budget estimates	Funds from other UN organizations	TC resources	Other extra- budgetary resources	Total
A. Nuclear Power	26.9	17.7	5 692 000	—	2 600 000	—	8 292 000
B. Nuclear Fuel Cycle	10.5	6.0	2 021 000	—	2 100 000	—	4 121 000
C. Radioactive Waste Management	18.0	21.0	3 851 000	—	1 000 000	147 000	4 998 000
Programme Area 1	55.4	44.7	11 564 000	—	5 700 000	147 000	17 411 000

PROGRAMME A: NUCLEAR POWER

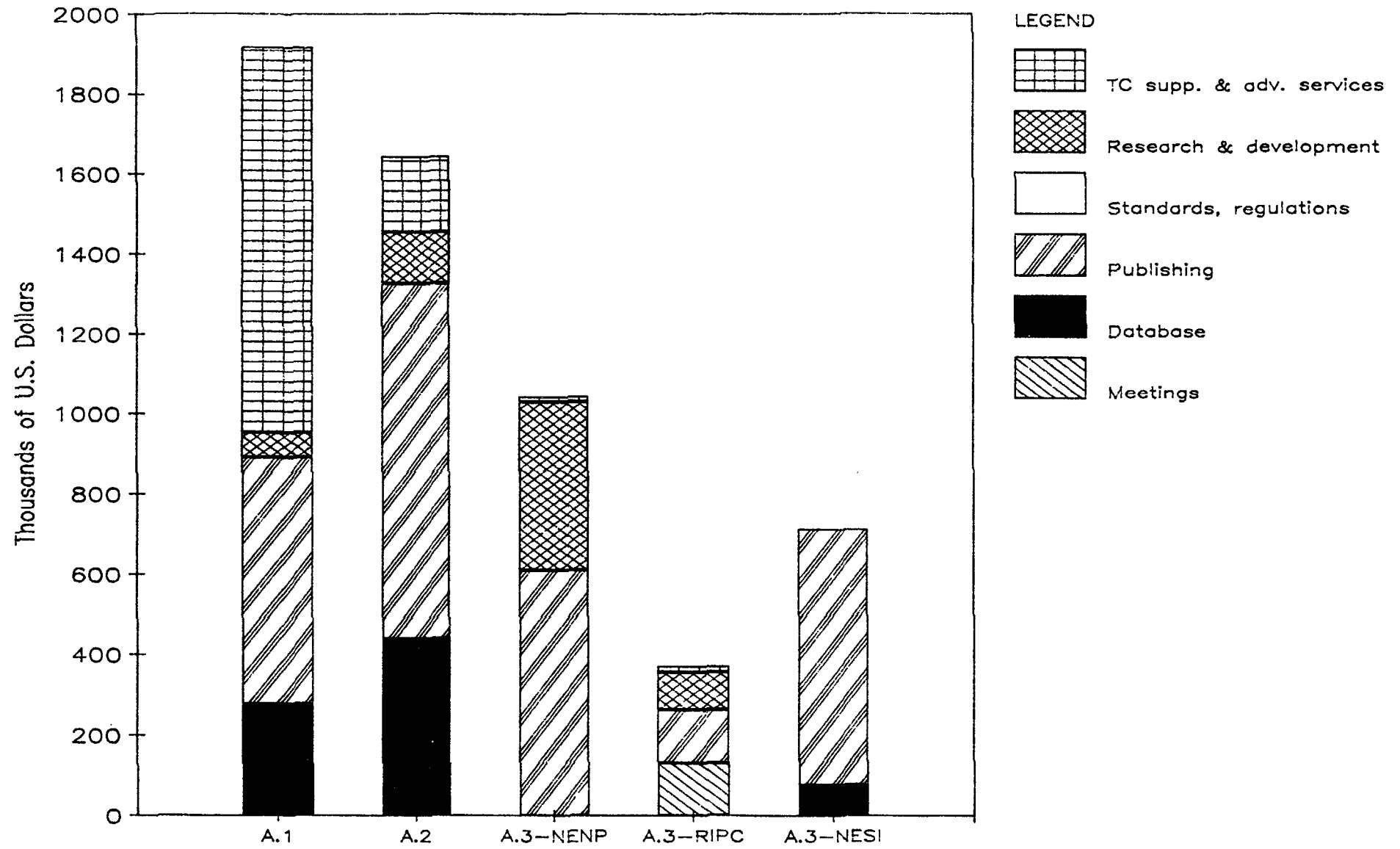
### Summary of main means by Area of Activity

Table 6

1988 Regular Budget Estimates											
Area of Activity		Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	Responsible Division
A.1. Nuclear Power Planning and Implementation		11.3	6.7	-	277 000	668 000	-	61 000	965 000	1 971 000	NENP
	SNSP (Net)	-	-	-	-	(53 000)	-	-	-	(53 000)	
A.2. Technical and Economic Performance of Nuclear Power		7.7	4.3	-	415 000	862 000	-	128 000	190 000	1 595 000	NENP
	SNSP (Net)	-	-	-	24 000	26 000	-	-	-	50 000	
A.3. Advanced Systems and Technology Development		4.0	2.0	-	-	431 000	-	285 000	15 000	731 000	NENP
	SNSP (Net)	-	-	-	-	179 000	-	134 000	-	313 000	
		1.9	0.7	131 000	-	132 000	-	93 000	16 000	372 000	RIPC
		2.0	4.0	-	76 000	637 000	-	-	-	713 000	NESI
Programme A Total		26.9	17.7	131 000	792 000	2 882 000	-	701 000	1 186 000	5 692 000	



A. Nuclear Power  
Main Means by Area of Activity  
Graph 1



## A. NUCLEAR POWER

### PROGRAMME A: NUCLEAR POWER

#### Summary of budget estimates by Area of Activity

Table 7

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
A.1. Nuclear Power Planning and Implementation	1 944 000	(74 000)	(3.8)	1 870 000	2.5	1 918 000
A.2. Technical and Economic Performance of Nuclear Power	1 714 000	(109 000)	(6.4)	1 605 000	2.5	1 645 000
A.3. Advanced Systems and Technology Development	1 947 000	128 000	6.6	2 075 000	2.6	2 129 000
Programme A Total	5 605 000	(55 000)	(1.0)	5 550 000	2.6	5 692 000

### PROGRAMME A: NUCLEAR POWER

#### CHANGES IN THE ORIGINAL PLANS

A/1. Detailed information on the activities planned for 1988 is provided under Programme A in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen. The changes exclude those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

A/2. Various forms of direct co-operation between utility companies operating nuclear power plants have been established, predominantly in industrialized countries, to exchange information on nuclear power plant operating experience. In order to make better use of the data contained in the Power Reactor Information System (PRIS) and to provide greater benefits to Member States from it, it is intended to initiate more active analytical work in order to determine, in a systematic way, from the management reports how good results were achieved in practice by good management in both industrialized and developing countries. It is planned under Project A.2.02 to issue in 1988 a technical report containing the results of the above analytical work. Depending on Member States' response, similar reports will be published at regular intervals.

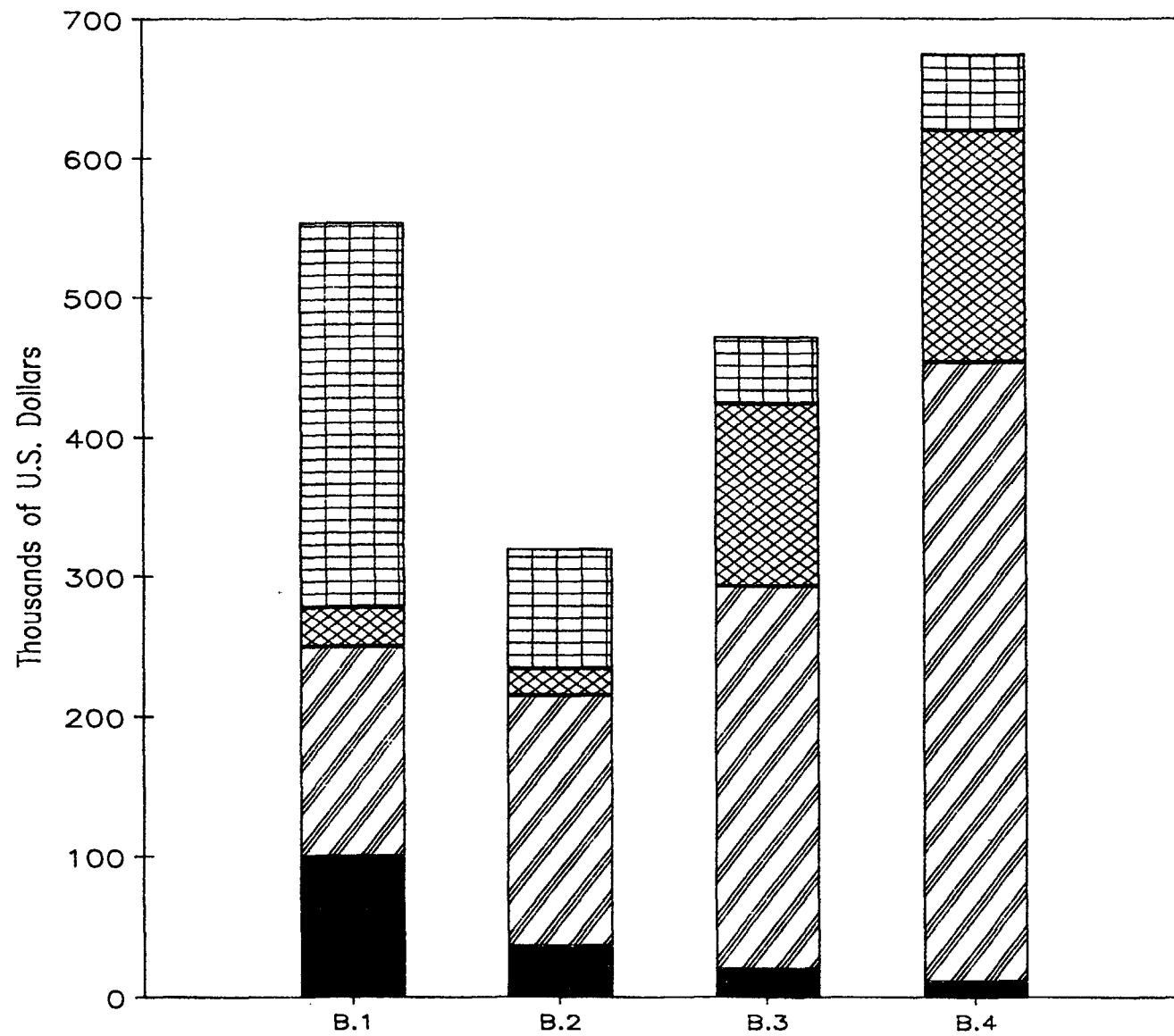
A/3. In connection with the consideration of a new international initiative relating to the international tokamak reactor study (Project A.3.04), it is planned to complete the INTOR project by the end of 1987. The countries participating in the INTOR project (European Community, Japan, USA and the USSR) are actively considering the next step in an expanded programme of international co-operation in this field. Each of the INTOR partners is prepared to embark on the conceptual design study of the next step tokamak experiment, which they have named the International Thermonuclear Experimental Reactor (ITER). This study, which is greater in scope and content than INTOR, will be supported by research and development work required to validate the concepts underlying the design. The objective of the study will be to reach the stage where any or all of the INTOR partners would be able to construct the device. As in the case of INTOR, the technical work of the project will be performed by national research and development establishments in participating States, with the necessary co-ordinating and management work being carried out by joint bodies established by the participants for this purpose. The expanded ITER activity is expected to result in a corresponding increase in the number of meetings of various kinds required for adequate co-ordination and support of the design study. The project is to be conducted under the auspices of the Agency in the same general manner as was the case for INTOR. The cost of the Agency's ITER programme will not exceed that of the INTOR workshop (the Agency's annual budget for INTOR in recent years was approximately US \$80 000, the bulk of which related to editing and publishing services). Expenses exceeding this level will be borne by the participants. If approved by the four parties, the project will start in 1988 and is expected to take three years to complete.

## PROGRAMME B: NUCLEAR FUEL CYCLE







Summary of main means by Area of ActivityTable 8

Area of Activity		1988 Regular Budget Estimates								Responsible Division	
		Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services		Total
B.1. Resources and Supply of Uranium and Thorium		3.5	2.0	-	100 000	150 000	-	28 000	276 000	554 000	NENF
B.2. Production and Processing of Nuclear and Reactor Materials		2.0	1.0	-	36 000	179 000	-	19 000	86 000	320 000	NENF
B.3. Reactor Fuel Design, Fabrication and Performance		1.6	1.0	32 000	20 000	273 000	-	131 000	48 000	504 000	NENF
	SNSP (Net)	-	-	(32 000)	-	-	-	-	-	(32 000)	
B.4. Spent Fuel Management		3.4	2.0	-	11 000	321 000	-	166 000	55 000	553 000	NENF
	SNSP (Net)	-	-	-	-	122 000	-	-	-	122 000	
Programme B Total		10.5	6.0	-	167 000	1 045 000	-	344 000	465 000	2 021 000	

B. Nuclear Fuel Cycle  
Main Means by Area of Activity  
Graph 2



LEGEND

-  TC supp. & adv. services
-  Research & development
-  Standards, regulations
-  Publishing
-  Database
-  Meetings

## B. NUCLEAR FUEL CYCLE

### PROGRAMME B: NUCLEAR FUEL CYCLE

#### Summary of budget estimates by Area of Activity

Table 9

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
B.1. Resources and Supply of Uranium and Thorium	571 000	(31 000)	(5.4)	540 000	2.6	554 000
B.2. Production and Processing of Nuclear and Reactor Materials	306 000	6 000	2.0	312 000	2.6	320 000
B.3. Reactor Fuel Design, Fabrication and Performance	521 000	(61 000)	(11.7)	460 000	2.6	472 000
B.4. Spent Fuel Management	516 000	142 000	27.5	658 000	2.6	675 000
Programme B Total	1 914 000	56 000	2.9	1 970 000	2.6	2 021 000

### PROGRAMME B: NUCLEAR FUEL CYCLE

#### CHANGES IN THE ORIGINAL PLANS

B/1. Detailed information on the activities planned for 1988 is provided under Programme B in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen. The changes exclude those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

B/2. Following the recommendation of a group of experts which met towards the end of 1986, it is now considered necessary to prepare in 1988 a technical report on uranium geology and resources in Europe (originally proposed for cancellation in GC(XXX)/777/Add.1, Annex 3, Table 2) in order to complete a series of studies on the geology of world uranium deposits (Project B.1.01).

B/3. Additional studies are required before the technical report on uranium resources and geology in Latin America (see Table 72, No. 6 of 777) can be drawn up, and it is therefore planned to postpone work on the report until 1990. The above studies include the investigation of unconformity-type uranium deposits, and a technical document on this subject will be prepared with the assistance of a technical committee meeting to be held in 1988 (Project B.1.01).

B/4. In accordance with recommendations made in September 1986 by the International Working Group on Water Reactor Fuel Performance and Technology, two technical documents will be prepared in 1989, one on reactor fuel burn-up determination (TCM 88), and the other on modifications of fuel assembly design and material aimed at improving safety in off-normal and accident conditions (AGM 88) (Project B.3.01).

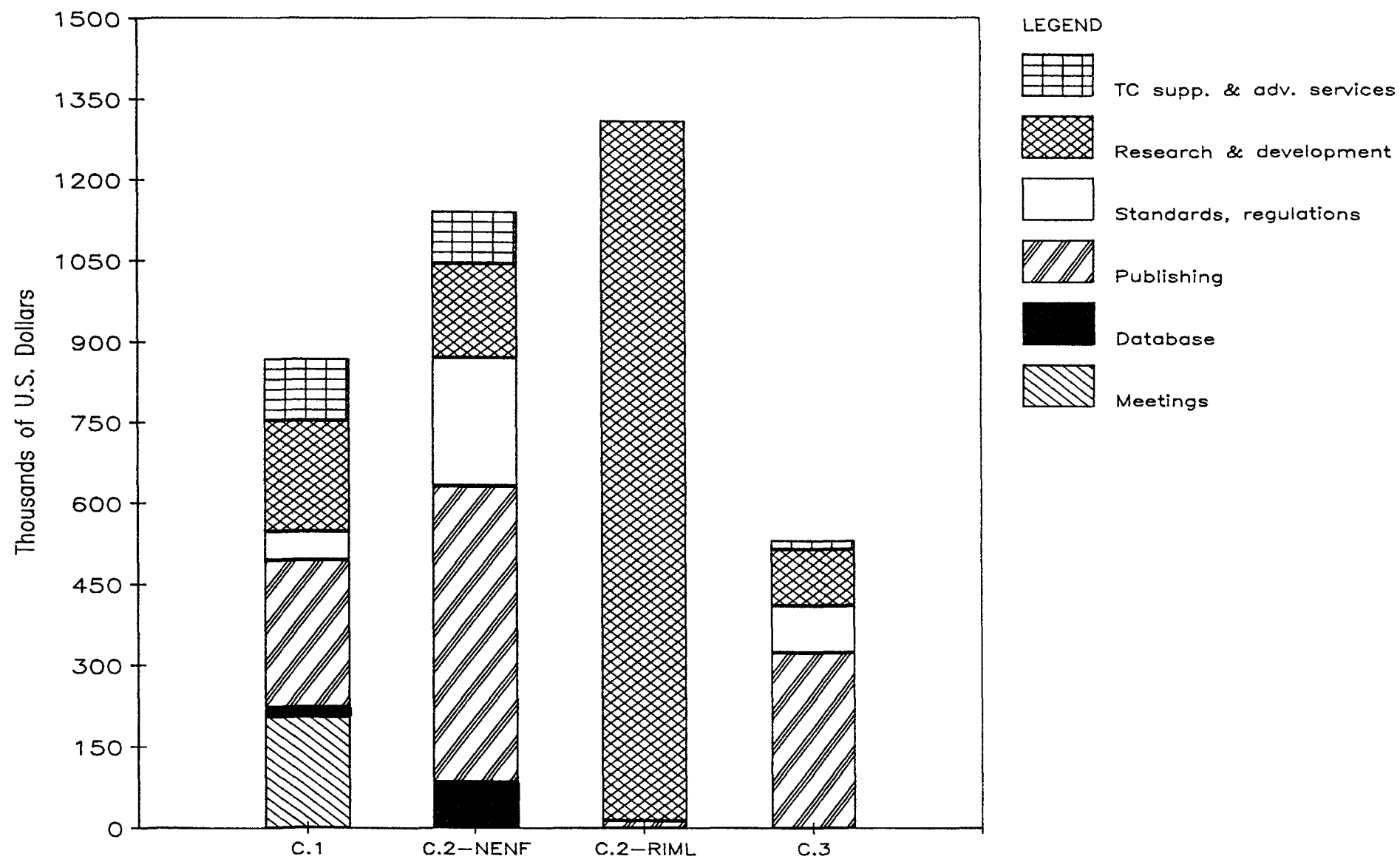
## PROGRAMME C: RADIOACTIVE WASTE MANAGEMENT

Summary of main means by Area of ActivityTable 10

Area of Activity		1988 Regular Budget Estimates								Responsible Division	
		Man-years P GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total		
C.1. Handling, Treatment, Conditioning and Storage of Radio- active Waste		3.6	2.3	205 000	18 000	297 000	53 000	205 000	116 000	894 000	NENF
	SNSP (Net)	-	-	-	-	(25 000)	-	-	-	(25 000)	
C.2. Radioactive Waste Disposal		5.7	3.4	-	33 000	543 000	239 000	174 000	97 000	1 086 000	NENF
	SNSP (Net)	-	-	-	52 000	3 000	-	-	-	55 000	
		7.5	14.0	-	-	14 000	-	1 296 000	-	1 310 000	RIML
C.3. Decommissioning of Nuclear Installations		1.2	1.3	-	-	127 000	87 000	104 000	17 000	335 000	NENF
	SNSP (Net)	-	-	-	-	196 000	-	-	-	196 000	
Programme C Total		18.0	21.0	205 000	103 000	1 155 000	379 000	1 779 000	230 000	3 851 000	



C. Radioactive Waste Management  
Main Means by Area of Activity  
Graph 3



## C. RADIOACTIVE WASTE MANAGEMENT

### PROGRAMME C: RADIOACTIVE WASTE MANAGEMENT

#### Summary of budget estimates by Area of Activity

Table 11

Area of Activity / Programme		1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
C.1.	Handling, Treatment, Conditioning and Storage of Radioactive Waste	808 000	39 000	4.8	847 000	2.6	869 000
C.2.	Radioactive Waste Disposal	2 493 000	(108 000)	(4.3)	2 385 000	2.8	2 451 000
C.3.	Decommissioning of Nuclear Installations	297 000	221 000	74.4	518 000	2.6	531 000
Programme C Total		3 598 000	152 000	4.2	3 750 000	2.7	3 851 000

### PROGRAMME C: RADIOACTIVE WASTE MANAGEMENT

#### CHANGES IN THE ORIGINAL PLANS

C/1. Detailed information on the activities planned for 1988 is provided under Programme C in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen. The changes exclude those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

C/2. Numerous countries which have introduced programmes for the application of isotopes and nuclear methods in health care, agriculture and industry and have set up nuclear research laboratories (including research reactors in some cases) have not yet established the corresponding waste processing and storage capacities. The requirements for waste management in these countries are broadly similar in terms of the volumes, characteristics and activity levels of the wastes generated. Consideration is therefore being given to the preparation of a reference architectural and engineering design package for a waste processing and storage facility, which would be made available to Member States and thus facilitate their decision-making process and the construction of such facilities. It is intended during 1987 to arrange for the examination of the usefulness and feasibility of such a project and details of its content (Area of Activity C.1).

C/3. It is planned to postpone to 1989 the preparation of a technical report on the handling and retention of airborne radionuclides at nuclear power plants during abnormal conditions (see Table 76, No. 11 of 777) to enable the results of a CRP dealing with this subject (see Table 76, No. 12 of 777) to be taken into account (Project C.1.01).

C/4. Following discussions at the international level on the principles for exemption of radioactive sources and practices from regulatory control and on the basis of the results of two reports on their application to specific areas (see Table 77, Nos 7 and 8 of 777), it is planned in 1988 to begin work on the preparation of a Safety Series document on the principles for exemption from regulatory control (Project C.2.02, in co-operation with the Radiation Protection programme).

C/5. As insufficient experience has been accumulated in Member States for a comprehensive assessment to be made of compliance with criteria relating - in particular - to principles for exempting radioactive sources and practices from regulatory control, preparation of a technical report on this subject (see Table 78, No. 3 of 777) has been postponed until 1990 (Project C.3.01).



## PROGRAMME AREA 2

### NUCLEAR APPLICATIONS

#### Summary of resources by programme

Table 12

Programme	Man-years		Planned expenditure for the implementation of the programme in 1988				
	P	GS	Regular Budget estimates	Funds from other UN organizations	TC resources	Other extra-budgetary resources	Total
D. Food and Agriculture	17.0 [12.0]	8.0 [14.8] [14.8] M&O	6 956 000	1 409 000	10 300 000	1 067 000	19 732 000
E. Human Health	16.5 [1.4]	12.0 [6.1] [1.8] M&O	4 260 000	232 000	5 000 000	359 000	9 851 000
F. Industry and Earth Sciences	7.2 [4.0]	3.8 [8.0] [1.0] M&O	2 018 000	686 000	6 400 000	-	9 104 000
G. Physical and Chemical Sciences	28.9 [4.7]	38.5 [13.6] [3.5] M&O	6 365 000	965 000	12 000 000	12 887 000	32 217 000
Programme Area 2	69.6	62.3	19 599 000	3 292 000	33 700 000	14 313 000	70 904 000

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular programme.

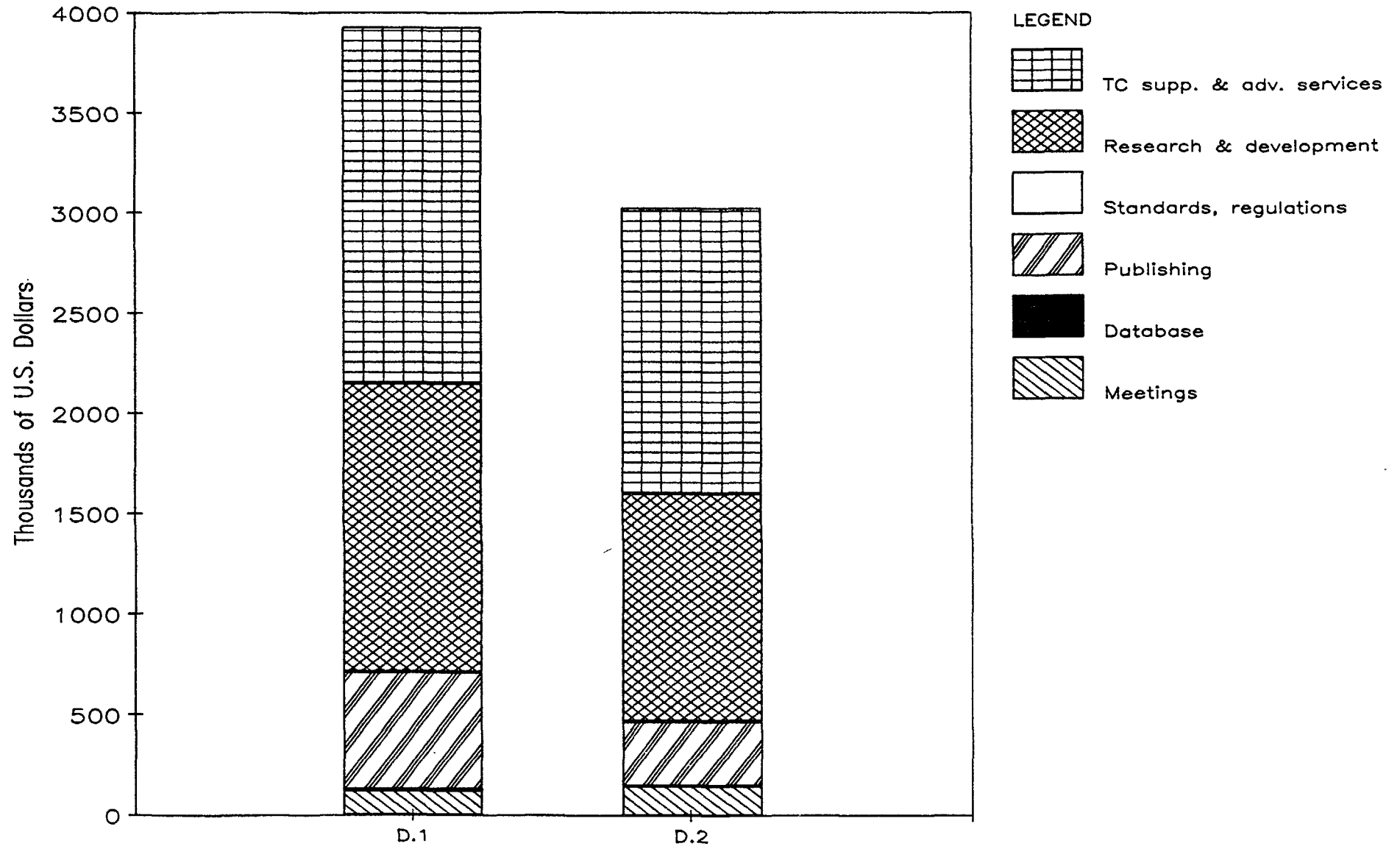
## PROGRAMME D: FOOD AND AGRICULTURE

Summary of main means by Area of ActivityTable 13

1988 Regular Budget Estimates											
Area of Activity		Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	Responsible Division
D.1.	Agricultural Production	8.6 [7.0]	4.1 [8.4] [7.9]M&O	125 000	5 000	581 000	-	1 438 000	1 782 000	3 931 000	RIFA
D.2.	Agricultural and Food Protection	8.4 [5.0]	3.9 [6.4] [6.9]M&O	148 000	-	318 000	-	1 133 000	1 426 000	3 025 000	RIFA
Programme D Total		17.0	8.0	273 000	5 000	899 000	-	2 571 000	3 208 000	6 956 000	

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular area of activity

D. Food and Agriculture  
Main Means by Area of Activity  
Graph 4



## D. FOOD AND AGRICULTURE

### PROGRAMME D: FOOD AND AGRICULTURE

#### Summary of budget estimates by Area of Activity

Table 14

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
D.1. Agricultural Production	3 645 000	176 000	4.8	3 821 000	2.9	3 931 000
D.2. Agricultural and Food Protection	3 003 000	(63 000)	(2.1)	2 940 000	2.9	3 025 000
Programme D Total	6 648 000	113 000	1.7	6 761 000	2.9	6 956 000

### PROGRAMME D: FOOD AND AGRICULTURE

#### CHANGES IN THE ORIGINAL PLANS

D/1. Detailed information on the activities planned for 1988 is provided under Programme D in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen.

D/2. Following the completion in 1987 of the CRP on nitrogen fixation and cycling in Azolla and blue-green algae (see Table 93 of 777), a CRP will be initiated in 1988 on the role of nitrogen-fixing trees in restoring and maintaining the soil fertility of fragile soils and in soil conservation (Project D.1.02).

D/3. A CRP on in vitro mutation breeding for improved disease resistance will be organized from 1987 to 1991 (Project D.1.05).

D/4. A regional programme concerning animal production and health will be initiated in Asia to strengthen the capability of national animal production and disease diagnostics institutes to use immunoassay tests (radioimmunoassay and enzyme-linked immunosorbent assay) and radio-labelled DNA probes within the context of animal breeding and disease surveillance and control programmes. The main activities involved will be training workshops, research conducted under research contracts and co-ordination of approaches to specific problems and diseases through distribution of standardized reagents and protocols from the Agency's Laboratory, consultant services, specialist meetings and technical support provided by a regional expert.

D/5. There has been rapid progress in Member States in applying genetic engineering for insect control using the sterile insect technique and other biocontrol methods. It is planned to initiate a CRP on this subject, with emphasis on the development of genetic sexing methods and other improved biological parameters. Initially this will involve the exchange of information through cost-free research agreements mainly with research establishments from developed countries, the results of this work subsequently being transferred to developing countries (Project D.2.01).



D/6. Following a change in national priorities, the large-scale field project for the eradication of the medfly from Egypt (see paragraph D/83 of 777) has been suspended (Project D.2.01).

D/7. A regional CRP on the control or eradication of fruit flies in Latin America will be organized from 1988 to 1993 (Project D.2.01).

D/8. Following the Chernobyl accident and subsequent concern regarding the consequences of the accidental release of radionuclides for agricultural production systems and for exposure of humans from food consumption, FAO has recommended that a new activity be included in the programme of the Joint FAO/IAEA Division of Food and Agriculture which would be implemented under a new Project D.2.07 entitled "Assessment of the consequences of an accidental release of radionuclides and formulation of emergency measures for agriculture". The project would comprise the following elements.

D/9. Objective: To assess and minimize potential exposure of human populations through agriculture and food production and the consumption of contaminated food following an accidental release of radionuclides into the environment.

D/10. Addressee: National authorities responsible for the safety of consumers and agricultural workers and for environmental protection.

D/11. Main means of achieving objective: Supporting research and development, meetings, supplying experts and equipment, training, laboratory services, preparing reports, receiving, surveying and collating existing data.

D/12. Project planning and duration: In conjunction with the Radiation Protection programme, the project will be implemented through CRPs and technical co-operation activities which will focus on measuring radionuclide contamination in food, soils and so on and will involve studying the environmental fate of radionuclides, analysing trends and assessing the exposure of humans from food consumption or agricultural activities, investigating the potential and effectiveness of methods of reducing exposure by means of alternative farming practices or decontamination, and formulating appropriate actions. These activities will be supported by the Agency's Laboratory at Seibersdorf.

D/13. Output: Guidelines for administrators, policy-makers, food control officers and agricultural advisers. Specialists familiar with the agricultural implications and the potential consequences for agriculture of radionuclide releases under specific climatic and agricultural conditions.

D/14. The amount of \$260 000 foreseen for the execution of this project during the period 1988-89 will be provided by FAO in addition to its regular contribution to the joint FAO/IAEA programme.

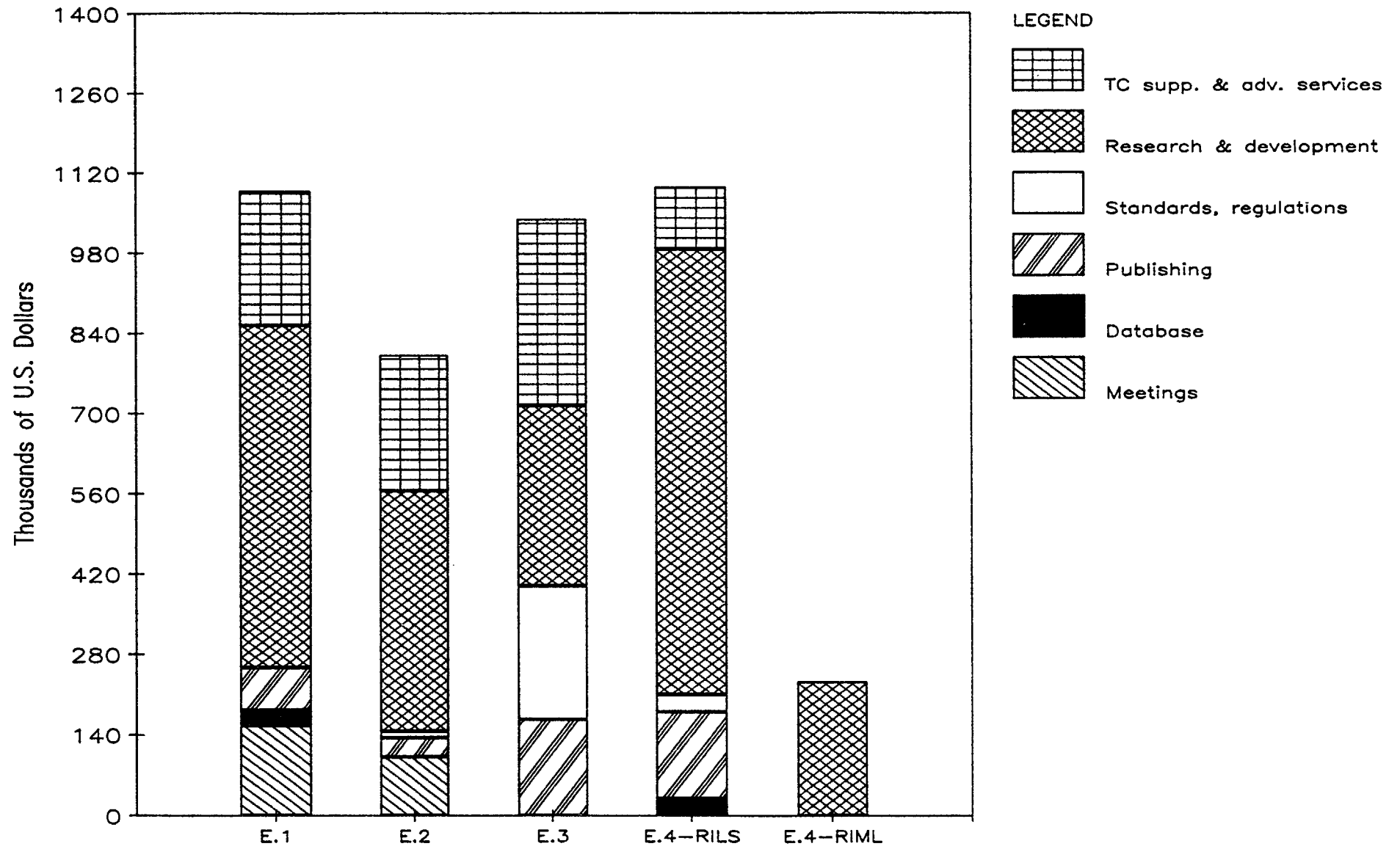
## PROGRAMME E: HUMAN HEALTH

Summary of main means by Area of ActivityTable 15

Area of Activity	1988 Regular Budget Estimates									Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	
E.1. Nuclear Medicine	4.3	2.3	156 000	27 000	74 000	-	597 000	235 000	1 089 000	RILS
E.2. Applied Radiation Biology and Radiotherapy	4.3	2.3	102 000	-	33 000	11 000	419 000	237 000	802 000	RILS
E.3. Radiation Dosimetry	4.3 [0.2]	3.3 [1.6] [0.7]M&O	-	-	167 000	232 000	315 000	326 000	1 040 000	RILS
E.4. Nutritional and Health-related Environmental Studies	2.1 [1.2]	2.1 [4.5] [1.1]M&O	-	30 000	70 000	30 000	625 000	109 000	864 000	RILS
SNSP (Net)	-	-	-	-	80 000	-	152 000	-	232 000	
	1.5	2.0	-	-	-	-	233 000	-	233 000	RIML
Programme E Total	16.5	12.0	258 000	57 000	424 000	273 000	2 341 000	907 000	4 260 000	

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular area of activity.

E. Human Health  
Main Means by Area of Activity  
Graph 5



## E. HUMAN HEALTH

### PROGRAMME E: HUMAN HEALTH

#### Summary of budget estimates by Area of Activity

Table 16

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
E.1. Nuclear Medicine	1 009 000	51 000	5.1	1 060 000	2.7	1 089 000
E.2. Applied Radiation Biology and Radiotherapy	874 000	(93 000)	(10.6)	781 000	2.7	802 000
E.3. Radiation Dosimetry	1 065 000	(53 000)	(5.0)	1 012 000	2.7	1 040 000
E.4. Nutritional and Health-related Environmental Studies	1 307 000	(13 000)	(1.0)	1 294 000	2.7	1 329 000
Programme E Total	4 255 000	(108 000)	(2.5)	4 147 000	2.7	4 260 000

## E. HUMAN HEALTH

### CHANGES IN THE ORIGINAL PLANS

E/1. Detailed information on the activities planned for 1988 is provided under Programme E in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen. The changes exclude those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

E/2. Recent developments in malaria vaccines and current field trials with one such vaccine indicate that there is a need to monitor vaccine efficacy and to identify immune and susceptible individuals in exposed populations on the basis of quantitative determination of specific anti-malaria antibodies. In view of the usefulness of immunoradiometric assays for such quantitative determinations, it is planned to initiate a CRP in 1988 in order to assist research institutions in endemic malaria countries to develop and assess such techniques. A technical document summing up the results of the work will be published in 1991 (Project E.1.02).

E/3. In order to upgrade the scientific and technical work of Secondary Standard Dosimetry Laboratories (SSDLs) and to provide input to the International Organization for Standardization (ISO) in its future consideration of international recommendations regarding reference radiation qualities for the calibration of dosimeters, it is planned in 1988 to initiate a CRP involving SSDLs, through which selected parameters will be re-evaluated.

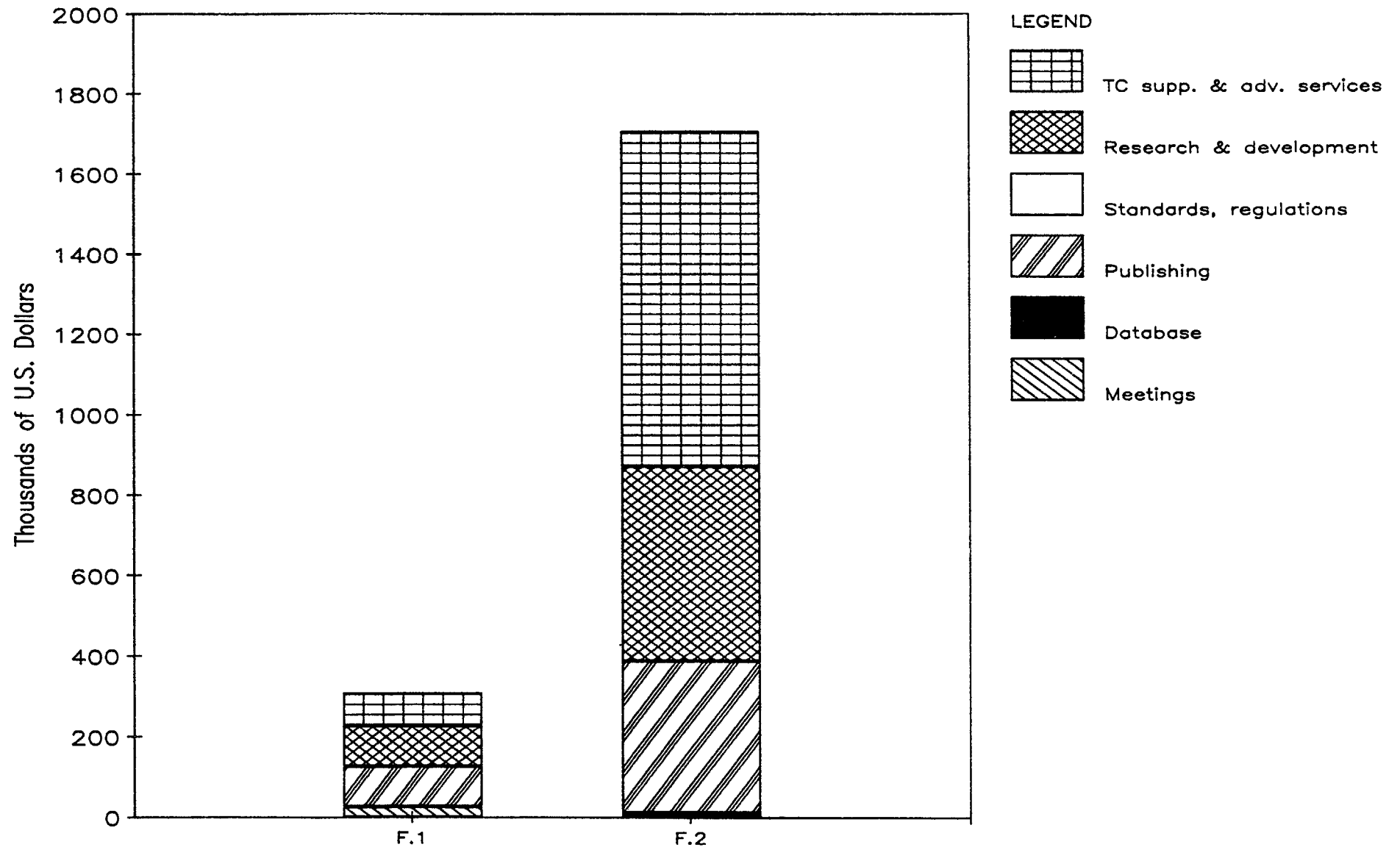
## PROGRAMME F: INDUSTRY AND EARTH SCIENCES

Summary of main means by Area of ActivityTable 17

1988 Regular Budget Estimates											
Area of Activity		Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	Responsible Division
F.1.	Industrial Applications	2.1	0.8	27 000	-	100 000	-	101 000	82 000	310 000	RIPC
F.2.	Development of Water and Mineral Resources	5.1 [4.0]	3.0 [8.0] [1.0]M&O	-	13 000	375 000	-	484 000	836 000	1 708 000	RIPC
Programme F Total		7.2	3.8	27 000	13 000	475 000	-	585 000	918 000	2 018 000	

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular area of activity.

F. Industry and Earth Sciences  
Main Means by Area of Activity  
Graph 6



# F. INDUSTRY AND EARTH SCIENCES

## PROGRAMME F: INDUSTRY AND EARTH SCIENCES

### Summary of budget estimates by Area of Activity

Table 18

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
F.1. Industrial Applications	300 000	2 000	0.7	302 000	2.8	310 000
F.2. Development of Water and Mineral Resources	1 661 000	-	-	1 661 000	2.8	1 708 000
Programme F Total	1 961 000	2 000	0.1	1 963 000	2.8	2 018 000



PROGRAMME F: INDUSTRY AND EARTH SCIENCES

CHANGES IN THE ORIGINAL PLANS

F/1. No changes are foreseen in 1988 to the activities planned under this programme, detailed information on which is provided under Programme F in Part I and in the corresponding tables in Part II of 777.

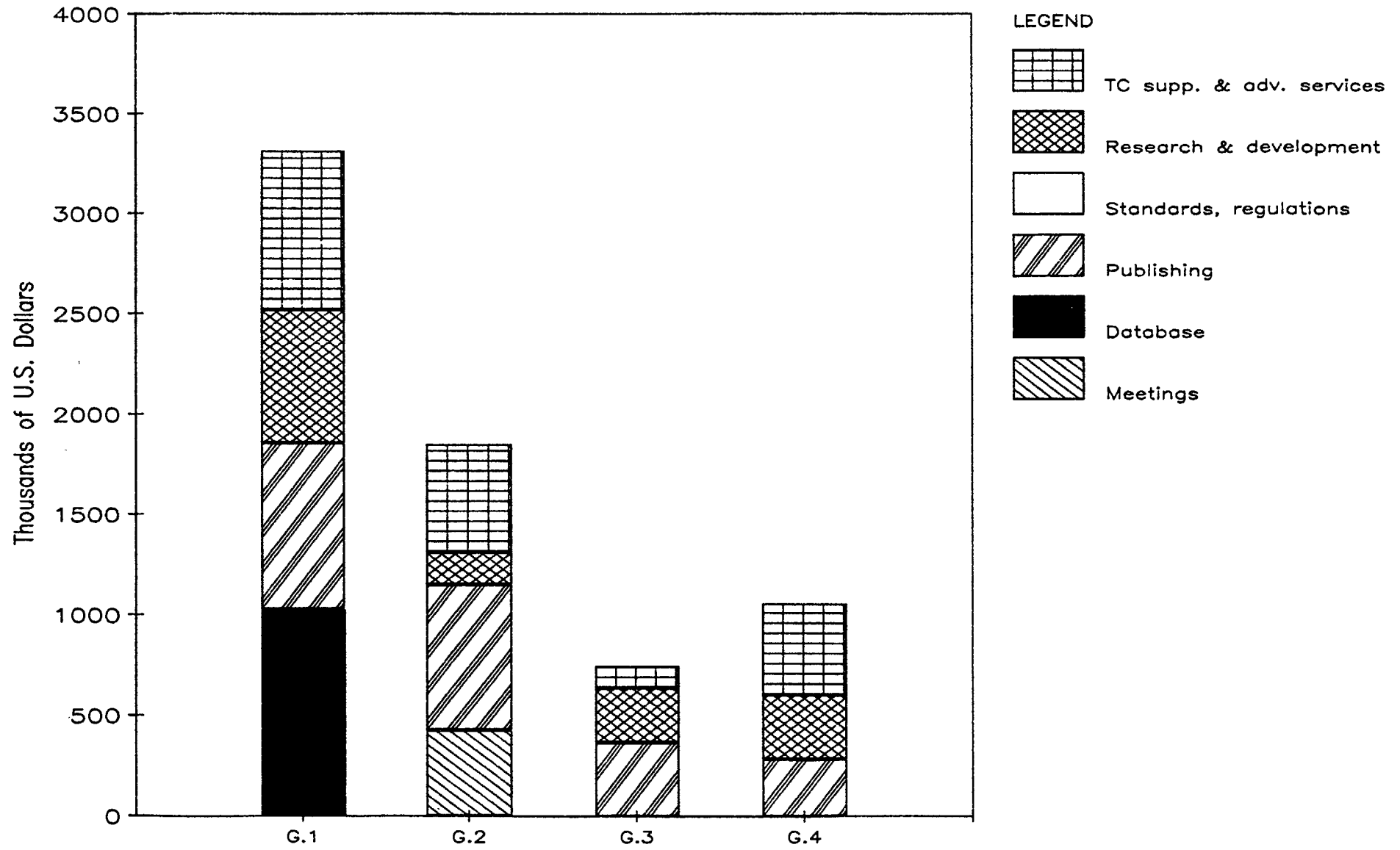
## PROGRAMME G: PHYSICAL AND CHEMICAL SCIENCES

Summary of main means by Area of ActivityTable 19

1988 Regular Budget Estimates											
Area of Activity		Man-years		Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	Responsible Division
		P	GS								
G.1.	Nuclear Measurements and Instrumentation	14.7 [2.5]	12.3 [10.1] [2.4]M&O	-	1 027 000	829 000	-	663 000	795 000	3 314 000	RIPC
G.2.	Theoretical Physics	11.0	25.0	427 000	-	123 000	-	160 000	540 000	1 250 000	RITP
G.3.	Utilization of Research Reactors and Particle Accelerators	1.1	0.7	-	-	366 000	-	270 000	110 000	746 000	RIPC
G.4.	Chemistry	2.1 [2.2]	0.5 [3.5] [1.1]M&O	-	-	284 000	-	318 000	453 000	1 055 000	RIPC
Programme G Total		28.9	38.5	427 000	1 027 000	1 602 000	-	1 411 000	1 898 000	6 365 000	

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular area of activity.

G. Physical and Chemical Sciences  
Main Means by Area of Activity  
Graph 7



# G. PHYSICAL AND CHEMICAL SCIENCES

## PROGRAMME G: PHYSICAL AND CHEMICAL SCIENCES

### Summary of budget estimates by Area of Activity

Table 20

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
G.1. Nuclear Measurements and Instrumentation	3 218 000	6 000	0.2	3 224 000	2.8	3 314 000
G.2. Theoretical Physics	1 262 000	(80 000)	(6.3)	1 182 000	5.8	1 250 000
G.3. Utilization of Research Reactors and Particle Accelerators	737 000	(11 000)	(1.5)	726 000	2.8	746 000
G.4. Chemistry	1 030 000	(4 000)	(0.4)	1 026 000	2.8	1 055 000
Programme G Total	6 247 000	(89 000)	(1.4)	6 158 000	3.4	6 365 000

## PROGRAMME G: PHYSICAL AND CHEMICAL SCIENCES

### CHANGES IN THE ORIGINAL PLANS

G/1. Detailed information on the activities planned for 1988 is given under Programme G in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen.

G/2. Following recent developments in the field of high-temperature superconducting materials, it is planned in 1988 to hold an advisory group meeting to examine the potential of such materials in nuclear medicine imaging equipment, in compact accelerators for radiation therapy and radiation processing, and in compact cyclotrons for the production of short-lived radioisotopes.

## PROGRAMME AREA 3

### NUCLEAR SAFETY AND RADIATION PROTECTION

#### Summary of resources by programme

Table 21

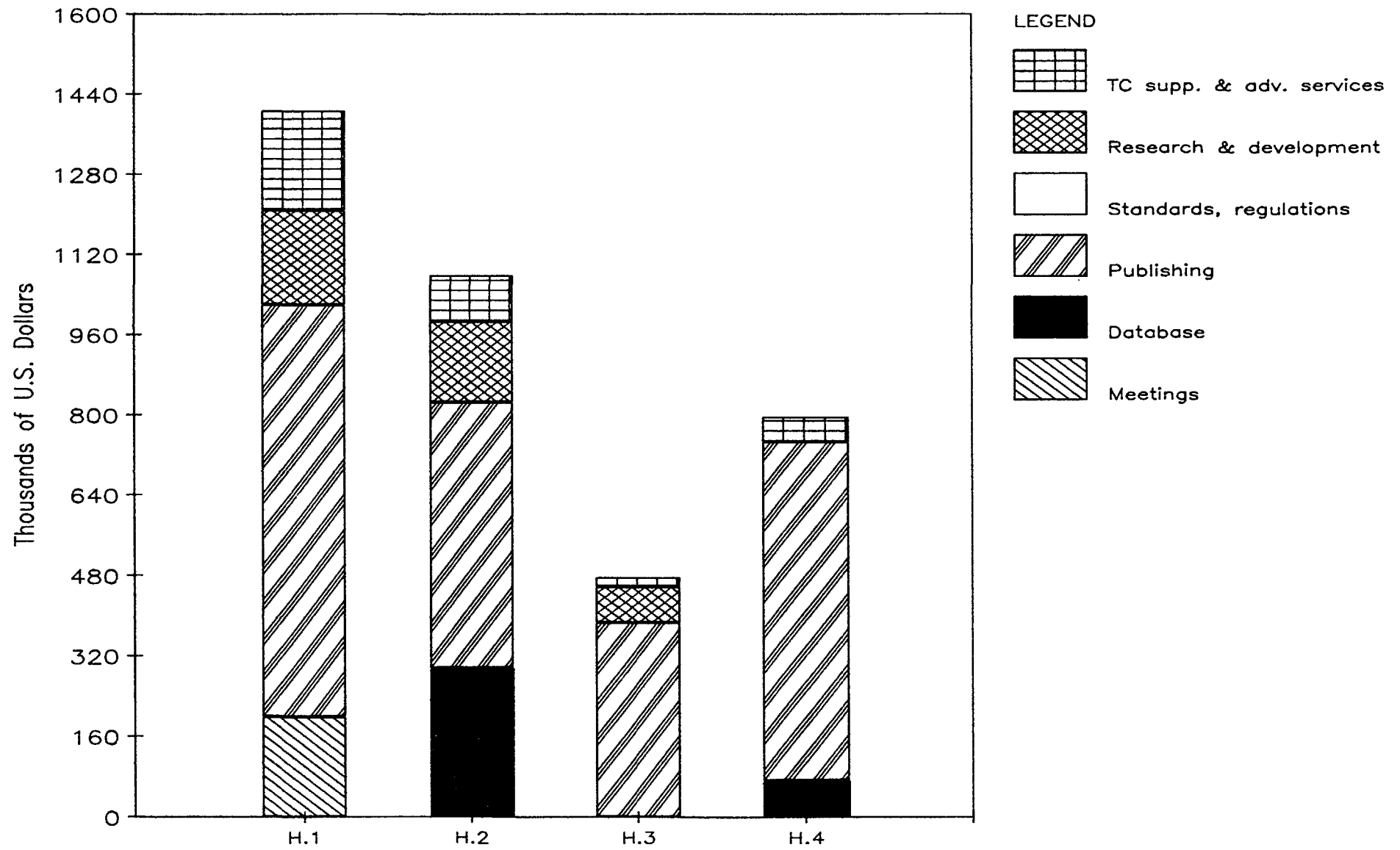
Programme	Man-years		Planned expenditure for the implementation of the programme in 1988				
	P	GS	Regular Budget estimates	Funds from other UN organizations	TC resources	Other extra- budgetary resources	Total
H. Radiation Protection	15.5	10.0	3 757 000	—	4 000 000	88 000	7 845 000
I. Safety of Nuclear Installations	22.5	16.0	5 434 000	—	2 600 000	176 000	8 210 000
Programme Area 3	38.0	26.0	9 191 000	—	6 600 000	264 000	16 055 000

## PROGRAMME H: RADIATION PROTECTION

Summary of main means by Area of ActivityTable 22

-----										
1988 Regular Budget Estimates										
Area of Activity	Man-years		Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	Responsible Division
	P	GS								
H.1. Occupational Radiation Protection and Health Effects	4.5	2.4	199 000	-	588 000	-	189 000	199 000	1 175 000	NENS
SNSP (Net)	1.0	1.0	-	-	232 000	-	-	-	232 000	
H.2. Radiation Protection of the General Public	2.4	1.7	-	-	515 000	-	161 000	92 000	768 000	NENS
SNSP (Net)	3.0	1.0	-	296 000	14 000	-	-	-	310 000	
H.3. Safe Transport of Radioactive Materials	1.4	1.7	-	-	386 000	-	71 000	19 000	476 000	NENS
H.4. Emergency Planning and Preparedness	2.2	1.2	-	-	450 000	-	-	50 000	500 000	NENS
SNSP (Net)	1.0	1.0	-	73 000	223 000	-	-	-	296 000	
Programme H Total	15.5	10.0	199 000	369 000	2 408 000	-	421 000	360 000	3 757 000	
-----										

H. Radiation Protection  
Main Means by Area of Activity  
Graph 8



# H. RADIATION PROTECTION

## PROGRAMME H: RADIATION PROTECTION

### Summary of budget estimates by Area of Activity

Table 23

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
H.1. Occupational Radiation Protection and Health Effects	1 419 000	(45 000)	(3.2)	1 374 000	2.5	1 407 000
H.2. Radiation Protection of the General Public	913 000	139 000	15.2	1 052 000	2.5	1 078 000
H.3. Safe Transport of Radioactive Materials	495 000	(31 000)	(6.3)	464 000	2.5	476 000
H.4. Emergency Planning and Preparedness	903 000	(126 000)	(14.0)	777 000	2.5	796 000
Programme H Total	3 730 000	(63 000)	(1.7)	3 667 000	2.5	3 757 000



PROGRAMME H: RADIATION PROTECTION

CHANGES IN THE ORIGINAL PLANS

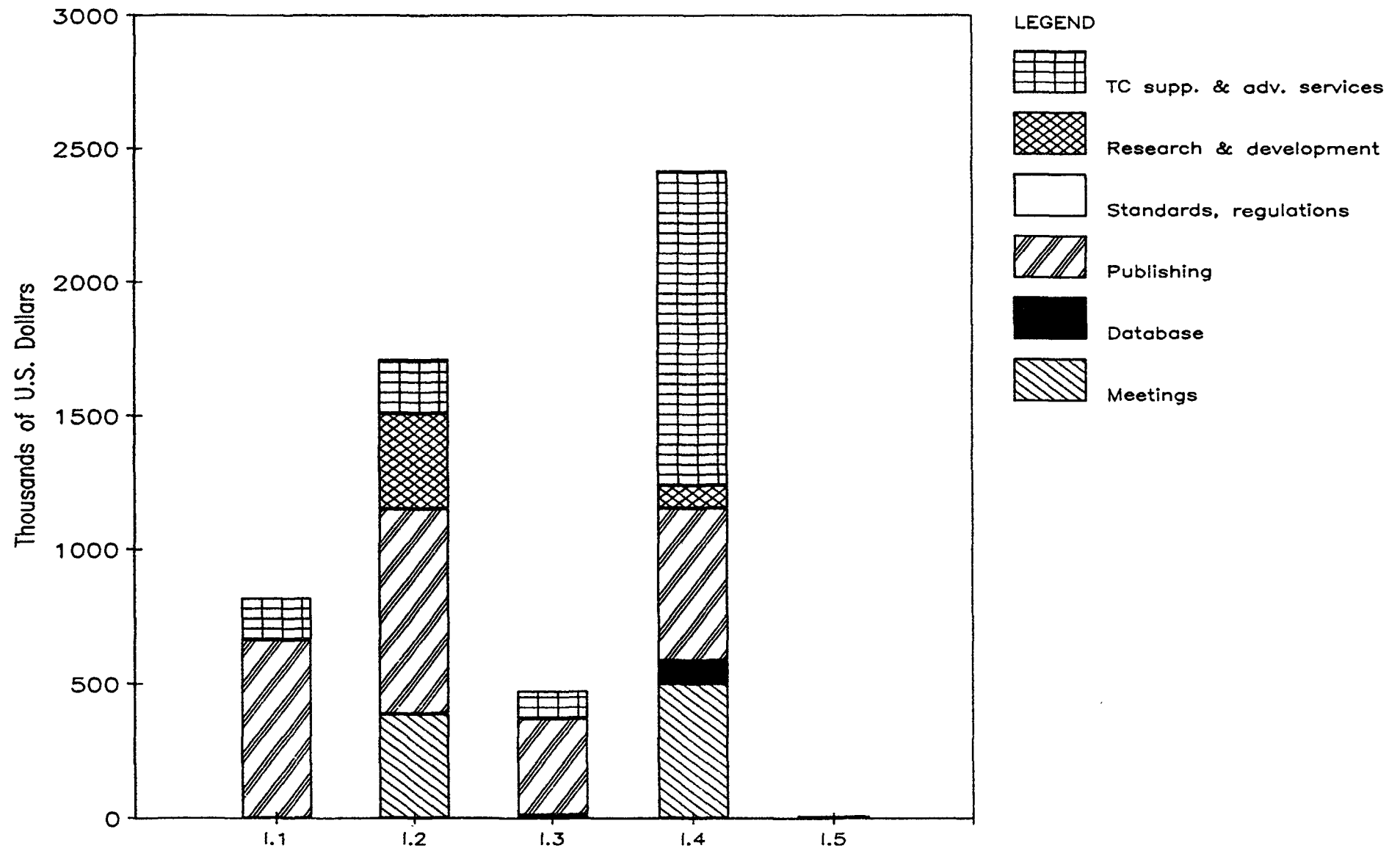
H/1. Detailed information on the activities planned for 1988 is given under Programme H in Part I and in the corresponding tables in Part II of 777. No changes to these activities are foreseen, with the exception of those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

## PROGRAMME I: SAFETY OF NUCLEAR INSTALLATIONS

Summary of main means by Area of ActivityTable 24

Area of Activity		1988 Regular Budget Estimates									Responsible Division
		Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Total	
I.1. Safety Principles and Regulatory Organization		2.3	2.2	-	-	629 000	-	-	156 000	785 000	NENS
	SNSP (Net)	-	-	-	-	35 000	-	-	-	35 000	
I.2. Safety Research and Analysis		6.3	5.0	163 000	-	745 000	-	244 000	203 000	1 355 000	NENS
	SNSP (Net)	1.0	1.0	225 000	-	18 000	-	114 000	-	357 000	
I.3. Safe Siting, Design and Construction of Nuclear Installations		2.3	1.2	-	-	307 000	-	-	103 000	410 000	NENS
	SNSP (Net)	1.0	-	12 000	-	52 000	-	-	-	64 000	
I.4. Operational Safety of Nuclear Installations		6.5	4.6	189 000	-	405 000	-	85 000	264 000	943 000	NENS
	SNSP (Net)	3.0	2.0	313 000	85 000	162 000	-	-	915 000	1 475 000	
I.5. Physical Protection of Nuclear Installations and Materials		0.1	-	-	-	-	-	-	10 000	10 000	NENS
Programme I Total		22.5	16.0	902 000	85 000	2 353 000	-	443 000	1 651 000	5 434 000	

I. Safety of Nuclear Installations  
Main Means by Area of Activity  
Graph 9



# I. SAFETY OF NUCLEAR INSTALLATIONS

## PROGRAMME I: SAFETY OF NUCLEAR INSTALLATIONS

### Summary of budget estimates by Area of Activity

Table 25

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
I.1. Safety Principles and Regulatory Organization	716 000	84 000	11.7	800 000	2.5	820 000
I.2. Safety Research and Analysis	1 340 000	331 000	24.7	1 671 000	2.5	1 712 000
I.3. Safe Siting, Design and Construction of Nuclear Installations	635 000	(173 000)	(27.2)	462 000	2.5	474 000
I.4. Operational Safety of Nuclear Installations	1 713 000	646 000	37.7	2 359 000	2.5	2 418 000
I.5. Physical Protection of Nuclear Installations and Materials	10 000	-	-	10 000	2.5	10 000
Programme I Total	4 414 000	888 000	20.1	5 302 000	2.5	5 434 000

## PROGRAMME I: SAFETY OF NUCLEAR INSTALLATIONS

### CHANGES IN THE ORIGINAL PLANS

I/1. Detailed information on the activities planned for 1988 is provided under Programme I in Part I and in the corresponding tables in Part II of 777. The following additions to, and changes in, these activities are foreseen. The changes exclude those actions added, cancelled or postponed as a result of the establishment of the supplementary nuclear safety programme, details of which are given in the Appendix.

I/2. In order to review experience with the implementation of the Agency's Safety Series recommendations on regulatory regimes and to provide a basis for future activities in this area (see Table 83, No. 4 of 777), it is proposed to hold a seminar on regulatory regimes in 1988 with the participation of senior staff from regulatory organizations in countries operating nuclear power plants (Project I.1.02).

I/3. In connection with the symposium on safety aspects of the ageing and maintenance of nuclear power plants to be held in 1987 (see Table 84, No. 4 of 777), it is planned to prepare a technical document on this subject and to formulate recommendations for further international co-operation in nuclear power plant ageing (AGM 88) (Project I.2.01).

## I. SAFETY OF NUCLEAR INSTALLATIONS

I/4. In order to provide Member States with information on new developments relating to the base isolation of nuclear power plants for earthquake protection, the preparation of a technical document on this topic will begin in 1988 and be completed in 1990 (Project I.3.02).

I/5. A manual on single and common cause failures will be drawn up in 1988 to supplement the NUSS design guides (Project I.3.02).

I/6. It is planned to initiate an exchange of information on safety aspects of particular reactor types. The first topic covered (through a seminar in 1988 which was originally planned for 1987) will be the safety of two-loop pressurized water reactors, and this will be followed by a review in 1989 of the safety aspects of pressurized heavy water reactors (Project I.4.01).



## PROGRAMME AREA 4

### SAFEGUARDS

#### Summary of resources by programme

Table 26

Programme	Man-years		Planned expenditure for the implementation of the programme in 1988				
	P	GS	Regular Budget estimates	Funds from other UN organizations	TC resources	Other extra- budgetary resources	Total
J. Safeguards	276.0 [5.9]	197.0 [15.5] [3.9] M&O	44 735 000	-	30 000	3 655 000	48 420 000
Programme Area 4	276.0	197.0	44 735 000	-	30 000	3 655 000	48 420 000

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular programme.

## PROGRAMME J: SAFEGUARDS

Summary of main means by Area of ActivityTable 27

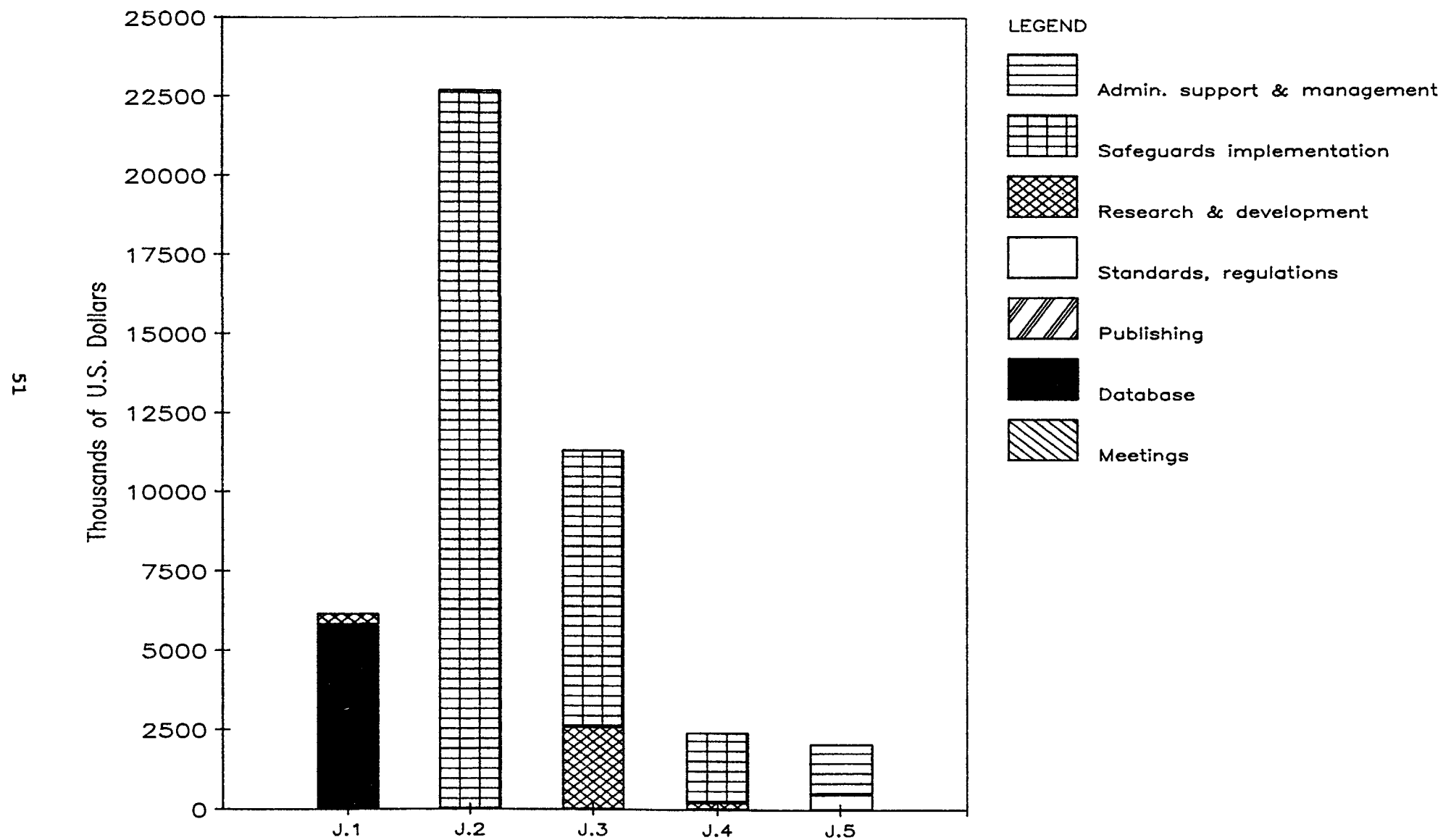
Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Safeguards a/ implementation	Standards, regulations	Research & development	Admin. support and management	Total	
J.1. Information Treatment	27.0	39.0	-	5 803 000	-	-	-	371 000	-	6 174 000	SGIT
J.2. Safeguards Operations	182.0	96.0	-	-	-	22 714 000	-	-	-	22 714 000	SGOA SGOB SGOC
J.3. Development and Technical Support	33.0 [5.9]	33.0 [15.5] [3.9]M&O	-	-	-	8 726 000	-	2 607 000	-	11 333 000	SGDE
J.4. Safeguards Evaluations	22.0	15.0	-	-	-	2 189 000	-	243 000	-	2 432 000	SGEV
J.5. Standardization, Training and Administrative Support	12.0	14.0	-	-	-	-	500 000	-	1 582 000	2 082 000	SGSA
Programme J Total	276.0	197.0	-	5 803 000	-	33 629 000	500 000	3 221 000	1 582 000	44 735 000	

a/ This comprises all safeguards implementation activities.

Note: The manpower figures shown in parentheses above represent the number of man-years of Agency Laboratory staff working for that particular area of activity.



J. Safeguards  
Main Means by Area of Activity  
Graph 10



## PROGRAMME J: SAFEGUARDS

Summary of budget estimates by Area of ActivityTable 28

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
J.1. Information Treatment	5 810 000	206 000	3.5	6 016 000	2.6	6 174 000
J.2. Safeguards Operations	22 050 000	142 000	0.6	22 192 000	2.4	22 714 000
J.3. Development and Technical Support	11 346 000	(307 000)	(2.7)	11 039 000	2.7	11 333 000
J.4. Safeguards Evaluation	2 299 000	80 000	3.5	2 379 000	2.2	2 432 000
J.5. Standardization, Training and Adminis- trative Support	1 978 000	56 000	2.8	2 034 000	2.4	2 082 000
Programme J Total	43 483 000	177 000	0.4	43 660 000	2.5	44 735 000

## PROGRAMME J: SAFEGUARDS

## CHANGES IN THE ORIGINAL PLANS

J/1. Detailed information on the activities planned for 1988 is provided under Programme J in Part I and in the corresponding tables in Part II of 777. The following changes to these activities are foreseen.

J/2. To facilitate and improve the efficiency of the safeguards approach to on-load reactors, a core discharge monitor concept will be tested for feasibility and, if proved practical, will be further developed (Activity J.3.01).

J/3. Large on-load reactor and MOX fabrication facilities will be coming on line in 1988. The additional resources for safeguards hardware needed for these facilities will amount to \$1.1 million (Activity J.3.02).

Installations subject to safeguards or containing safeguarded material in non-nuclear-weapon States  
(1986 to 1990)

Table 29

Type of installation	1986		1987		1988		1989		1990	
	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements
Power reactors	151	27	156	28	163	30	172	32	178	33
Research reactors and critical assemblies	150	26	152	26	154	26	156	27	157	28
Conversion plants	4	2	4	2	4	2	4	2	4	2
Fuel fabrication plants	27	9	27	9	28	9	29	9	29	9
Reprocessing plants	4	2	4	2	4	2	4	3	4	3
Enrichment plants	5	1	6	1	6	2	6	2	6	2
Separate storage facilities	32	2	33	2	34	2	34	2	35	2
Other facilities (>1 ekq)	40	3	40	4	40	4	40	4	40	4
Other locations ( $\leq$ 1 ekq)	386	28	386	28	386	28	386	28	386	28
Non-nuclear installations	0	2	0	2	0	2	0	3	0	3
<b>TOTAL</b>	<b>799</b>	<b>102</b>	<b>808</b>	<b>104</b>	<b>819</b>	<b>107</b>	<b>831</b>	<b>112</b>	<b>839</b>	<b>114</b>

Amounts of nuclear material under Agency safeguards  
in non-nuclear-weapon States

(Status as of 31 December 1986 and forecast for 1988 and 1993)

Table 30

Material	Amounts (tonnes)					
	1986		1988		1993	
	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements	NPT and/or Tlatelolco agreements	INFCIRC/66 -type agreements
Plutonium	143.1	14.0	180-196	18-21	330-380	48-58
Uranium enriched to 20% or more	12.6	0.4	12.6	0.4	12.6	0.4
Uranium enriched to less than 20%	20 700	1390	25 000-28 000	1800-2200	43 000-48 000	4200-5200
Source material	30 300	2340	31 000-35 000	2800-3200	46 000-52 000	5000-6000



## PROGRAMME AREA S

### DIRECTION AND SUPPORT

#### Summary of resources by programme

Table 31

Programme	Man-years		Planned expenditure for the implementation of the programme in 1988				
	P	GS	Regular Budget estimates	Funds from other UN organizations	TC resources	Other extra-budgetary resources	Total
S.1. General Management and Secretariat of the Policy-making Organs	19.0	16.0	7 987 000	-	-	-	7 987 000
S.2. Administration	56.0	94.0	10 242 000	-	-	-	10 242 000
S.3. T.C. Servicing and Co-ordination	46.0	67.0	7 155 000	-	130 000	-	7 285 000
S.4. General Services	10.0	71.0 28.0 M&O	14 411 000	-	-	-	14 411 000
S.5. Specialized Service Activities	21.0	38.0	6 469 000	-	340 000	-	6 809 000
S.6. Shared Support Services <u>a/</u>	121.0	224.0 23.0 M&O	1 284 000	-	-	-	1 284 000
			[24 501 000] <u>b/</u>				
Programme Area S	273.0	510.0 51.0 M&O	47 548 000	-	470 000	-	48 018 000

a/ All costs except those of the Library have been allocated to the user programmes. Contracts Administration Services, Conference Services, Interpretation, Translation and Records Services, Data Processing Services and Printing and Publishing Services are shared by the user programmes. Medical Services are allocated to Personnel Services. The cost of Radiation Protection Services is charged to Safeguards (Programme J) and TC projects, and - in respect of other in-house utilization - to Area of Activity S.5.3. Only the Library has not been allocated to any other programme and the cost is therefore shown under this programme.

b/ Allocated costs as shown in Table 42.

#### CHANGES IN THE ORIGINAL PLANS

S/1. No changes are foreseen in 1988 to the activities planned in this programme area, information on which is provided under Programmes S.1-S.6 in Part I of 777.

## PROGRAMME S.1: GENERAL MANAGEMENT AND SECRETARIAT OF THE POLICY-MAKING ORGANS

Summary of main means by Area of ActivityTable 32

Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Admin. support and management	Total	
S.1.1 General Management	16.0	14.0	-	-	-	-	-	-	2 817 000	2 817 000	Offices of DG DDG-AD DDG-RI DDG-NE DDG-TC DDG-SG
S.1.2 Secretariat of the Policy-making Organs	3.0	2.0	-	-	-	-	-	-	5 170 000	5 170 000	SEC
Programme S.1. Total	19.0	16.0	-	-	-	-	-	-	7 987 000	7 987 000	

Summary of budget estimates by Area of ActivityTable 33

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.1.1 General Management	2 780 000	(27 000)	(1.0)	2 753 000	2.3	2 817 000
S.1.2 Secretariat of the Policy-making Organs	5 008 000	35 000	0.7	5 043 000	2.5	5 170 000
Programme S.1. Total	7 788 000	8 000	0.1	7 796 000	2.4	7 987 000



PROGRAMME S.2: ADMINISTRATION

Summary of main means by Area of Activity

Table 34

Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Admin. support and management	Total	
S.2.1 External Relations	8.0	13.0	-	-	-	-	-	-	1 425 000	1 425 000	ADEX
S.2.2 Legal Advice	8.0	4.0	-	-	-	-	-	-	615 000	615 000	ADLG
S.2.3 Internal Audit and Management	7.0	6.0	-	-	-	-	-	-	804 000	804 000	ADIT
S.2.4 Personnel Services	12.0	26.0	-	-	-	-	-	-	3 579 000	3 579 000	ADPR
S.2.6 Budget and Finance	21.0	45.0	-	-	-	-	-	-	3 819 000	3 819 000	ADBF
Programme S.2. Total	56.0	94.0	-	-	-	-	-	-	10 242 000	10 242 000	

Summary of budget estimates by Area of Activity

Table 35

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.2.1 External Relations	1 496 000	(104 000)	(7.0)	1 392 000	2.4	1 425 000
S.2.2 Legal Advice	569 000	33 000	5.8	602 000	2.2	615 000
S.2.3 Internal Audit and Management	773 000	12 000	1.6	785 000	2.4	804 000
S.2.4 Personnel Services	3 588 000	(103 000)	(2.9)	3 485 000	2.7	3 579 000
S.2.6 Budget and Finance	3 713 000	10 000	0.3	3 723 000	2.6	3 819 000
Programme S.2. Total	10 139 000	(152 000)	(1.5)	9 987 000	2.6	10 242 000

PROGRAMME S.3: TECHNICAL CO-OPERATION SERVICING AND CO-ORDINATION

Summary of main means by Area of Activity

Table 36

Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Admin. support and management	Total	
S.3.1 Operations	43.0	65.0	-	-	-	-	-	6 682 000	-	6 682 000	TCAC
S.3.2 Evaluation	3.0	2.0	-	-	-	-	-	473 000	-	473 000	TCAC
Programme S.3. Total	46.0	67.0	-	-	-	-	-	7 155 000	-	7 155 000	

Summary of budget estimates by Area of Activity

Table 37

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.3.1 Operations	5 388 000	1 135 000	21.1	6 523 000	2.4	6 682 000
S.3.2 Evaluation	1 443 000	(982 000)	(68.1)	461 000	2.4	473 000
Programme S.3. Total	6 831 000	153 000	2.2	6 984 000	2.4	7 155 000

Note: In the 1987 Budget, Programme Co-ordination was included under S.3.2 (Evaluation); in the 1988 Budget, it is incorporated in S.3.1 (Operations).

PROGRAMME S.4: GENERAL SERVICES

Summary of main means by Area of Activity

Table 38

Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Admin. support and management	Total	
S.4.1 VIC Maintenance and Operation	-	-	-	-	-	-	-	-	8 064 000	8 064 000	ADGS
S.4.2 Other General Services	10.0	71.0 28.0 M&O	-	-	-	-	-	-	6 347 000	6 347 000	ADGS
Programme S.4. Total	10.0	71.0 28.0 M&O	-	-	-	-	-	-	14 411 000	14 411 000	

Summary of budget estimates by Area of Activity

Table 39

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.4.1 VIC Maintenance and Operation	7 739 000	25 000	0.3	7 764 000	3.9	8 064 000
S.4.2 Other General Services	6 182 000	(25 000)	(0.4)	6 157 000	3.1	6 347 000
Programme S.4. Total	13 921 000	-	-	13 921 000	3.5	14 411 000

# PROGRAMME S.5: SPECIALIZED SERVICE ACTIVITIES

## Summary of main means by Area of Activity

Table 40

Area of Activity	1988 Regular Budget Estimates										Responsible Division
	Man-years P	GS	Meetings	Database	Publishing	Standards, regulations	Research & development	TC support & advisory services	Admin. support and management	Total	
S.5.1 Public Information	5.0	9.0	-	-	1 666 000	-	-	-	-	1 666 000	ADPI
S.5.2 International Nuclear Information System	15.0	27.0	-	2 560 000	1 572 000	-	-	-	360 000	4 492 000	NESI
Director's Office - NESI	1.0	2.0	-	-	-	-	-	-	188 000	188 000	NESI
S.5.3 Radiation Protection Services	-	-	-	-	-	-	-	-	123 000 a/	123 000	NENS
Programme S.5. Total	21.0	38.0	-	2 560 000	3 238 000	-	-	-	671 000	6 469 000	

a/ Radiation protection services provided to the Departments of Nuclear Energy and Safety and Research and Isotopes.

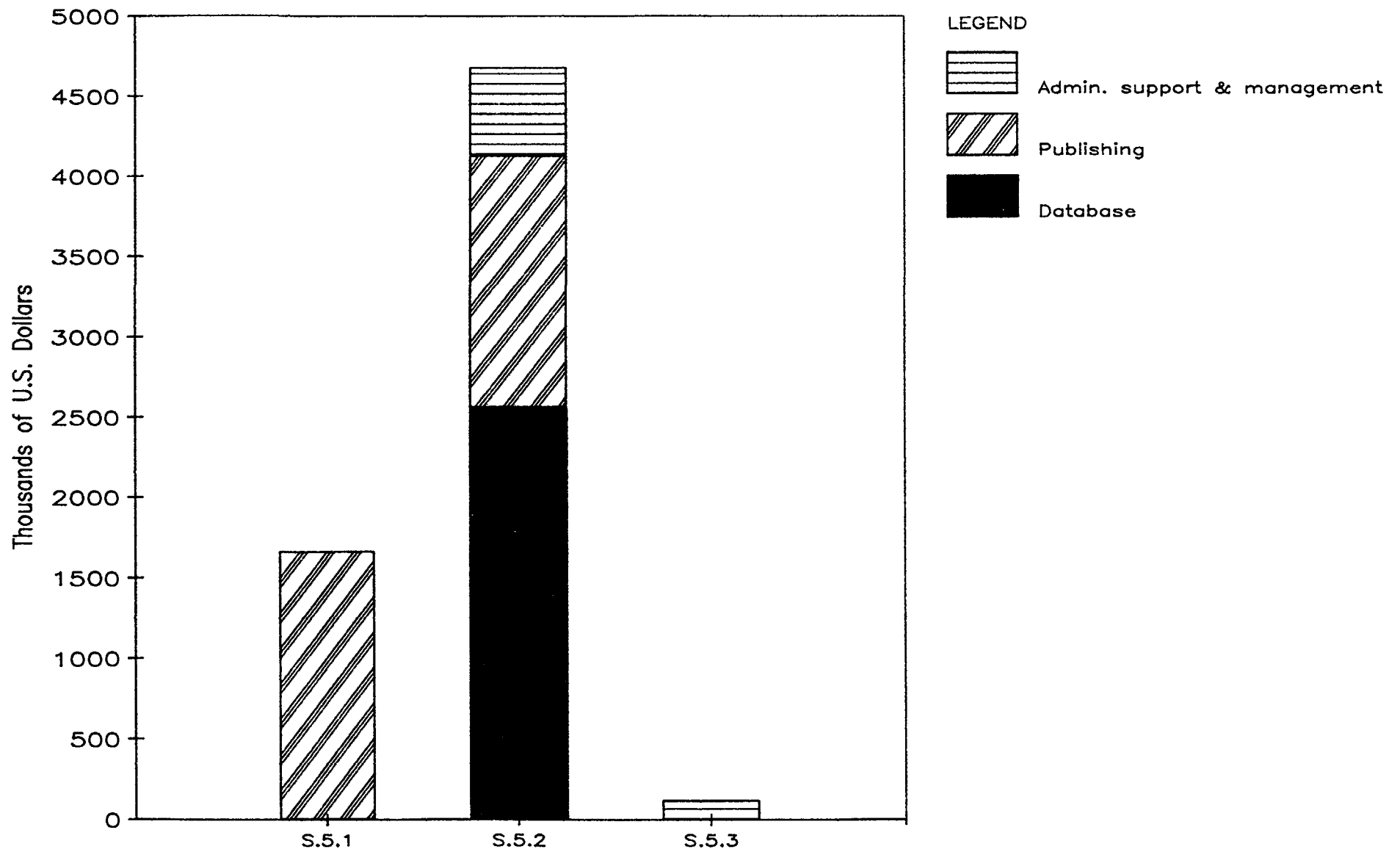
## Summary of budget estimates by Area of Activity

Table 41

Area of Activity / Programme		1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.5.1	Public Information	1 567 000	56 000	3.6	1 623 000	2.6	1 666 000
S.5.2	International Nuclear Information System	4 283 000	85 000	2.0	4 368 000	2.8	4 492 000
	Director's Office - NESI	179 000	5 000	2.8	184 000	2.2	188 000
S.5.3	Radiation Protection Services	549 000	(429 000)	(78.1)	120 000	2.5	123 000 a/
Programme S.5. Total		6 578 000	(283 000)	(4.3)	6 295 000	2.8	6 469 000

a/ Radiation protection services provided to the Departments of Nuclear Energy and Safety and Research and Isotopes.

S.5 Specialized Service Activities  
Main Means by Area of Activity  
Graph 11



**PROGRAMME S.6: SHARED SUPPORT SERVICES**  
Summary of main means by Area of Activity

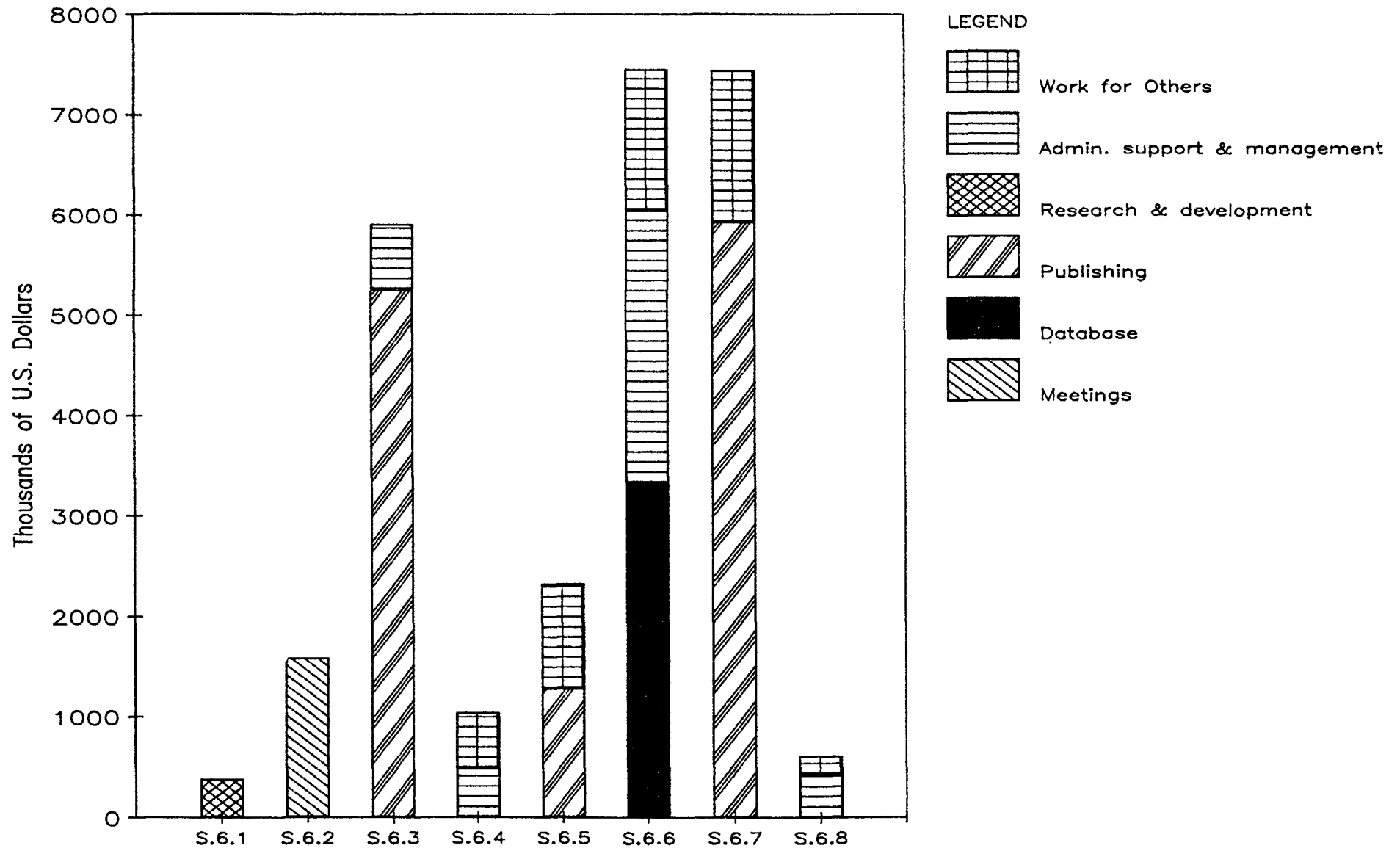
Table 42

1988 Regular Budget Estimates											
Area of Activity		Man-years		Meetings	Database	Publishing	Research & development	TC support & advisory services	Admin. support and management	Work for Others	Responsible Division
		P	GS							Total	
S.6.1	Contract Administration Services	1.0	5.0	-	-	-	385 000	-	-	-	DDG RI
S.6.2	Conference Services and Interpretation	5.0	8.0	676 000	-	-	-	-	-	676 000	ADEX
		8.0	1.0	913 000	-	-	-	-	-	913 000	
S.6.3	Translation and Records Services	48.0	42.0	-	-	5 259 000	-	-	650 000	5 909 000	ADLA
			2.0 M&O								
S.6.4	Medical Services	3.0	15.0	-	-	-	-	-	488 000	557 000	ADPR
			3.0 M&O								
S.6.5	Library a/	5.0	10.0	-	-	1 284 000	-	-	-	1 043 000	NESI
										2 327 000	
S.6.6	Data Processing Services	31.0	37.0	-	3 326 000	-	-	-	2 722 000	1 406 000	NESI
S.6.7	Printing and Publishing	17.0	101.0	-	-	5 931 000	-	-	-	1 512 000	TCPU
			18.0 M&O							7 443 000	
S.6.8	Radiation Protection Services	3.0	5.0	-	-	-	-	-	431 000	182 000	NENS
										613 000 b/	
Programme S.6. Total		121.0	224.0	1 589 000	3 326 000	12 474 000	385 000	-	4 291 000	4 700 000	
			23.0 M&O							26 765 000	
Total: Programme S.6.										26 765 000	
Less: cross charge										980 000	
Total: Shared Support Services										25 785 000	
Allocated cost:											
to Agency programmes under the Regular Budget										19 801 000	
to other organizations and TC projects										4 700 000	
										24 501 000	
Non-allocated cost:											
Agency's share of the Library										1 284 000	
Total: Shared Support Services										25 785 000	

a/ See footnote on Table 43.

b/ Represents the total cost of radiation protection services including charges to the Department of Safeguards and TC projects.

S.6 Shared Support Services  
Main Means by Area of Activity  
Graph 12



# S. DIRECTION AND SUPPORT

## PROGRAMME S.6: SHARED SUPPORT SERVICES

### Summary of budget estimates by Area of Activity

Table 43

Area of Activity / Programme	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 estimate
S.6.1 Contract Administration Services	523 000	(148 000)	(28.3)	375 000	2.7	385 000
S.6.2 Conference Services and Interpretation	655 000 1 063 000	5 000 (182 000)	0.8 (17.1)	660 000 881 000	2.4 3.6	676 000 913 000
S.6.3 Translation and Records Services	5 502 000	279 000	5.1	5 781 000	2.2	5 909 000
S.6.4 Medical Services	1 022 000	(3 000)	(0.3)	1 019 000	2.6	1 045 000
S.6.5 Library <u>a/</u>	2 261 000	(33 000)	(1.5)	2 228 000	4.4	2 327 000
S.6.6 Data Processing Services	7 083 000	166 000	2.3	7 249 000	2.8	7 454 000
S.6.7 Printing and Publishing	7 262 000	(30 000)	(0.4)	7 232 000	2.9	7 443 000
S.6.8 Radiation Protection Services	549 000	49 000	8.9	598 000	2.5	613 000 <u>b/</u>
Programme S.6. Total	25 920 000	103 000	0.4	26 023 000	2.9	26 765 000
Total: Programme S.6.						26 765 000
Less: cross-charge						980 000
Total: Shared Support Services						25 785 000
Allocated cost:						
to Agency programmes under the Regular Budget						19 801 000
to other organizations and TC projects						4 700 000
						24 501 000
Non-allocated cost:						
Agency's share of the Library						1 284 000
Total: Shared Support Services						25 785 000

a/ All costs except those of the Library have been allocated to the user programmes. Contract Administration Services, Conference Services, Interpretation, Translation and Records Services, Data Processing Services and Printing and Publishing Services are shared by the user programmes. Medical Services are allocated to Personnel Services. The cost of Radiation Protection Services is charged to Safeguards (Programme J) and TC projects, and - in respect of other in-house utilization - to Area of Activity S.5.3. Only the Library has not been allocated to any other programme and the cost is therefore shown under this programme.

b/ Represents total cost of radiation protection services including charges to the Department of Safeguards and TC projects.



A N N E X E S    I - III

## ANNEX I

### CONFERENCES, SYMPOSIA AND SEMINARS IN 1988

Within the limits of the appropriation and subject to the requirements of the individual programmes as outlined for 1988 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(XXX)/777.

#### NUCLEAR POWER AND THE FUEL CYCLE

- |    |   |       |
|----|---|-------|
| 1. | Symposium on the management of low- and intermediate-level radioactive wastes             | C/7   |
| 2. | Twelfth international conference on plasma physics and controlled nuclear fusion research | A/137 |

#### NUCLEAR APPLICATIONS

- |     |   |       |
|-----|---|-------|
| 3.  | FAO/WHO/IAEA conference on acceptance, control of and trade in irradiated foods   | D/114 |
| 4.  | Symposium on applications of dynamic functional studies with radioisotopes in nuclear medicine in developing countries            | E/30  |
| 5.  | FAO/IAEA seminar on food irradiation for developing countries in Africa[1]  | D/109 |
| 6.  | Seminar for Asia and the Pacific on nuclear techniques in parasitic and communicable diseases                                     | E/16  |
| 7.  | Seminar on training in nuclear medicine in developing countries   | E/30  |
| 8.  | Seminar on new approaches in practices and process technology for radiation sterilization of medical supplies                     | E/57  |
| 9.  | Seminar for Latin America on industrial radiation applications  | F/14  |
| 10. | FAO/IAEA seminar on the improvement of basic food crops in Africa through plant breeding including the use of induced mutation[1] | D/34  |

#### NUCLEAR SAFETY AND RADIATION PROTECTION

- |     |  |        |
|-----|--|--------|
| 11. | Conference on radiation protection in nuclear energy                                 | H/13   |
| 12. | Symposium on the feedback of operational safety experience from nuclear power plants | I/90   |
| 13. | Conference on the man-machine interface in the nuclear industry                      | SNSP   |
| 14. | Symposium on severe accidents in nuclear power plants[1]                             | I/29   |
| 15. | Seminar on regulatory regime   | I/2[2] |
| 16. | Seminar on operational safety experience of two-loop PWRs[1]                         | I/90   |

#### DIRECTION AND SUPPORT

- |     |   |      |
|-----|---|------|
| 17. | INIS training seminar for input preparation and output utilization          | S/38 |
| 18. | Seminar on radiation protection services for developing countries in Africa | S/47 |

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[1] Postponed from 1987.

[2] Reference is to this document.

## ANNEX II

### CONFERENCES, SYMPOSIA AND SEMINARS IN 1989

The following list of scientific meetings which were considered by the Scientific Advisory Committee or are proposed under the SNSP is presented for 1989.

#### NUCLEAR POWER AND THE FUEL CYCLE

1. Symposium on safety assessment of radioactive waste repositories
2. Symposium on quality in nuclear power plant operation

#### NUCLEAR SAFETY AND RADIATION PROTECTION

3. Symposium on determination of foodstuff contamination after a nuclear accident
4. Symposium on recovery operations in the event of a nuclear power plant accident
5. Symposium on safety aspects of research reactors and critical assemblies (will also include topics relating to research reactor renewal and upgrading)
6. Symposium on experience in monitoring and assessing environmental radioactivity following a major accident[\*]
7. Symposium on fire protection and fire-fighting at nuclear facilities[\*]
8. Regional seminar on regulatory aspects and enforcement of radiation protection

#### NUCLEAR APPLICATIONS

9. FAO/IAEA symposium on use of stable isotopes in plant nutrition, soil fertility and environmental studies
10. Symposium on nuclear analytical methods in the life sciences
11. Seminar for Africa on organization and training in radiotherapy
12. FAO/IAEA regional seminar for Africa on improving health and reproductive efficiency of livestock through radioimmunoassay and related techniques
13. FAO/IAEA regional seminar on the sterile technique for fruit fly control or eradication in Latin America
14. Regional seminar for Latin America on nuclear techniques in parasitic and communicable infections
15. Regional seminar for Europe and the Middle East on calibration procedures in Secondary Standard Dosimetry Laboratories (SSDLs)
16. FAO/IAEA interregional seminar on the bioconversion of agricultural residues using nuclear techniques
17. Seminar for developing countries on nuclear research centres in the service of environmental research; service-client-sponsor relationships

#### DIRECTION AND SUPPORT

18. INIS training seminar

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[\*] Postponed from 1988 under SNSP.

## ANNEX III

### Draft resolutions

#### A. REGULAR BUDGET APPROPRIATIONS FOR 1988

##### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 1988 [1],

1. Appropriates on the basis of an exchange rate of AS 14.20 to \$ 1.00, an amount of \$ 137 337 000 for the Regular Budget expenses of the Agency in 1988 as follows:

	United States dollars
1. Technical Assistance and Co-operation	7 155 000
2. Nuclear Energy and Safety [2]	25 160 000
3. Research and Isotopes [3]	18 488 000
4. Operational Facilities [4]	2 793 000
5. Safeguards	45 128 000
6. Policy-making Organs	5 170 000
7. Executive Management and Administration	14 332 000
8. General Services	14 411 000
	<hr/>
Sub-Total Agency Programme	132 637 000
9. Shared Support Services	4 700 000
(Cost of Work for Others)	<hr/>
TOTAL	137 337 000
	=====

the amounts in the appropriation sections to be adjusted in accordance with the adjustment formula presented in the Attachment in order to take into account the exchange rate variations during the year.

2. Decides that the foregoing appropriation shall be financed, after the deduction of revenues deriving from work for others (Section 9) and of other miscellaneous income of \$ 3 500 000 (representing \$ 564 000 plus AS 41 691 000), from contributions by Member States amounting, at an

exchange rate of AS 14.20 to \$ 1.00, to \$ 129 137 000 (\$ 20 530 000 plus the equivalent in US dollars of AS 1 542 219 000), in accordance with the scale of assessment fixed by the General Conference in resolution GC(XXXI)/RES/ , each contribution to be adjusted in the light of the rate applicable at the date of payment; and

3. Authorizes the Director General:

- (a) To incur expenditures additional to those for which provision is made in the Regular Budget for 1988, 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 1988; 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(XXXI)/ .

[2] For the financing of Nuclear Power, Nuclear Fuel Cycle, Nuclear Safety and Scientific and Technical Information.

[3] For the financing of Food and Agriculture, Life Sciences and Physical and Chemical Sciences.

[4] For the financing of the International Centre for Theoretical Physics (in part) and the International Laboratory of Marine Radioactivity (in part).

# ATTACHMENT

## ADJUSTMENT FORMULA IN US \$

1. Technical Assistance and Co-operation	665 000	+	( 92 158 000 / R)
2. Nuclear Energy and Safety [2]	4 097 000	+	( 299 095 000 / R)
3. Research and Isotopes [3]	3 558 000	+	( 212 006 000 / R)
4. Operational Facilities [4]	1 399 000	+	( 19 795 000 / R)
5. Safeguards	8 171 000	+	( 524 788 000 / R)
6. Policy-making Organs	472 000	+	( 66 712 000 / R)
7. Executive Management and Administration	1 881 000	+	( 176 804 000 / R)
8. General Services	851 000	+	( 192 552 000 / R)
<hr/>			
Sub-Total Agency Programme	21 094 000	+	(1 583 910 000 / R)
<hr/>			
9. Shared Support Services (Cost of Work for Others)	614 000	+	( 58 021 000 / R)
<hr/>			
TOTAL	21 708 000	+	(1 641 931 000 / R)
<hr/>			
=====			

[2 - 4] See footnotes on page 71.

Note: R is the average United Nations schilling-to-dollar exchange rate which will be experienced during 1988.

## B. TECHNICAL ASSISTANCE AND CO-OPERATION FUND ALLOCATION FOR 1988

### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's technical assistance and co-operation programme for 1988;

1. Decides that for 1988 the target for voluntary contributions to the Technical Assistance and Co-operation Fund shall be \$38 000 000;
2. Notes that funds from other sources, estimated at \$1 million, are expected to be available for that programme;
3. Allocates the amount of \$39 000 000 for the Agency's technical assistance and co-operation programme for 1988; and
4. Urges all Member States to make voluntary contributions for 1988 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 1988

### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's Working Capital Fund in 1988 [1],

1. Approves a level of \$                      for the Agency's Working Capital Fund in 1988;
2. Decides that the Fund shall be financed, administered and used in 1988 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(XXXI)              para      of the Introduction.

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





P A R T    I I

M A N A G E M E N T    P L A N



# THE REGULAR BUDGET

## By appropriation section

Table 44

	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %	1988 at 1987 prices	Price increase %	1988 with price increase
1. Technical Assistance and Co-operation	6 255 103	6 831 000	153 000	2.2	6 984 000	2.4 7 155 000
2. Nuclear Power	3 863 331	4 499 000	(5 000)	(0.1)	4 494 000	2.5 4 607 000
Nuclear Fuel Cycle	3 857 162	4 247 000	199 000	4.7	4 446 000	2.6 4 562 000
Nuclear Safety	7 196 198	8 693 000	396 000	4.6	9 089 000	2.5 9 314 000
Scientific and Technical Information	5 643 876	6 435 000	40 000	0.6	6 475 000	3.1 6 677 000
Nuclear Energy and Safety	20 560 567	23 874 000	630 000	2.6	24 504 000	2.7 25 160 000
3. Food and Agriculture	6 213 214	6 648 000	113 000	1.7	6 761 000	2.9 6 956 000
Life Sciences	3 725 111	4 029 000	(109 000)	(2.7)	3 920 000	2.7 4 027 000
Physical and Chemical Sciences	6 634 665	7 325 000	(24 000)	(0.3)	7 301 000	2.8 7 505 000
Research and Isotopes	16 572 990	18 002 000	(20 000)	(0.1)	17 982 000	2.8 18 488 000
4. International Centre for Theoretical Physics	1 153 072	1 262 000	(80 000)	(6.3)	1 182 000	5.8 1 250 000
International Laboratory of Marine Radioactivity	1 374 565	1 491 000	10 000	0.7	1 501 000	2.8 1 543 000
Operational Facilities	2 527 637	2 753 000	(70 000)	(2.5)	2 683 000	4.1 2 793 000
5. Safeguards	39 899 547	43 846 000	200 000	0.5	44 046 000	2.5 45 128 000
6. Policy-making Organs	5 065 133	5 008 000	35 000	0.7	5 043 000	2.5 5 170 000
7. Executive Management Administration	2 082 176	2 417 000	(50 000)	(2.1)	2 367 000	2.4 2 424 000
Executive Management and Administration	10 296 989	11 706 000	(96 000)	(0.8)	11 610 000	2.6 11 908 000
Executive Management and Administration	12 379 165	14 123 000	(146 000)	(1.0)	13 977 000	2.5 14 332 000
8. General Services	12 907 046	13 921 000	-	-	13 921 000	3.5 14 411 000
Total Agency programmes	116 167 188	128 358 000	782 000	0.6	129 140 000	2.7 132 637 000
9. Shared Support Services (Cost of work for others)	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2 4 700 000
TOTAL	120 635 115	132 793 000	902 000	0.7	133 695 000	2.7 137 337 000

SUPPLEMENTARY NUCLEAR SAFETY PROGRAMME AT AS 14.20

By appropriation section

Table 45

Areas of Activity	1987 SNSP a/	Expenditure increase(decrease) %	1988 at 1987 prices	Price increase %	1988 with price increase
A.1 Nuclear Power Planning and Implementation	(13 000)	(39 000)	(52 000)	2.5	(53 000)
A.2 Technical and Economic Performance of Nuclear Power	89 000	(40 000)	49 000	2.5	50 000
A.3 Advanced Systems and Technology Development	129 000	176 000	305 000	2.5	313 000
Sub-total for the Division of Nuclear Power	205 000	97 000 47.3	302 000	2.5	310 000
B.1 Resources and Supply of Uranium and Thorium	(25 000)	25 000	-	2.6	-
B.2 Production and Processing of Nuclear and Reactor Materials	6 000	(6 000)	-	2.6	-
B.3 Reactor Fuel Design, Fabrication and Performance	6 000	(37 000)	(31 000)	2.6	(32 000)
B.4 Spent Fuel Management	17 000	102 000	119 000	2.6	122 000
C.1 Handling, Treatment, Conditioning and Storage of Radioactive Waste	-	(24 000)	(24 000)	2.6	(25 000)
C.2 Radioactive Waste Disposal	44 000	10 000	54 000	2.6	55 000
C.3 Decommissioning of Nuclear Installations	84 000	107 000	191 000	2.6	196 000
Sub-total for the Division of Nuclear Fuel Cycle	132 000	177 000 134.1	309 000	2.6	316 000
H.1 Occupational Radiation Protection and Health Effects	341 000	(113 000)	228 000	2.4	232 000
H.2 Radiation Protection of the General Public	318 000	(16 000)	302 000	2.4	310 000
H.3 Safe Transport of Radioactive Materials	(41 000)	41 000	-	2.4	-
H.4 Emergency Planning and Preparedness	387 000	(97 000)	290 000	2.4	296 000
I.1 Safety Principles and Regulatory Organization	77 000	(43 000)	34 000	2.4	35 000
I.2 Safety Research and Analysis	(2 000)	350 000	348 000	2.4	357 000
I.3 Safe Siting, Design and Construction of Nuclear Installations	56 000	6 000	62 000	2.4	64 000
I.4 Operational Safety of Nuclear Installations	870 000	570 000	1 440 000	2.4	1 475 000
Sub-total for Division of Nuclear Safety	2 006 000	698 000 34.8	2 704 000	2.4	2 769 000
=====					
APPROPRIATION SECTION 2: Nuclear Energy and Safety	2 343 000	972 000 41.5	3 315 000	2.4	3 395 000
=====					
E.3 Radiation Dosimetry	15 000	(15 000)	-	2.7	-
E.4 Nutritional and Health-related Environmental Studies	233 000	(7 000)	226 000	2.7	232 000
Sub-total for the Division of Life Sciences	248 000	(22 000) (8.9)	226 000	2.7	232 000
=====					
APPROPRIATION SECTION 3: Research and Isotopes	248 000	(22 000) (8.9)	226 000	2.7	232 000
=====					
SNSP TOTAL b/	2 591 000	950 000 36.7	3 541 000	2.4	3 627 000
=====					

a/ The 1987 figures correspond to those set in GC(XXX)/777/Add.1.

b/ The 1987 SNSP total of US\$ 2 591 000 at AS 14.20 corresponds to US\$ 2 030 000 at AS 19.50.

THE REGULAR BUDGET INCLUDING THE SUPPLEMENTARY NUCLEAR SAFETY PROGRAMME

By appropriation section

(Sections 2 and 3 only) a/

Table 46

	1986 Actuals	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Division of Nuclear Power							
Basic programme	3 863 331	4 294 000	(102 000)	(2.4)	4 192 000	2.5	4 297 000
SNSP	-	205 000	97 000	47.3	302 000	2.5	310 000
Division Sub-total	3 863 331	4 499 000	(5 000)	(0.1)	4 494 000	2.5	4 607 000
Division of Nuclear Fuel Cycle							
Basic programme	3 857 162	4 115 000	22 000	0.5	4 137 000	2.6	4 246 000
SNSP	-	132 000	177 000	134.1	309 000	2.6	316 000
Division Sub-total	3 857 162	4 247 000	199 000	4.7	4 446 000	2.6	4 562 000
Division of Nuclear Safety							
Basic programme	6 601 614	6 687 000	(302 000)	(4.5)	6 385 000	2.5	6 545 000
SNSP	594 584	2 006 000	698 000	34.8	2 704 000	2.4	2 769 000
Division Sub-total	7 196 198	8 693 000	396 000	4.6	9 089 000	2.5	9 314 000
Division of Scientific and Technical Information							
Basic programme	5 643 876	6 435 000	40 000	0.6	6 475 000	3.1	6 677 000
SNSP	-	-	-	-	-	3.1	-
Division Sub-total	5 643 876	6 435 000	40 000	0.6	6 475 000	3.1	6 677 000
=====							
APPROPRIATION SECTION 2: Nuclear Energy and Safety	20 560 567	23 874 000	630 000	2.6	24 504 000	2.7	25 160 000
=====							
Division of Food and Agriculture							
Basic programme	6 213 214	6 648 000	113 000	1.7	6 761 000	2.9	6 956 000
Division of Life Sciences							
Basic programme	3 682 844	3 781 000	(87 000)	(2.3)	3 694 000	2.7	3 795 000
SNSP	42 267	248 000	(22 000)	(8.9)	226 000	2.7	232 000
Division Sub-total	3 725 111	4 029 000	(109 000)	(2.7)	3 920 000	2.7	4 027 000
Division of Physical and Chemical Sciences							
Basic programme	6 634 665	7 325 000	(24 000)	(0.3)	7 301 000	2.8	7 505 000
=====							
APPROPRIATION SECTION 3: Research and Isotopes	16 572 990	18 002 000	(20 000)	(0.1)	17 982 000	2.8	18 488 000
=====							

a/ \$296 166 at AS 14.20 was spent on SNSP in 1986 by the Policy-Making Organs (Appropriation 6).

# THE REGULAR BUDGET

## By appropriation section

Table 47

	1987 Budget	Expenditure increase(decrease) %	1988 at 1987 prices	Adjustments DP charging system and affected SSS	Adjustments staff & affected SSS	Adjustments radiation protection service	Total adjustments a/	Adjusted 1988 estimates at 1987 prices
1 Technical Assistance and Co-operation	6 831 000	-	6 831 000	(97 000)	250 000	-	153 000	6 984 000
2 Nuclear Energy and Safety	23 874 000	782 000	24 656 000	148 000	-	(300 000)	(152 000)	24 504 000
3 Research and Isotopes	18 002 000	-	18 002 000	102 000	(122 000)	-	(20 000)	17 982 000
4 Operational Facilities	2 753 000	-	2 753 000	26 000	(96 000)	-	(70 000)	2 683 000
5 Safeguards	43 846 000	-	43 846 000	(100 000)	-	300 000	200 000	44 046 000
6 Policy-making Organs	5 008 000	-	5 008 000	35 000	-	-	35 000	5 043 000
7 Executive Management and Administration	14 123 000	-	14 123 000	(114 000)	(32 000)	-	(146 000)	13 977 000
8 General Services	13 921 000	-	13 921 000	-	-	-	-	13 921 000
Total Agency Programmes	128 358 000	782 000	129 140 000	-	-	-	-	129 140 000
Shared Support Services (Cost of Work for Others)	4 435 000	-	4 435 000	(58 000)		178 000	120 000	4 555 000
TOTAL	132 793 000	782 000	133 575 000	(58 000)		178 000	120 000	133 695 000

a/ The 1988 estimates take into account several adjustments, the effect of which is shown separately from the expenditure increase. These adjustments relate to a different charging system for data processing services, transfers of staff and functions and an allocation of the radiation protection services to Safeguards and TC projects.

# THE REGULAR BUDGET

## By Department

Table 48

	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
1. Director General and Secretariat of the Policy-making Organs	5 981 291	6 074 000	29 000	0.5	6 103 000	2.5	6 254 000
2. Department of Technical Co-operation	6 504 964	7 114 000	152 000	2.1	7 266 000	2.5	7 445 000
3. Department of Nuclear Energy and Safety	20 852 072	24 219 000	630 000	2.6	24 849 000	2.7	25 514 000
4. Department of Research and Isotopes	19 412 927	21 106 000	(110 000)	(0.5)	20 996 000	3.0	21 620 000
5. Department of Safeguards	39 899 547	43 846 000	200 000	0.5	44 046 000	2.5	45 128 000
6. Department of Administration	23 516 387	25 999 000	(119 000)	(0.5)	25 880 000	3.1	26 676 000
Total Agency Programmes	116 167 188	128 358 000	782 000	0.6	129 140 000	2.7	132 637 000
7. Shared Support Services including cost of work for others	24 198 229	25 067 000	3 000	—	25 070 000	2.9	25 785 000
Less: Amount of services charged to Agency programmes	19 730 302	20 632 000	(117 000)	(0.6)	20 515 000	2.8	21 085 000
Cost of work for others	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2	4 700 000
Total Regular Budget	120 635 115	132 793 000	902 000	0.7	133 695 000	2.7	137 337 000

# THE REGULAR BUDGET

## By item of expenditure

Table 49

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	30 498 136	36 273 000	(505 000)	(1.4)	35 768 000	2.0	36 487 000
Temporary assistance - P	375 104	435 800	558 000	128.0	993 800	1.0	1 003 800
Salaries - established posts - GS & M&O	14 013 874	15 663 000	318 000	2.0	15 981 000	3.0	16 461 000
Temporary assistance - GS & M&O	954 557	722 100	73 500	10.2	795 600	2.0	811 400
Common staff costs	15 979 629	18 093 000	110 600	0.6	18 203 600	2.3	18 617 700
Overtime	187 194	167 500	35 500	21.2	203 000	3.1	209 200
Sub-total: Staff costs	62 008 494	71 354 400	590 600	0.8	71 945 000	2.3	73 590 100
Travel	8 828 107	9 676 600	(70 200)	(0.7)	9 606 400	3.0	9 895 000
Representation and hospitality	139 083	148 400	8 200	5.5	156 600	6.7	167 100
Training	502 200	537 500	(75 700)	(14.1)	461 800	2.7	474 100
Experts	1 062 265	1 031 800	(20 600)	(2.0)	1 011 200	4.1	1 052 500
Equipment: leased or rental	319 257	341 300	108 700	31.8	450 000	3.1	464 000
Equipment: purchased (construction)	4 893 998	4 998 000	(560 100)	(11.2)	4 437 900	3.4	4 590 000
Supplies and materials	3 194 481	2 809 900	167 100	5.9	2 977 000	3.1	3 068 400
General operating expenses	10 696 951	11 652 300	178 000	1.5	11 830 300	4.0	12 303 200
Contracts	864 678	845 000	155 000	18.3	1 000 000	2.1	1 021 000
Research and technical contracts	2 158 319	2 180 000	363 000	16.7	2 543 000	3.0	2 619 000
Miscellaneous	1 769 053	2 150 800	55 000	2.6	2 205 800	4.6	2 307 600
Sub-total: Other direct costs	34 428 392	36 371 600	308 400	0.8	36 680 000	3.5	37 961 900
Conference services	617 429	655 000	5 000	0.8	660 000	2.4	676 000
Interpretation services	1 119 623	1 063 000	(182 000)	(17.1)	881 000	3.6	913 000
Translation services	5 573 347	5 450 000	276 000	5.1	5 726 000	2.2	5 853 000
Printing and publishing services	5 482 708	5 582 000	92 000	1.6	5 674 000	2.9	5 838 000
Data processing services	4 512 360	5 085 000	(11 000)	(0.2)	5 074 000	2.8	5 217 000
Contract administration	436 701	523 000	(148 000)	(28.3)	375 000	2.7	385 000
Services a/	1 988 134	2 274 000	(149 000)	(6.6)	2 125 000	3.7	2 203 000
Sub-total: Shared costs	19 730 302	20 632 000	(117 000)	(0.6)	20 515 000	2.8	21 085 000
Agency Programmes	116 167 188	128 358 000	782 000	0.6	129 140 000	2.7	132 637 000
Cost of work for others	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2	4 700 000
Total Regular Budget	120 635 115	132 793 000	902 000	0.7	133 695 000	2.7	137 337 000

a/ Included here are Legal Services, Medical Services, Library Services and Radiation Protection Services.



Shared Support Services

Table 50

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	5 777 385	6 671 000	(274 000)	(4.1)	6 397 000	2.0	6 525 000
Temporary assistance - P	1 016 086	759 900	94 400	12.4	854 300	3.1	880 700
Salaries - established posts - GS & M&O	5 491 310	5 702 000	163 000	2.9	5 865 000	3.0	6 041 000
Temporary assistance - GS & M&O	633 280	479 100	(146 400)	(30.6)	332 700	2.0	339 400
Common staff costs	3 909 032	4 502 600	(139 500)	(3.1)	4 363 100	2.4	4 467 600
Overtime	132 338	60 100	-	-	60 100	3.0	61 900
Sub-total: Staff costs	16 959 431	18 174 700	(302 500)	(1.7)	17 872 200	2.5	18 315 600
Travel	41 550	42 600	4 400	10.3	47 000	3.0	48 400
Representation and hospitality	2 148	1 900	-	-	1 900	5.3	2 000
Training	76 433	78 700	-	-	78 700	2.8	80 900
Experts	35 686	13 000	6 800	52.3	19 800	4.0	20 600
Equipment: leased or rental	1 338 354	1 474 000	688 000	46.7	2 162 000	3.1	2 228 000
Equipment: purchased (construction)	1 873 308	1 148 600	(702 100)	(61.1)	446 500	2.6	458 000
Supplies and materials	1 855 643	2 077 100	100 000	4.8	2 177 100	4.7	2 279 400
General operating expenses	1 639 126	1 836 400	143 600	7.8	1 980 000	3.9	2 058 200
Contracts	244 757	142 000	8 000	5.6	150 000	3.3	155 000
Research and technical contracts	131 793	78 000	-	-	78 000	2.6	80 000
Miscellaneous	-	-	56 800	-	56 800	3.7	58 900
Sub-total: Other direct costs	7 238 798	6 892 300	305 500	4.4	7 197 800	3.8	7 469 400
Interpretation services	9 910	-	-	-	-	-	-
Translation services	35 123	52 000	3 000	5.8	55 000	1.8	56 000
Printing and publishing services	114 177	105 000	(14 000)	(13.3)	91 000	2.2	93 000
Data processing services	544 954	696 000	111 000	15.9	807 000	3.0	831 000
Sub-total: Shared costs	704 164	853 000	100 000	11.7	953 000	2.8	980 000
SUB-TOTAL	24 902 393	25 920 000	103 000	0.4	26 023 000	2.9	26 765 000
Less: Cross-Charge (above)	704 164	853 000	100 000	11.7	953 000	2.8	980 000
Total Shared Support Services	24 198 229	25 067 000	3 000	-	25 070 000	2.9	25 785 000
Cost of work for others	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2	4 700 000
Total paid by Agency under Shared Support Services	19 730 302	20 632 000	(117 000)	(0.6)	20 515 000	2.8	21 085 000

# Manning Table 1988

Table 51 (a)

	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	2	-	-	1	-	5	4	-	9
Secretariat of the Policy-making Organs	-	-	1	1	-	1	-	-	3	2	-	5
Sub-total	1	-	2	3	-	1	1	-	8	6	-	14
Department of Technical Co-operation <sup>a/</sup>	-	1	-	-	-	1	-	-	2	2	-	4
Division of Technical Assistance and Co-operation	-	-	2	10	12	16	5	1	46	67	-	113
Sub-total	-	1	2	10	12	17	5	1	48	69	-	117
Department of Nuclear Energy and Safety	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	10	6	5	1	-	23	13	-	36
Division of Nuclear Fuel Cycle	-	-	1	7	12	1	-	-	21	13	-	34
Division of Nuclear Safety <sup>b/</sup>	-	-	1	20	15	2	-	-	38	26	-	64
Division of Scientific and Technical Information <sup>c/</sup>	-	-	1	3	6	7	-	1	18	33	-	51
Sub-total	-	1	4	40	39	16	1	2	103	87	-	190
Department of Research and Isotopes	-	1	-	-	-	1	-	-	2	2	-	4
Division of Food and Agriculture <sup>d/</sup>	-	-	-	6	7	2	2	-	17	8	-	25
Division of Life Sciences	-	-	1	4	8	2	-	-	15	10	-	25
Division of Physical and Chemical Sciences	-	-	1	7	11	5	3	-	27	18	-	45
The Agency's Laboratory	-	-	1	3	10	7	6	1	28	58	25	111
International Laboratory of Marine Radioactivity	-	-	1	1	2	1	3	1	9	16	-	25
International Centre for Theoretical Physics	-	-	1	6	2	1	1	-	11	25	-	36
Sub-total	-	1	5	27	40	19	15	2	109	137	25	271
Department of Safeguards	-	1	-	-	-	-	-	-	1	2	-	3
Division of Operations A	-	-	1	13	23	34	-	-	71	32	-	103
Division of Operations B	-	-	1	11	18	19	-	-	49	27	-	76
Division of Operations C	-	-	1	11	26	24	-	-	62	37	-	99
Division of Development <sup>e/</sup>	-	-	1	11	19	2	-	-	33	33	-	66
Division of Information Treatment <sup>f/</sup>	-	-	1	2	12	4	4	4	27	39	-	66
Division of Evaluation <sup>g/</sup>	-	-	1	5	14	2	-	-	22	15	-	37
Division of Standardization <sup>h/</sup>	-	-	1	4	5	1	1	-	12	14	-	26
Sub-total	-	1	7	57	117	86	5	4	277	199	-	476
Department of Administration	-	1	-	1	-	1	-	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	3	2	1	-	7	6	-	13
Division of Budget and Finance	-	-	1	4	5	6	5	-	21	45	-	66
Division of General Services	-	-	1	2	3	1	2	1	10	71	28	109
Division of External Relations	-	-	2	3	2	1	-	-	8	13	-	21
Division of Public Information	-	-	1	1	1	1	1	-	5	9	-	14
Legal Division	-	-	1	3	2	1	1	-	8	4	-	12
Division of Personnel	-	-	1	2	3	4	2	-	12	26	-	38
Sub-total	-	1	7	17	19	17	12	1	74	176	28	278
Shared Support Services	-	-	-	-	1	-	-	-	1	5	-	6
Contract Administration Services	-	-	-	1	-	1	3	-	5	8	-	13
Conference Services	-	-	-	1	4	3	-	-	8	1	-	9
Interpretation	-	-	1	6	14	27	-	-	48	42	2	92
Translation and Records Services	-	-	1	-	2	-	-	-	3	15	3	21
Medical Services	-	-	-	1	-	2	2	-	5	10	-	15
Library	-	-	-	3	8	11	6	3	31	37	-	68
Data Processing Services	-	-	1	2	-	5	9	-	17	101	18	136
Printing and Publishing Services	-	-	-	1	-	2	-	-	3	5	-	8
Radiation Protection Services	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total	-	-	3	15	29	51	20	3	121	224	23	368
TOTAL	1	5	30	169	256	207	59	13	740	898	76	1 714

<sup>a/</sup> The Evaluation Section which reports to the Deputy Director General is shown together with the Division of Technical Assistance and Co-operation.

<sup>b/</sup> Excluding Radiation Protection Services which are shown under Shared Support Services.

<sup>c/</sup> Excluding Data Processing Services and Library which are shown under Shared Support Services.

Full titles of the respective Divisions are:

<sup>d/</sup> Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy

for Food and Agricultural Development

<sup>e/</sup> Division of Development and Technical Support

<sup>f/</sup> Division of Safeguards Information Treatment

<sup>g/</sup> Division of Safeguards Evaluation

<sup>h/</sup> Division of Standardization, Training and Administrative Support

Summary of manpower by grade of post and by Department

Table 51 (b)

Grade of post	Number of established posts					1988
	1986 Adjusted	1987	1987 Adjusted	Change		
				New posts	Reclassi- fications	
DG	1	1	1	-	-	1
DDG	5	5	5	-	-	5
D	30	30	30	-	-	30
P-5	161	162	168	-	1	169
P-4	251	251	253	2	1	256
P-3	197	204	204	4	(1)	207
P-2	57	57	57	1	1	59
P-1	19	17	17	-	(4)	13
Sub-total	721	727	735	7	(2)	740
GS	836	871	876	20	2	898
M&O	73	73	73	3	-	76
TOTAL	1 630	1 671	1 684 <u>a/</u>	30	-	1 714

				Change			
				P	GS	M&O	
-----							
Department:							
Office of the Director General	14	14	14	-	-	-	14
Department of Technical Co-operation	98	107	115	2	-	-	117
Department of Nuclear Energy and Safety	177	182	186	2	2	-	190
Department of Research and Isotopes	266	271	269	-	2	-	271
Department of Safeguards	455	471	471	(1)	6	-	476
Department of Administration	270	272	272	-	4	2	278
Shared Support Services (Agency posts)	350	354	357	2	8	1	368
-----							
TOTAL	1 630	1 671	1 684 <u>a/</u>	5	22	3	1 714
-----							
Extrabudgetary posts:							
Common printing services	9	9	4	-	(1)	-	3
Library	14	14	13	-	-	-	13
-----							
TOTAL	23	23	17	-	(1)	-	16
=====							

a/ Includes 13 posts for the SNSP.

# New posts for 1988

Table 52

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub-Total	GS	M&O	Total
Department of Technical Co-operation <u>a/</u>												
Division of Technical Assistance and Co-operation	-	-	-	-	-	1	1	-	2	-	-	2
Sub-total	-	-	-	-	-	1	1	-	2	-	-	2
Department of Nuclear Energy and Safety												
Division of Nuclear Safety <u>b/</u>	-	-	-	-	1	1	-	-	2	2	-	4
Sub-total	-	-	-	-	1	1	-	-	2	2	-	4
Department of Research and Isotopes												
The Agency's Laboratory	-	-	-	-	-	-	-	-	-	1	-	1
International Laboratory of Marine Radioactivity	-	-	-	-	-	-	-	-	-	1	-	1
Sub-total	-	-	-	-	-	-	-	-	-	2	-	2
Department of Safeguards												
Division of Operations A	-	-	-	-	-	-	-	-	-	1	-	1
Division of Development <u>a/</u>	-	-	-	-	-	-	-	-	-	2	-	2
Division of Information Treatment <u>f/</u>	-	-	-	-	-	-	-	-	-	1	-	1
Division of Evaluation <u>g/</u>	-	-	-	-	1	-	-	-	1	-	-	1
Sub-total	-	-	-	-	1	-	-	-	1	4	-	5
Department of Administration												
Division of Budget and Finance	-	-	-	-	-	-	-	-	-	1	-	1
Division of General Services	-	-	-	-	-	-	-	-	-	-	2	2
Division of Public Information	-	-	-	-	-	-	-	-	-	1	-	1
Division of Personnel	-	-	-	-	-	-	-	-	-	2	-	2
Sub-total	-	-	-	-	-	-	-	-	-	4	2	6
Shared Support Services												
Translation and Records Services	-	-	-	-	-	2	-	-	2	1	1	4
Data Processing Services	-	-	-	-	-	-	-	-	-	7	-	7
Sub-total	-	-	-	-	-	2	-	-	2	8	1	11
TOTAL	-	-	-	-	2	4	1	-	7	20	3	30

a/ b/ e/ f/ and g/ see footnotes on Table 51(a).

## ADDITIONAL PROFESSIONAL POSTS IN 1988

### Department of Technical Co-operation

#### Division of Technical Assistance and Co-operation

In order to cope with the increased workload in the Middle East and Europe Section, particularly in respect of interregional projects, one additional P-3 post is required for an assistant area officer.

1 P-3

In the Training Courses Section the workload is expanding, with additional emphasis being placed on training in the field of nuclear safety and radiological protection. A P-2 post will be required.

1 P-2

## Department of Nuclear Energy and Safety

### Division of Nuclear Safety

A Professional Officer is required to strengthen the Agency's programme on the man-machine interface in nuclear facilities. The duties will include work on human reliability statistics, the assessment of human performance in accident analyses, human performance requirements and operator computer aids including use of probabilistic safety assessment (PSA) results for operational safety.

1 P-4  
(SNSP)

A Professional Officer is required to assist in the execution of the expanded safety programme, in particular in work on establishing values for dose per unit intake of radionuclides, in work on developing technical guidelines on criteria and procedures for radiological sampling and monitoring under emergency conditions (where constraints differ from those associated with routine radiological sampling and monitoring) and in activities in support of technical co-operation work.

1 P-3  
(SNSP)

## Department of Safeguards

### Division of Safeguards Evaluation

One additional Professional post will be required for a statistician, to recommend and implement procedures and methods for the statistical analysis and evaluation of safeguards inspection and measurement data, with emphasis on reprocessing and fabrication facilities. With the help of this post the existing backlog in procedures and software development will be overcome, which is expected to result in an increase in the productivity of the whole Section.

1 P-4

### Shared Support Services

#### Translation and Records Services

Two additional Professional posts will be required for Chinese translators. The work has so far been carried out by temporary assistance staff.

2 P-3

7

ADDITIONAL GENERAL SERVICE AND MAINTENANCE & OPERATIVE  
POSTS IN 1988

Department of Nuclear Energy and Safety

Division of Nuclear Safety

One additional GS post will be required to carry out the increased secretarial and clerical work resulting from the expansion of the nuclear safety and radiation protection programme. 1 GS (SNSP)

One clerical post is required for a computer assistant whose functions will be mainly to assist in the computerization of the Division's work by analysing different types of task and co-ordinating their development and implementation using the computer, as well as to provide on-the-job training for Professional and secretarial staff in computer handling. The work has been performed for several years by temporary assistance staff. 1 GS

Department of Research and Isotopes

The Agency's Laboratory

An additional plutonium chemistry technician will be required to cope with the increasing workload. 1 GS

The Monaco Laboratory

In the Laboratory's new premises, the Agency has to supply services which were previously provided by the Musée Océanographique. One switchboard operator/receptionist will be required. 1 GS

Department of Safeguards

Division of Operations (A) 1 GS

One GS post is needed for a technician in the Tokyo Office. Having a technician in Tokyo will make it possible to discontinue the practice of either shipping safeguards instruments from the Far East back to Vienna for servicing or sending a technician from Vienna, which has so far been a necessity.

<u>Division of Development and Technical Support</u>	2 GS
<p>Two additional GS posts will be required, one for a video technician and one for a non-destructive assay technician in order to cope with the increased workload resulting from the annual purchase, installation and operation of both types of equipment. Savings from proper maintenance and timely repair of equipment are expected to outweigh the cost of the additional staff.</p>	
<u>Division of Safeguards Information Treatment</u>	1 GS
<p>Owing to increased workload an additional post is required for a production programmer, who will assist with the maintenance of the IAEA Safeguards Information System.</p>	
<u>Department of Administration</u>	
<u>Division of Budget and Finance</u>	1 GS
<p>One additional GS post will be needed for a treasury clerk to process all Agency payments and to maintain proper internal controls. The functions are of a continuing nature and have, for several years, been carried out by temporary assistance staff.</p>	
<u>Division of Public Information</u>	1 GS
<p>There is a need for a secretarial post in the Director's Office to carry out work of a continuing nature which has so far been performed by temporary assistance staff.</p>	
<u>Division of Personnel</u>	2 GS
<p>One secretarial post in the Welfare and Social Security Unit and one personnel assistant post to deal with actions arising in connection with separations will be required. The functions have so far been performed by long-term temporary assistance staff.</p>	
<u>Division of General Services</u>	
<p>Two additional M&amp;O posts will be required for messengers. The work has so far been carried out by temporary assistance.</p>	2 M&O
<u>Shared Support Services</u>	
<u>Translation and Records Services</u>	1 GS 1 M&O
<p>One GS post will be required for a terminology assistant to relieve the Professional terminologist from routine tasks.</p>	
<p>In addition, one M&amp;O post will be needed for a messenger to ensure that texts are circulated within the Division without delay and deadlines are met. The work is at present carried out by temporary assistance.</p>	

In the Computer Section seven persons on temporary assistance positions were found to be carrying out long-term functions. In order to regularize this situation, seven GS posts are required, as follows:

- One documentation clerk to assist programmers in routine back-up work;
- One training assistant to cope with the high demand for data processing and word processing training by administering internal and external training courses;
- One finance clerk to assist in the efficient use of computer resources;
- One secretary to provide administrative and secretarial support for the end-user service (Help Centre);
- One production programmer to provide support for existing computer systems and to assist with the creation of new systems in the Divisions of Nuclear Power and Nuclear Fuel Cycle; and
- Two computer operators.



## Reclassification of existing posts

Table 53

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub-Total	GS	M&O	Total
Department of Technical Co-operation	-	-	-	-	-	1	(1)	-	-	-	-	-
Sub-total	-	-	-	-	-	1	(1)	-	-	-	-	-
Department of Research and Isotopes												
Division of Food and Agriculture	-	-	-	-	1	(1)	-	-	-	-	-	-
Sub-total	-	-	-	-	1	(1)	-	-	-	-	-	-
Department of Safeguards												
Division of Operations C	-	-	-	1	(1)	-	-	-	-	-	-	-
Division of Information Treatment	-	-	-	-	-	-	2	(4)	(2)	2	-	-
Sub-total	-	-	-	1	(1)	-	2	(4)	(2)	2	-	-
Department of Administration												
Division of General Services	-	-	-	-	1	(1)	-	-	-	-	-	-
Sub-total	-	-	-	-	1	(1)	-	-	-	-	-	-
TOTAL	-	-	-	1	1	(1)	1	(4)	(2)	2	-	-

### RECLASSIFICATION OF POSTS IN 1988

#### Department of Technical Co-operation

One P-2 to P-3 (Departmental Administrative Officer)

1 P-3

In view of the responsibilities and duties of this post, it is properly classified at the P-3 level under the ICSC Master Standard.

#### Department of Research and Isotopes

##### Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development

One P-3 to P-4 (Agrochemist)

1 P-4

The Head of the Agrochemicals Unit assists the Director in carrying out a laboratory programme aimed at assisting Member States in the safe and effective use of pesticides through nuclear techniques. This post involves duties and responsibilities which are properly classified under the ICSC Master Standard at the P-4 level.

#### Department of Safeguards

##### Division of Operations (C)

One P-4 to P-5 (Section Head)

1 P-5

Owing to the creation of a new Section in the Division of Operations (C), the upgrading of a P-4 post to the P-5 level for the Section Head is required. In view of the responsibilities of the post, the reclassification is in line with the ICSC Master Standard.

### Division of Safeguards Information Treatment

Two P-1 to P-2 (Development Programmers)	2 P-2
Two P-1 to G-7 (Production Programmers)	2 G-7

An in-depth analysis of the programming requirements of the Division has demonstrated the need for two Professional posts for development programmers at the P-2 level and for two GS posts for production programmers at the G-7 level. This grading structure, which corresponds to the classification of the ICSC Master Standard, can be achieved by upgrading two and downgrading two of the existing P-1 posts.

### Department of Administration

#### Division of General Services

One P-3 to P-4 (Section Head)	1 P-4
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The complexity of the duties and responsibilities of the post of Head, Administrative Support and Staff Services Section, justifies the grading of the post at the P-4 level under the ICSC Master Standard.

Adjusted Manning Table 1987

Table 54

	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	2	-	-	1	-	5	4	-	9
Secretariat of the Policy-making Organs	-	-	1	1	-	1	-	-	3	2	-	5
Sub-total	1	-	2	3	-	1	1	-	8	6	-	14
Department of Technical Co-operation <sup>a/</sup>	-	1	-	-	-	-	1	-	2	2	-	4
Division of Technical Assistance and Co-operation	-	-	2	10	12	15	4	1	44	67	-	111
Sub-total	-	1	2	10	12	15	5	1	46	69	-	115
Department of Nuclear Energy and Safety	-	1	-	-	-	1	-	1	3	2	-	5
Division of Nuclear Power	-	-	1	10	6	5	1	-	23	13	-	36
Division of Nuclear Fuel Cycle	-	-	1	7	12	1	-	-	21	13	-	34
Division of Nuclear Safety <sup>b/</sup>	-	-	1	20	14	1	-	-	36	24	-	60
Division of Scientific and Technical Information <sup>c/</sup>	-	-	1	3	6	7	-	1	18	33	-	51
Sub-total	-	1	4	40	38	15	1	2	101	85	-	186
Department of Research and Isotopes	-	1	-	-	-	1	-	-	2	2	-	4
Division of Food and Agriculture <sup>d/</sup>	-	-	-	6	6	3	2	-	17	8	-	25
Division of Life Sciences	-	-	1	4	8	2	-	-	15	10	-	25
Division of Physical and Chemical Sciences	-	-	1	7	11	5	3	-	27	18	-	45
The Agency's Laboratory	-	-	1	3	10	7	6	1	28	57	25	110
International Laboratory of Marine Radioactivity	-	-	1	1	2	1	3	1	9	15	-	24
International Centre for Theoretical Physics	-	-	1	6	2	1	1	-	11	25	-	36
Sub-total	-	1	5	27	39	20	15	2	109	135	25	269
Department of Safeguards	-	1	-	-	-	-	-	-	1	2	-	3
Division of Operations A	-	-	1	13	23	34	-	-	71	31	-	102
Division of Operations B	-	-	1	11	18	19	-	-	49	27	-	76
Division of Operations C	-	-	1	10	27	24	-	-	62	37	-	99
Division of Development <sup>e/</sup>	-	-	1	11	19	2	-	-	33	31	-	64
Division of Information Treatment <sup>f/</sup>	-	-	1	2	12	4	2	8	29	36	-	65
Division of Evaluation <sup>g/</sup>	-	-	1	5	13	2	-	-	21	15	-	36
Division of Standardization <sup>h/</sup>	-	-	1	4	5	1	1	-	12	14	-	26
Sub-total	-	1	7	56	117	86	3	8	278	193	-	471
Department of Administration	-	1	-	1	-	1	-	-	3	2	-	5
Office of Internal Audit and Management	-	-	-	1	3	2	1	-	7	6	-	13
Division of Budget and Finance	-	-	1	4	5	6	5	-	21	44	-	65
Division of General Services	-	-	1	2	2	2	2	1	10	71	26	107
Division of External Relations	-	-	2	3	2	1	-	-	8	13	-	21
Division of Public Information	-	-	1	1	1	1	1	-	5	8	-	13
Legal Division	-	-	1	3	2	1	1	-	8	4	-	12
Division of Personnel	-	-	1	2	3	4	2	-	12	24	-	36
Sub-total	-	1	7	17	18	18	12	1	74	172	26	272
Shared Support Services	-	-	-	-	1	-	-	-	1	5	-	6
Contract Administration Services	-	-	-	1	-	1	3	-	5	8	-	13
Conference Services	-	-	-	1	4	3	-	-	8	1	-	9
Interpretation	-	-	-	1	4	3	-	-	8	1	-	9
Translation and Records Services	-	-	1	6	14	25	-	-	46	41	1	88
Medical Services	-	-	1	-	2	-	-	-	3	15	3	21
Library	-	-	-	1	-	2	2	-	5	10	-	15
Data Processing Services	-	-	-	3	8	11	6	3	31	30	-	61
Printing and Publishing Services	-	-	1	2	-	5	9	-	17	101	18	136
Radiation Protection Services	-	-	-	1	-	2	-	-	3	5	-	8
Sub-total	-	-	3	15	29	49	20	3	119	216	22	357
TOTAL	1	5	30	168	253	204	57	17	735	876	73	1 684

<sup>a/</sup> <sup>b/</sup> <sup>c/</sup> <sup>d/</sup> <sup>e/</sup> <sup>f/</sup> <sup>g/</sup> and <sup>h/</sup> see footnotes on Table 51(a).

# SNSP Posts - 1987

Table 55 (a)

	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub- Total	GS	M&O	Total
Department of Nuclear Energy and Safety												
Division of Nuclear Safety	-	-	-	6	2	-	-	-	8	5	-	13
Sub-total	-	-	-	6	2	-	-	-	8	5	-	13
TOTAL	-	-	-	6	2	-	-	-	8	5	-	13

## POSTS FOR THE SUPPLEMENTARY NUCLEAR SAFETY PROGRAMME IN 1987

In the light of the manpower information provided to the General Conference in document GC(XXX)/777 Add.1, Annex 4, and subsequent deliberations by the Board of Governors, eight Professional posts (six at P-5 level and two at P-4 level) and five GS posts have been added to the 1987 Manning Table for the Division of Nuclear Safety, as shown in Table 55(a). These 13 posts represent a reduction in the number of posts compared with the original figure of 26 posts.

# Proposed transfer of posts in 1987

Table 55 (b)

	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)	-	-	-	-	-	-	-
Sub-total	-	-	-	1	(1)	-	-	-	-	-	-	-
Department of Technical Co-operation <sup>a/</sup> Division of Technical Assistance and Co-operation	-	-	1	-	2	-	-	-	3	5	-	8
Sub-total	-	-	1	-	2	-	-	-	3	5	-	8
Department of Nuclear Energy and Safety Division of Nuclear Fuel Cycle	-	-	-	-	(1)	-	-	-	(1)	-	-	(1)
Division of Nuclear Safety <sup>b/</sup>	-	-	-	(1)	-	(2)	-	-	(3)	(5)	-	(8)
Division of Scientific and Technical Information <sup>c/</sup>	-	-	-	-	1	(2)	-	1	-	-	-	-
Sub-total	-	-	-	(1)	-	(4)	-	1	(4)	(5)	-	(9)
Department of Research and Isotopes	-	-	-	(1)	-	-	-	-	(1)	(1)	-	(2)
Sub-total	-	-	-	(1)	-	-	-	-	(1)	(1)	-	(2)
Shared Support Services Contract Administration Services	-	-	(1)	-	-	-	-	-	(1)	1	-	-
Library	-	-	-	-	-	1	-	(1)	-	-	-	-
Data Processing Services	-	-	-	-	(1)	1	-	-	-	-	-	-
Printing and Publishing Services	-	-	-	-	-	-	-	-	-	(5)	-	(5)
Radiation Protection Services	-	-	-	1	-	2	-	-	3	5	-	8
Sub-total	-	-	(1)	1	(1)	4	-	(1)	2	1	-	3
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-

<sup>a/</sup> <sup>b/</sup> and <sup>c/</sup> see footnotes on Table 51(a).

## TRANSFER OF POSTS IN 1987

Table 55(b) shows the transfer of posts and functions within the Secretariat which the Director General has approved in order to make best use of human resources and available Manning Table posts. The explanations are given below:

- The P-5 post of the ARCAL Liaison Officer is transferred from the Office of the Deputy Director General for Research and Isotopes to the Office of the Director General in order to accommodate the upgrading of a P-4 post to the P-5 level for a programme evaluator. The P-4 post is transferred in exchange to the Division of Technical Assistance and Co-operation where the functions of the ARCAL Liaison Officer will be located in future.
- The D-1 post of the RCA Co-ordinator is transferred from the Contracts Administration Section to the Division of Technical Assistance and Co-operation, as it is considered that the ARCAL and the RCA Co-ordinator functions are appropriately placed in this Division.

- One GS post from the Office of the Deputy Director General for Research and Isotopes is transferred to the Contracts Administration Section.
- One vacant P-4 post is transferred from the Division of Nuclear Fuel Cycle to the Division of Technical Assistance and Co-operation.
- Five GS posts, which are being released from the Division of Publications (four from the Common Printing Service, one from the Publishing Section) mainly as a result of a reduction in the utilization of the Common Printing Service by other organizations, are being redeployed in the Division of Technical Assistance and Co-operation. The posts will be used to accommodate:
  - Two clerks/typists for the Africa Section and for general assistance;
  - One correspondence clerk for the Training Courses Section;
  - One recruitment clerk for the Experts Section; and
  - One data entry clerk for the Programme Co-ordination Section.

Some of these functions have been carried out by temporary assistance staff.

- The Radiation Protection Service Section, which belongs to the Division of Nuclear Safety, is now presented under "Shared Support Services". This facilitates the charging to the Department of Safeguards and Technical Co-operation projects the cost of services performed for safeguards inspectors and TC experts.

One P-5 post, two P-3 posts and five GS posts are involved in this change of presentation.

- One P-4 post from Data Processing Services is transferred to the INIS Section of the Division of Scientific and Technical Information to accommodate the upgrading of the post of the Head, INIS Clearing House.

The P-3 post no longer required in the INIS Section is transferred to Data Processing Services to accommodate the upgrading of a P-2 post to the P-3 level for a systems analyst.

Another P-3 post is transferred from INIS to the Library and a P-1 post from the Library is transferred to INIS.

The above reclassifications are in line with the ICSC Master Standard.

**APPROPRIATION SECTION 1**

**TECHNICAL ASSISTANCE AND CO-OPERATION**

# APPROPRIATION SECTION 1: TECHNICAL ASSISTANCE AND CO-OPERATION

## Summary of cost

Table 56

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	1 997 494	2 385 000	109 000	4.6	2 494 000	2.0	2 544 000
Temporary assistance - P	-	-	99 000	-	99 000	1.0	100 000
Salaries - established posts - GS & M&O	1 098 460	1 371 000	89 000	6.5	1 460 000	3.0	1 504 000
Temporary assistance - GS & M&O	296 978	158 500	(55 900)	(35.3)	102 600	2.0	104 700
Common staff costs	1 111 707	1 331 200	80 700	6.1	1 411 900	2.4	1 446 300
Overtime	6 123	-	12 000	-	12 000	3.0	12 400
Sub-total: Staff costs	4 510 762	5 245 700	333 800	6.4	5 579 500	2.4	5 711 400
Travel	138 912	133 900	22 100	16.5	156 000	3.0	160 700
Representation and hospitality	1 499	2 400	100	4.2	2 500	8.0	2 700
Experts	213 091	91 300	(52 300)	(57.3)	39 000	4.1	40 600
Equipment: leased or rental	2 013	3 000	(3 000)	(100.0)	-	3.1	-
Equipment: purchased (construction)	189 087	-	-	-	-	3.0	-
Supplies and materials	27 393	-	10 000	-	10 000	3.0	10 300
General operating expenses	48 316	74 300	(16 300)	(21.9)	58 000	4.0	60 300
Miscellaneous	1 439	18 400	(18 400)	(100.0)	-	3.0	-
Sub-total: Other direct costs	621 750	323 300	(57 800)	(17.9)	265 500	3.4	274 600
Translation services	389 226	435 000	2 000	0.5	437 000	2.2	447 000
Printing and publishing services	30 589	54 000	(24 000)	(44.4)	30 000	2.9	31 000
Data processing services	702 776	773 000	(101 000)	(13.1)	672 000	2.8	691 000
Sub-total: Shared costs	1 122 591	1 262 000	(123 000)	(9.7)	1 139 000	2.6	1 169 000
T O T A L	6 255 103	6 831 000	153 000	2.2	6 984 000	2.4	7 155 000
Expenditure increase			-	-			
Adjustments			153 000	2.2			



## APPROPRIATION SECTION 1: TECHNICAL ASSISTANCE AND CO-OPERATION

Summary of manpowerTable 57

	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Technical Assistance and Co-operation	44	67	-	111	46	67	-	113



APPROPRIATION SECTION 2

NUCLEAR ENERGY AND SAFETY

# APPROPRIATION SECTION 2: NUCLEAR ENERGY AND SAFETY

## Summary of cost

Table 58

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	4 845 461	6 100 000	82 000	1.3	6 182 000	2.0	6 306 000
Temporary assistance - P	132 164	246 000	299 000	121.5	545 000	1.0	550 400
Salaries - established posts - GS & M&O	1 567 480	1 875 000	40 000	2.1	1 915 000	3.0	1 972 000
Temporary assistance - GS & M&O	73 981	141 800	94 900	66.9	236 700	2.0	241 400
Common staff costs	2 301 937	2 834 600	185 100	6.5	3 019 700	2.1	3 083 300
Overtime	6 907	7 900	15 400	194.9	23 300	3.4	24 100
Sub-total: Staff costs	8 927 930	11 205 300	716 400	6.4	11 921 700	2.1	12 177 200
Travel	2 300 109	3 223 400	(167 200)	(5.2)	3 056 200	3.0	3 147 800
Representation and hospitality	38 761	44 700	4 500	10.1	49 200	8.1	53 200
Training	183	7 600	-	-	7 600	2.6	7 800
Experts	293 906	411 900	38 400	9.3	450 300	4.1	468 700
Equipment: leased or rental	56 838	68 000	25 000	36.8	93 000	3.2	96 000
Equipment: purchased (construction)	472 459	240 400	(139 800)	(58.2)	100 600	3.4	104 000
Supplies and materials	78 805	55 800	26 200	47.0	82 000	2.9	84 400
General operating expenses	235 360	275 900	28 500	10.3	304 400	4.0	316 500
Contracts	103 235	119 000	34 000	28.6	153 000	7.8	165 000
Research and technical contracts	429 104	454 000	181 000	39.9	635 000	3.0	654 000
Miscellaneous	40 009	47 000	-	-	47 000	3.0	48 400
Sub-total: Other direct costs	4 048 769	4 947 700	30 600	0.6	4 978 300	3.4	5 145 800
Conference services	236 124	246 000	15 000	6.1	261 000	1.9	266 000
Interpretation services	566 208	469 000	(138 000)	(29.4)	331 000	3.6	343 000
Translation services	633 073	551 000	122 000	22.1	673 000	2.1	687 000
Printing and publishing services	3 235 187	3 184 000	143 000	4.5	3 327 000	2.9	3 424 000
Data processing services	1 273 821	1 383 000	189 000	13.7	1 572 000	2.8	1 616 000
Contract administration	82 304	93 000	(2 000)	(2.2)	91 000	3.3	94 000
Radiation protection services, Library	1 557 151	1 795 000	(446 000)	(24.8)	1 349 000	4.3	1 407 000
Sub-total: Shared costs	7 583 868	7 721 000	(117 000)	(1.5)	7 604 000	3.1	7 837 000
T O T A L	20 560 567	23 874 000	630 000	2.6	24 504 000	2.7	25 160 000
Expenditure increase			782 000	3.2			
Adjustments			(152 000)	(0.6)			

# APPROPRIATION SECTION 2: NUCLEAR ENERGY AND SAFETY

## Expenditure by Division

Table 59

Division	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Nuclear Power	3 863 331	4 499 000	(5 000)	(0.1)	4 494 000	2.5	4 607 000
Nuclear Fuel Cycle	3 857 162	4 247 000	199 000	4.7	4 446 000	2.6	4 562 000
Nuclear Safety	7 196 198	8 693 000	396 000	4.6	9 089 000	2.5	9 314 000
Scientific and Technical Information <u>a/</u>	5 643 876	6 435 000	40 000	0.6	6 475 000	3.1	6 677 000
Total Appropriation Section	20 560 567	23 874 000	630 000	2.6	24 504 000	2.7	25 160 000

a/ These figures do not include the cost of the Computer Section which can be found in Table 82, Shared Support Services.

## Manpower by Division

Table 60

Division	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Nuclear Power	23	13	-	36	23	13	-	36
Nuclear Fuel Cycle	21	13	-	34	21	13	-	34
Nuclear Safety <u>a/</u>	36	24	-	60	38	26	-	64
Scientific and Technical <u>b/</u> Information	18	33	-	51	18	33	-	51
Total Appropriation Section	98	83	-	181	100	85	-	185

a/ These figures do not include the Radiation Protection Services, the manning table for which is shown in Table 51(a), under "Shared Support Services".

b/ These figures do not include the Data Processing Services and the Library, the manning table for which is shown in Table 51(a), under "Shared Support Services".



APPROPRIATION SECTION 3

RESEARCH AND ISOTOPES

# APPROPRIATION SECTION 3: RESEARCH AND ISOTOPES

## Summary of cost

Table 61

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	4 450 978	5 371 000	(355 000)	(6.6)	5 016 000	2.0	5 117 000
Temporary assistance - P	32 171	46 000	61 000	132.6	107 000	1.0	108 100
Salaries - established posts - GS & M&O	2 629 881	2 810 000	35 000	1.2	2 845 000	3.0	2 930 000
Temporary assistance - GS & M&O	40 944	59 700	32 400	54.3	92 100	2.0	93 900
Common staff costs	2 542 389	2 816 900	(76 200)	(2.7)	2 740 700	2.3	2 803 900
Overtime	33 905	41 200	200	0.5	41 400	2.9	42 600
Sub-total: Staff costs	9 730 268	11 144 800	(302 600)	(2.7)	10 842 200	2.3	11 095 500
Travel	1 501 012	1 520 200	23 400	1.5	1 543 600	3.0	1 589 900
Representation and hospitality	26 556	22 300	700	3.1	23 000	8.3	24 900
Training	8 525	17 000	500	2.9	17 500	2.3	17 900
Experts	192 260	268 400	2 000	0.7	270 400	4.1	281 500
Equipment: leased or rental	70 892	78 000	22 000	28.2	100 000	3.0	103 000
Equipment: purchased (construction)	712 029	620 100	34 000	5.5	654 100	5.0	687 000
Supplies and materials	649 743	547 200	31 800	5.8	579 000	4.9	607 400
General operating expenses	1 219 332	1 264 000	73 200	5.8	1 337 200	4.0	1 390 600
Contracts	-	-	20 000	-	20 000	5.0	21 000
Research and technical contracts	1 626 704	1 620 000	171 000	10.6	1 791 000	3.0	1 845 000
Miscellaneous	263 718	298 000	(19 000)	(6.4)	279 000	3.0	287 300
Sub-total: Other direct costs	6 270 771	6 255 200	359 600	5.7	6 614 800	3.6	6 855 500
Conference services	135 432	166 000	(2 000)	(1.2)	164 000	3.0	169 000
Interpretation services	102 183	114 000	(15 000)	(13.2)	99 000	4.0	103 000
Translation services	288 647	320 000	38 000	11.9	358 000	3.1	369 000
Printing and publishing services	1 129 663	1 173 000	16 000	1.4	1 189 000	2.8	1 222 000
Data processing services	265 052	255 000	123 000	48.2	378 000	3.4	391 000
Contract administration	330 068	402 000	(146 000)	(36.3)	256 000	2.3	262 000
Laboratory services	(1 679 094)	(1 828 000)	(91 000)	5.0	(1 919 000)	3.2	(1 979 000)
Sub-total: Shared costs	571 951	602 000	(77 000)	(12.8)	525 000	2.3	537 000
T O T A L	16 572 990	18 002 000	(20 000)	(0.1)	17 982 000	2.8	18 488 000
Expenditure increase Adjustments			(20 000)	(0.1)			



# APPROPRIATION SECTION 3: RESEARCH AND ISOTOPES

## Expenditure by Division

Table 62

Division	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Food and Agriculture	6 213 214	6 648 000	113 000	1.7	6 761 000	2.9	6 956 000
Life Sciences	3 725 111	4 029 000	(109 000)	(2.7)	3 920 000	2.7	4 027 000
Physical and Chemical Sciences	6 634 665	7 325 000	(24 000)	(0.3)	7 301 000	2.8	7 505 000
The Laboratory <u>a/</u>	[5 286 784]	[5 795 000]	[9 000]	[0.2]	[5 804 000]	[3.2]	[5 990 000]
Total Appropriation Section	16 572 990	18 002 000	(20 000)	(0.1)	17 982 000	2.8	18 488 000

a/ Cost included in the above three Divisions

## THE LABORATORY

Table 63

Division	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Total Laboratory	6 965 878	7 623 000	100 000	1.3	7 723 000	3.2	7 969 000
Safeguards Analytical Laboratory (charged to Safeguards)	1 679 094	1 828 000	91 000	5.0	1 919 000	3.2	1 979 000
Total, charged to Research and Isotopes	5 286 784	5 795 000	9 000	0.2	5 804 000	3.2	5 990 000
Consists of:							
Food and Agriculture	2 643 392	2 868 000	29 000	1.0	2 897 000	3.2	2 990 000
Life Sciences	687 282	754 000	(16 000)	(2.1)	738 000	3.2	762 000
Physical and Chemical Sciences	1 956 110	2 173 000	(4 000)	(0.2)	2 169 000	3.2	2 238 000

## APPROPRIATION SECTION 3: RESEARCH AND ISOTOPES

Manpower by DivisionTable 64

Division	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Food and Agriculture	17	8	-	25	17	8	-	25
Life Sciences	15	10	-	25	15	10	-	25
Physical and Chemical Sciences	27	18	-	45	27	18	-	45
Laboratory	28	57	25	110	28	58	25	111
Total Appropriation Section	87	93	25	205	87	94	25	206

**APPROPRIATION SECTION 4**

**OPERATIONAL FACILITIES**

## APPROPRIATION SECTION 4: OPERATIONAL FACILITIES

Summary of costTable 65

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	371 769	469 000	(25 000)	(5.3)	444 000	2.0	453 000
Salaries - established posts - GS & M&O	343 196	345 000	34 000	9.9	379 000	2.9	390 000
Temporary assistance - GS & M&O	28 493	18 600	(5 600)	(30.1)	13 000	2.3	13 300
Common staff costs	256 732	283 600	900	0.3	284 500	2.2	290 900
Sub-total: Staff costs	1 000 190	1 116 200	4 300	0.4	1 120 500	2.4	1 147 200
Travel	30 010	23 200	16 800	72.4	40 000	3.0	41 200
Representation and hospitality	710	2 500	-	-	2 500	4.0	2 600
Training	1 369	2 500	500	20.0	3 000	3.3	3 100
Experts	16 347	17 200	(5 200)	(30.2)	12 000	4.2	12 500
Equipment: purchased (construction)	129 460	146 000	(16 000)	(11.0)	130 000	5.4	137 000
Supplies and materials	102 810	80 900	(10 900)	(13.5)	70 000	5.0	73 500
General operating expenses	45 293	34 800	200	0.6	35 000	4.0	36 400
Contracts	4 013	3 000	-	-	3 000	-	3 000
Research and technical contracts	27 600	38 000	11 000	28.9	49 000	2.0	50 000
Miscellaneous	1 008 027	1 047 700	44 300	4.2	1 092 000	6.0	1 157 500
Sub-total: Other direct costs	1 365 639	1 395 800	40 700	2.9	1 436 500	5.6	1 516 800
Translation services	-	1 000	-	-	1 000	-	1 000
Printing and publishing services	29 314	95 000	-	-	95 000	3.2	98 000
Data processing services	-	-	26 000	-	26 000	-	26 000
Contract administration	3 744	4 000	-	-	4 000	-	4 000
Charged to ICTP	128 750	141 000	(141 000)	(100.0)	-	-	-
Sub-total: Shared costs	161 808	241 000	(115 000)	(47.7)	126 000	2.4	129 000
T O T A L	2 527 637	2 753 000	(70 000)	(2.5)	2 683 000	4.1	2 793 000
Expenditure increase			-	-			
Adjustments			(70 000)	(2.5)			

# APPROPRIATION SECTION 4: OPERATIONAL FACILITIES

## Expenditure by Division

Table 66

Division	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
International Centre for Theoretical Physics	1 153 072	1 262 000	(80 000)	a/ (6.3)	1 182 000	5.8	1 250 000
International Laboratory of Marine Radioactivity	1 374 565	1 491 000	10 000	0.7	1 501 000	2.8	1 543 000
Total Appropriation Section	2 527 637	2 753 000	(70 000)	(2.5)	2 683 000	4.1	2 793 000

a/ The expenditure decrease in ICTP reflects an adjustment in charges for services rendered to the ICTP. There is no decrease in real terms in resources available to the programme.

## Manpower by Division

Table 67

Division	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
International Laboratory of Marine Radioactivity	9	15	-	24	9	16	-	25
International Centre for Theoretical Physics	11	25	-	36	11	25	-	36
Total Appropriation Section	20	40	-	60	20	41	-	61



APPROPRIATION SECTION 5

SAFEGUARDS

# APPROPRIATION SECTION 5: SAFEGUARDS

## Summary of cost

Table 68

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	14 280 134	16 402 000	(120 000)	(0.7)	16 282 000	2.0	16 608 000
Temporary assistance - P	98 200	78 200	132 800	169.8	211 000	1.0	213 200
Salaries - established posts - GS & M&O	3 725 979	4 360 000	23 000	0.5	4 383 000	3.0	4 515 000
Temporary assistance - GS & M&O	286 518	158 200	65 800	41.6	224 000	2.0	228 500
Common staff costs	6 463 833	7 192 800	(16 800)	(0.2)	7 176 000	2.2	7 332 100
Overtime	7 250	10 900	100	0.9	11 000	3.6	11 400
Sub-total: Staff costs	24 861 914	28 202 100	84 900	0.3	28 287 000	2.2	28 908 200
Travel	4 599 150	4 377 800	26 200	0.6	4 404 000	3.0	4 536 400
Representation and hospitality	25 586	19 500	1 500	7.7	21 000	8.6	22 800
Training	5 393	-	9 000	-	9 000	2.2	9 200
Experts	208 767	157 300	33 700	21.4	191 000	4.1	198 800
Equipment: leased or rental	142 958	140 300	60 700	43.3	201 000	3.0	207 000
Equipment: purchased (construction)	2 783 532	3 627 700	(439 700)	(12.1)	3 188 000	3.0	3 285 000
Supplies and materials	1 626 472	1 355 300	72 700	5.4	1 428 000	3.0	1 470 900
General operating expenses	758 775	758 200	40 800	5.4	799 000	4.0	830 900
Contracts	757 430	723 000	92 000	12.7	815 000	1.0	823 000
Research and technical contracts	74 911	68 000	-	-	68 000	2.9	70 000
Miscellaneous	209 328	204 800	55 200	27.0	260 000	3.0	267 800
Sub-total: Other direct costs	11 192 302	11 431 900	(47 900)	(0.4)	11 384 000	3.0	11 721 800
Conference services	40 776	11 000	(3 000)	(27.3)	8 000	-	8 000
Interpretation services	42 448	50 000	(34 000)	(68.0)	16 000	-	16 000
Translation services	238 091	193 000	32 000	16.6	225 000	1.8	229 000
Printing and publishing services	49 388	55 000	4 000	7.3	59 000	1.7	60 000
Data processing services	1 473 645	1 739 000	(227 000)	(13.1)	1 512 000	2.8	1 554 000
Contract administration	20 585	24 000	-	-	24 000	4.2	25 000
Laboratory services	1 679 094	1 828 000	91 000	5.0	1 919 000	3.2	1 979 000
Radiation protection and legal services	301 304	312 000	300 000	96.2	612 000	2.5	627 000
Sub-total: Shared costs	3 845 331	4 212 000	163 000	3.9	4 375 000	2.8	4 498 000
T O T A L	39 899 547	43 846 000	200 000	0.5	44 046 000	2.5	45 128 000
Expenditure increase Adjustments			200 000	0.5			



# APPROPRIATION SECTION 5: SAFEGUARDS

## Expenditure by Division

Table 69

Division	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Co-ordination Section	351 116	363 000	23 000	6.3	386 000	1.8	393 000
Operations A	8 051 729	8 366 000	(104 000)	(1.2)	8 262 000	2.4	8 460 000
Operations B	5 462 248	6 256 000	301 000	4.8	6 557 000	2.4	6 712 000
Operations C	6 431 807	7 428 000	(55 000)	(0.7)	7 373 000	2.3	7 542 000
Development and Technical Support	10 182 364	11 346 000	(307 000)	(2.7)	11 039 000	2.7	11 333 000
Safeguards Information Treatment	5 430 328	5 810 000	206 000	3.5	6 016 000	2.6	6 174 000
Safeguards Evaluation	2 182 505	2 299 000	80 000	3.5	2 379 000	2.2	2 432 000
Standardization, Training and Administrative Support	1 807 450	1 978 000	56 000	2.8	2 034 000	2.4	2 082 000
Total Appropriation Section	39 899 547	43 846 000	200 000	0.5	44 046 000	2.5	45 128 000

## Manpower by Division

Table 70

Division	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Programme Co-ordination	1	2	-	3	1	2	-	3
Operations A	71	31	-	102	71	32	-	103
Operations B	49	27	-	76	49	27	-	76
Operations C	62	37	-	99	62	37	-	99
Development and Technical support	33	31	-	64	33	33	-	66
Safeguards Information Treatment	29	36	-	65	27	39	-	66
Safeguards Evaluation	21	15	-	36	22	15	-	37
Standardization, Training and Administrative Support	12	14	-	26	12	14	-	26
Total Appropriation Section	278	193	-	471	277	199	-	476



**APPROPRIATION SECTION 6**

**POLICY-MAKING ORGANS**

## APPROPRIATION SECTION 6: POLICY-MAKING ORGANS

Summary of costTable 71

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	184 108	217 000	-	-	217 000	2.3	222 000
Salaries - established posts - GS & M&O	62 023	47 000	-	-	47 000	4.3	49 000
Temporary assistance - GS & M&O	22 022	17 300	900	5.2	18 200	1.6	18 500
Common staff costs	88 383	95 000	(500)	(0.5)	94 500	4.4	98 700
Overtime	68 755	43 300	600	1.4	43 900	3.0	45 200
Sub-total: Staff costs	425 291	419 600	1 000	0.2	420 600	3.0	433 400
Travel	4 942	5 800	-	-	5 800	3.4	6 000
Representation and hospitality	9 516	8 300	1 700	20.5	10 000	8.0	10 800
Supplies and materials	2 872	3 700	-	-	3 700	2.7	3 800
General operating expenses	78 061	63 200	(1 900)	(3.0)	61 300	4.1	63 800
Contracts	-	-	4 000	-	4 000	-	4 000
Miscellaneous	113 858	113 400	6 200	5.5	119 600	3.0	123 200
Sub-total: Other direct costs	209 249	194 400	10 000	5.1	204 400	3.5	211 600
Conference services	203 561	231 000	(5 000)	(2.2)	226 000	2.7	232 000
Interpretation services	404 324	413 000	(20 000)	(4.8)	393 000	3.8	408 000
Translation services	3 348 566	3 309 000	65 000	2.0	3 374 000	2.2	3 448 000
Printing and publishing services	474 142	441 000	(25 000)	(5.7)	416 000	2.9	428 000
Data processing services	-	-	9 000	-	9 000	-	9 000
Sub-total: Shared costs	4 430 593	4 394 000	24 000	0.5	4 418 000	2.4	4 525 000
T O T A L	5 065 133	5 008 000	35 000	0.7	5 043 000	2.5	5 170 000
Expenditure increase			-	-			
Adjustments			35 000	0.7			

# APPROPRIATION SECTION 6: POLICY-MAKING ORGANS

## Expenditure

Table 72

	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
The General Conference	2 076 705	2 018 000	(1 000)	-	2 017 000	2.7	2 071 000
The Board of Governors	2 988 428	2 990 000	36 000	1.2	3 026 000	2.4	3 099 000
Total Appropriation Section	5 065 133	5 008 000	35 000	0.7	5 043 000	2.5	5 170 000

## Summary of manpower

Table 73

	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Policy-making Organs	3	2	-	5	3	2	-	5



**APPROPRIATION SECTION 7**

**EXECUTIVE MANAGEMENT AND ADMINISTRATION**

# APPROPRIATION SECTION 7: EXECUTIVE MANAGEMENT AND ADMINISTRATION

## Summary of cost

Table 74

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	3 861 264	4 744 000	(188 000)	(4.0)	4 556 000	2.0	4 648 000
Temporary assistance - P	112 569	65 600	(33 800)	(51.5)	31 800	0.9	32 100
Salaries - established posts - GS & M&O	2 549 205	2 723 000	75 000	2.8	2 798 000	3.0	2 882 000
Temporary assistance - GS & M&O	149 220	88 600	(9 600)	(10.8)	79 000	1.9	80 500
Common staff costs	2 300 931	2 588 300	(51 000)	(2.0)	2 537 300	2.4	2 597 600
Overtime	37 244	38 900	500	1.3	39 400	2.8	40 500
Sub-total: Staff costs	9 010 433	10 248 400	(206 900)	(2.0)	10 041 500	2.4	10 280 700
Travel	250 625	386 500	7 900	2.0	394 400	3.0	406 400
Representation and hospitality	35 962	48 100	(300)	(0.6)	47 800	3.6	49 500
Training	486 730	510 400	(85 700)	(16.8)	424 700	2.7	436 100
Experts	137 894	85 700	(37 200)	(43.4)	48 500	3.9	50 400
Equipment: leased or rental	46 556	52 000	4 000	7.7	56 000	3.6	58 000
Equipment: purchased (construction)	199 090	72 900	36 300	49.8	109 200	3.5	113 000
Supplies and materials	80 442	25 300	19 000	75.1	44 300	2.9	45 600
General operating expenses	191 132	229 200	11 200	4.9	240 400	4.0	249 900
Contracts	-	-	5 000	-	5 000	-	5 000
Miscellaneous	132 674	421 500	(13 300)	(3.2)	408 200	3.7	423 400
Sub-total: Other direct costs	1 561 105	1 831 600	(53 100)	(2.9)	1 778 500	3.3	1 837 300
Conference services	1 536	1 000	-	-	1 000	-	1 000
Interpretation services	4 460	17 000	25 000	147.1	42 000	2.4	43 000
Translation services	671 806	636 000	18 000	2.8	654 000	2.1	668 000
Printing and publishing services	447 863	521 000	(23 000)	(4.4)	498 000	3.0	513 000
Data processing services	681 033	842 000	(44 000)	(5.2)	798 000	2.8	820 000
Other services a/	929	26 000	138 000	530.8	164 000	3.0	169 000
Sub-total: Shared costs	1 807 627	2 043 000	114 000	5.6	2 157 000	2.6	2 214 000
T O T A L	12 379 165	14 123 000	(146 000)	(1.0)	13 977 000	2.5	14 332 000
Expenditure increase			-	-			
Adjustments			(146 000)	(1.0)			

a/ Includes Medical Services less charges for Legal Services which are transferred to Safeguards.



# APPROPRIATION SECTION 7: EXECUTIVE MANAGEMENT AND ADMINISTRATION

## Expenditure

Table 75

	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Executive Management	2 082 176	2 417 000	(50 000)	(2.1)	2 367 000	2.4	2 424 000
Administration	10 296 989	11 706 000	(96 000)	(0.8)	11 610 000	2.6	11 908 000
Total Appropriation Section	12 379 165	14 123 000	(146 000)	(1.0)	13 977 000	2.5	14 332 000

## Manpower

Table 76

	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Executive management	15	12	-	27	15	12	-	27
Administration	61	99	-	160	61	103	-	164
Total Appropriation Section	76	111	-	187	76	115	-	191



**APPROPRIATION SECTION 8**

**GENERAL SERVICES**

## APPROPRIATION SECTION 8: GENERAL SERVICES

Summary of costTable 77

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	506 928	585 000	(8 000)	(1.4)	577 000	2.1	589 000
Salaries - established posts - GS & M&O	2 037 650	2 132 000	22 000	1.0	2 154 000	3.0	2 219 000
Temporary assistance - GS & M&O	56 401	79 400	(49 400)	(62.2)	30 000	2.0	30 600
Common staff costs	913 717	950 600	(11 600)	(1.2)	939 000	2.8	964 900
Overtime	27 010	25 300	6 700	26.5	32 000	3.1	33 000
Sub-total: Staff costs	3 541 706	3 772 300	(40 300)	(1.1)	3 732 000	2.8	3 836 500
Travel	3 347	5 800	600	10.3	6 400	3.1	6 600
Representation and hospitality	493	600	-	-	600	-	600
Equipment: purchased (construction)	408 341	290 900	(34 900)	(12.0)	256 000	3.1	264 000
Supplies and materials	625 944	741 700	18 300	2.5	760 000	1.6	772 500
General operating expenses	8 120 682	8 952 700	42 300	0.5	8 995 000	4.0	9 354 800
Sub-total: Other direct costs	9 158 807	9 991 700	26 300	0.3	10 018 000	3.8	10 398 500
Translation services	3 938	5 000	(1 000)	(20.0)	4 000	-	4 000
Printing and publishing services	86 562	59 000	1 000	1.7	60 000	3.3	62 000
Data processing services	116 033	93 000	14 000	15.1	107 000	2.8	110 000
Sub-total: Shared costs	206 533	157 000	14 000	8.9	171 000	2.9	176 000
T O T A L	12 907 046	13 921 000	-	-	13 921 000	3.5	14 411 000
Expenditure increase			-	-			
Adjustments			-	-			

APPROPRIATION SECTION 8: GENERAL SERVICES

Summary of manpower

Table 78

	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
General Services	10	71	26	107	10	71	28	109

## GENERAL SERVICES

VIC Operating CostsTable 79

	1986 Actual expenditures	1987 Adjusted budget	1988 estimate
Utilities	2 059 192	2 368 300	2 560 000
Contractual maintenance services	740 022	1 113 100	1 176 000
Cleaning	954 521	1 042 000	936 000
Building and maintenance staff	1 619 469	1 584 300	1 676 000
Security services staff costs	1 029 596	1 095 400	1 174 000
Building and maintenance supplies	239 484	364 100	376 000
Building, property and maintenance equipment	73 171	109 100	73 000
Sinking Fund, major repairs	67 945	62 700	67 000
TOTAL	6 783 400	7 739 000	8 038 000

Costs of common services, supplies and equipmentTable 80

	1986 Actual expenditures	1987 Adjusted budget	1988 estimate
Division of General Services			
A. Services:			
Communications	1 156 759	1 104 900	1 105 800
Freight and Transportation	28 633	42 400	42 000
Rental of Premises	47 257	72 400	85 000
Rental and maintenance of office equipment	432 832	457 500	518 000
Other	52 401	72 400	82 000
Sub-total	1 717 882	1 749 600	1 832 800
B. Supplies:			
Office supplies	175 387	205 300	244 000
Expendable equipment	120 575	172 300	152 500
Other	90 498	-	-
Sub-total	386 460	377 600	396 500
C. Equipment:			
Office furniture and equipment	237 999	94 000	98 000
Transportation and equipment	29 226	25 100	26 000
Sub-total	267 225	119 100	124 000
TOTAL	2 371 567	2 246 300	2 353 300

APPROPRIATION SECTION 9

SHARED SUPPORT SERVICES

(COST OF WORK FOR OTHERS)

# APPROPRIATION SECTION 9: SHARED SUPPORT SERVICES

## Cost of work for others

### Summary of cost

Table 81

Item of Expenditure	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Salaries - established posts - P	5 777 385	6 671 000	(274 000)	(4.1)	6 397 000	2.0	6 525 000
Temporary assistance - P	1 016 086	759 900	94 400	12.4	854 300	3.1	880 700
Salaries - established posts - GS & M&O	5 491 310	5 702 000	163 000	2.9	5 865 000	3.0	6 041 000
Temporary assistance - GS & M&O	633 280	479 100	(146 400)	(30.6)	332 700	2.0	339 400
Common staff costs	3 909 032	4 502 600	(139 500)	(3.1)	4 363 100	2.4	4 467 600
Overtime	132 338	60 100	-	-	60 100	3.0	61 900
Sub-total: Staff costs	16 959 431	18 174 700	(302 500)	(1.7)	17 872 200	2.5	18 315 600
Travel	41 550	42 600	4 400	10.3	47 000	3.0	48 400
Representation and hospitality	2 148	1 900	-	-	1 900	5.3	2 000
Training	76 433	78 700	-	-	78 700	2.8	80 900
Experts	35 686	13 000	6 800	52.3	19 800	4.0	20 600
Equipment: leased or rental	1 338 354	1 474 000	688 000	46.7	2 162 000	3.1	2 228 000
Equipment: purchased (construction)	1 873 308	1 148 600	(702 100)	(61.1)	446 500	2.6	458 000
Supplies and materials	1 855 643	2 077 100	100 000	4.8	2 177 100	4.7	2 279 400
General operating expenses	1 639 126	1 836 400	143 600	7.8	1 980 000	3.9	2 058 200
Contracts	244 757	142 000	8 000	5.6	150 000	3.3	155 000
Research and technical contracts	131 793	78 000	-	-	78 000	2.6	80 000
Miscellaneous	-	-	56 800	-	56 800	3.7	58 900
Sub-total: Other direct costs	7 238 798	6 892 300	305 500	4.4	7 197 800	3.8	7 469 400
Interpretation services	9 910	-	-	-	-	-	-
Translation services	35 123	52 000	3 000	5.8	55 000	1.8	56 000
Printing and publishing services	114 177	105 000	(14 000)	(13.3)	91 000	2.2	93 000
Data processing services	544 954	696 000	111 000	15.9	807 000	3.0	831 000
Sub-total: Shared costs	704 164	853 000	100 000	11.7	953 000	2.8	980 000
SUB-TOTAL	24 902 393	25 920 000	103 000	0.4	26 023 000	2.9	26 765 000
Less: Cross-Charge (above)	704 164	853 000	100 000	11.7	953 000	2.8	980 000
Total Shared Support Services	24 198 229	25 067 000	3 000	-	25 070 000	2.9	25 785 000
Less: Agency's share	19 730 302	20 632 000	(117 000)	(0.6)	20 515 000	2.8	21 085 000
Cost of work for others	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2	4 700 000



# APPROPRIATION SECTION 9: SHARED SUPPORT SERVICES

## Expenditure by service

Table 82

Service	1986 Actual expenditures	1987 Budget	Expenditure increase(decrease) %		1988 at 1987 prices	Price increase %	1988 with price increase
Contract administration services	436 701	523 000	(148 000)	(28.3)	375 000	2.7	385 000
Conference services	617 429	655 000	5 000	0.8	660 000	2.4	676 000
Interpretation	1 129 533	1 063 000	(182 000)	(17.1)	881 000	3.6	913 000
Translation and records services	5 608 470	5 502 000	279 000	5.1	5 781 000	2.2	5 909 000
Medical services	995 992	1 022 000	(3 000)	(0.3)	1 019 000	2.6	1 045 000
Library	1 928 880	2 261 000	(33 000)	(1.5)	2 228 000	4.4	2 327 000
Data processing services	6 800 395	7 083 000	166 000	2.3	7 249 000	2.8	7 454 000
Printing and publishing	6 924 436	7 262 000	(30 000)	(0.4)	7 232 000	2.9	7 443 000
Radiation protection services	460 557	549 000	49 000	8.9	598 000	2.5	613 000
Sub-total	24 902 393	25 920 000	103 000	0.4	26 023 000	2.9	26 765 000
Less: cross-charge (above)	704 164	853 000	100 000	11.7	953 000	2.8	980 000
Total Shared Support Services	24 198 229	25 067 000	3 000	-	25 070 000	2.9	25 785 000
Less: Agency's share	19 730 302	20 632 000	(117 000)	(0.6)	20 515 000	2.8	21 085 000
Services provided to others	4 467 927	4 435 000	120 000	2.7	4 555 000	3.2	4 700 000

## APPROPRIATION SECTION 9: SHARED SUPPORT SERVICES

Breakdown of costs by userTable 83

	Contract administration services	Conference services	Translation and records services	Medical services	Library	Data processing services	Printing and publishing services	Interpretation	Radiation protection services	Total	%
<u>Agency</u>											
Appropriation Section 1	-	-	447 000	-	-	691 000	31 000	-	-	1 169 000	5.3
Appropriation Section 2	94 000	266 000	687 000	-	1 284 000	1 616 000	3 424 000	343 000	123 000	7 837 000	35.5
Appropriation Section 3	262 000	169 000	369 000	-	-	391 000	1 222 000	103 000	-	2 516 000	11.4
Appropriation Section 4	4 000	-	1 000	-	-	26 000	98 000	-	-	129 000	0.6
Appropriation Section 5	25 000	8 000	229 000	-	-	1 554 000	60 000	16 000	308 000	2 200 000	10.0
Appropriation Section 6	-	232 000	3 448 000	-	-	9 000	428 000	408 000	-	4 525 000	20.5
Appropriation Section 7	-	1 000	668 000	488 000	-	820 000	513 000	43 000	-	2 533 000	11.5
Appropriation Section 8	-	-	4 000	-	-	110 000	62 000	-	-	176 000	0.8
Appropriation Section 9	-	-	56 000	-	-	831 000	93 000	-	-	980 000	4.4
Sub-total	385 000	676 000	5 909 000	488 000	1 284 000	6 048 000	5 931 000	913 000	431 000	22 065 000	100.0
Less: Cross-charges	-	-	56 000	-	-	831 000	93 000	-	-	980 000	
Sub-total Agency	385 000	676 000	5 853 000	488 000	1 284 000	5 217 000	5 838 000	913 000	431 000	21 085 000	
<u>Work for others</u>											
UNIDO	-	-	-	507 000	671 000	886 000	1 012 000	-	-	3 076 000	
UNRWA	-	-	-	50 000	10 000	118 000	-	-	-	178 000	
AGRIS	-	-	-	-	-	211 000	-	-	-	211 000	
TC	-	-	-	-	-	117 000	-	-	182 000	299 000	
UN, UNPA, Other	-	-	-	-	362 000	74 000	500 000	-	-	936 000	
Sub-total Work for others	-	-	-	557 000	1 043 000	1 406 000	1 512 000	-	182 000	4 700 000	
TOTAL	385 000	676 000	5 853 000	1 045 000	2 327 000	6 623 000	7 350 000	913 000	613 000	25 785 000	

APPROPRIATION SECTION 9: SHARED SUPPORT SERVICES

Manpower by service

Table 84

Division	1987 Adjusted				1988			
	P	GS	M&O	Total	P	GS	M&O	Total
Contract administration services	1	5	-	6	1	5	-	6
Conference services	5	8	-	13	5	8	-	13
Interpretation	8	1	-	9	8	1	-	9
Translation and records services	46	41	1	88	48	42	2	92
Medical services	3	15	3	21	3	15	3	21
Library	5	10	-	15	5	10	-	15
Data processing services	31	30	-	61	31	37	-	68
Printing and publishing	17	101	18	136	17	101	18	136
Radiation protection services	3	5	-	8	3	5	-	8
Total Appropriation Section	119	216	22	357	121	224	23	368



## APPENDIX



## APPENDIX

## SUPPLEMENTARY NUCLEAR SAFETY AND RADIATION PROTECTION PROGRAMME

Actions Planned

(Reference: Appendix I of GOV/2278)

Table 1: Nuclear Power

Task	Actions and scheduling	Completion date[1]
<u>Area of Activity A.2: Technical and Economic Performance of Nuclear Power</u>		
1. Power Reactor Information System (PRIS)	CM 87[2] AGM 88	1988
2. Technical document on specific aspects of nuclear power plant control and instrumentation (man-machine interface)	SPM 87, 88 IWG 87	1989
3. Technical report on qualification criteria and the accreditation of operator training programmes (in co-operation with the Safety of Nuclear Installations programme)	CM 87, 88 AGM 87, 88	1989
3a. Technical document on exchange of information and experience between training centres of nuclear power plant operating organizations	AGM 88	1989
3b. Symposium on quality assurance activities in nuclear power plant operation	1989	Proceedings, 1990
4. Internal reports evaluating the effectiveness of the Agency's QA programme	AGM 87 AGM 89	1987 1989
5. Manual on QA in nuclear power plant operations	AGM 87	1988
6. Advisory missions for QA programme appraisals (1-2 per year)	TC in 1988	1987/88

[1] For publications, the date given is that by which the manuscript is due to be completed.

[2] This category relates to the services of outside consultants needed to carry out specific tasks. Under the Secretariat's internal rules, between one and seven consultants may attend such a meeting. If a higher number are needed, the approval of the Director General is required.

Table 1 (cont.)

Task	Actions and scheduling	Completion date
<u>Area of Activity A.3: Advanced Systems and Technology Development</u>		
7. International Working Group on Advanced Technologies for Water-cooled Reactors	TCM 87 TCM 88	1987 1988
(i) Technical document on design concepts to promote passive safety features	CM 87 2 TCM 88 SPM 88	1988 1989
(ii) Technical document on accident management for water-cooled reactors and related technology development	TCM 88	1989
(iii) Technical document on accident situations and their impact on future reactor designs	TCM 88	1989
(iv) Technical report on advanced LWR design and technology	CM 87	1988
(v) CRP on LWR technology data base (88-91)		1991

Table 2: Nuclear Fuel Cycle

Task	Actions and scheduling	Completion date
[Tasks 1-4 deleted on the recommendation of the Expert Working Group on International Co-operation in Nuclear Safety and Radiation Protection (EWG), para. 8, Annex 1 of GOV/2278]		
<u>Area of Activity B.4: Spent Fuel Management</u>		
5. Technical report on the main principles of the handling, conditioning, transportation and storage/disposal of severely damaged nuclear fuel (combined with I.4.22)	CM 87 AGM 88	1989
6. Technical report on design and engineering solutions for safe spent fuel storage in at-reactor pools under accident conditions	CM 88 TCM 88 AGM 87	1989



Table 3: Radioactive Waste Management

Task	Actions and scheduling	Completion date
<u>Area of Activity C.2: Radioactive Waste Disposal</u>		
1. Technical report on near-field effects of the post-accident entombment of damaged nuclear facilities	CM 88, 89 TCM 88 TCM 89, 90	1991
2. Safety Series report on safety and performance assessment for the radioactive waste isolation system at entombed nuclear facilities	2 CM 89 AGM 89 TCM 89, 90	1991
3. Technical report on the evaluation and optimization of post-accident concrete sealing technology for nuclear facilities	CM 88, 89 AGM 89 TCM 90	1991
3a. Establishment of data bases for the validation of different types of model used in modelling radio-nuclide transfer through the terrestrial, aquatic and urban environment, in preparation for the writing of technical reports on each type of model	CM 87 CRP 88	1992
<u>Area of Activity C.3: Decommissioning of Nuclear Installations</u>		
4. Technical report assessing the decommissioning and disposal alternatives for a nuclear reactor after a serious accident (in co-operation with the Radiation Protection Programme)(combined with H.1.1)	CM 87, 88, 89 TCM 87, 90	1991
5. Technical report on the use of remotely operated equipment in the isolation, disposal or decommissioning of nuclear facilities after a serious accident	CM 88, 90 TCM 89	1991
6. Technical report on methodology and technology for cleaning up and decontaminating very large areas after a nuclear accident, including radiation protection aspects (in co-operation with the Radiation Protection Programme)(combined with H.1.3-4)	CM 87, 88, 89 AGM 87, 89 TCM 88	1989
7. Technical report on the safe transport, disposal and stabilization of very large volumes of contaminated material from the clean-up of large areas after a nuclear accident (in co-operation with the Radiation Protection Programme)(combined with H.1.6 and H.3.21)	CM 88, 89 2 TCM 89 AGM 89	1990
8. Technical report on the on-site treatment of large volumes of liquid and solid wastes generated at nuclear facilities as a result of a major accident	CM 89, 90 TCM 90	1991

Table 4: Human Health

Task	Actions and scheduling	Completion date
<u>Area of Activity E.3: Radiation Dosimetry</u>		
1. Technical document on the role of SSDLs in the quality assurance programme relating to the use of dose rate meters for personal and environmental measurements	AGM 87	1987
<u>Area of Activity E.4: Nutritional and Health-related Environmental Studies</u>		
2. Technical document on the type of substrates and analytes to be used in monitoring radioactivity in the environment and food	Consultants	1987
3. CRP on reference methods for the determination of key radioactive contaminants in basic environmental and food samples (87-90)	Laboratory	1990/91
4. Technical report - Guidelines for monitoring radioactive contamination due to fallout in environmental samples and foodstuffs	Consultants	1991
5. Laboratory quality control intercomparisons	Laboratory	1988
6. Development of certified reference materials	Laboratory	1988/89
7. Training course on sampling, sample preparation, measurement and data evaluation for environmental radioactivity measurements	TC	1988

Table 5: Radiation Protection

Task	Actions and scheduling	Completion date
<u>Area of Activity H.1: Occupational Radiation Protection and Health Effects</u>		
1. [Combined with C.3.4]		
2. Technical report on the rapid and reliable assessment of the large-scale contamination of people (external and internal)	AGM 89 CM 89	1991
3-4 [Combined with C.3.6]		

Table 5 (cont.)

Task	Actions and scheduling	Completion date
5. Technical report on protective clothing for personnel involved in operations in the presence of very high levels of contamination	CM 87 CM 88	1989
6. [Combined with C.3.7]		
[Task 7 deleted from the SNSP. This task will be carried out under the basic programme.]		
8. Safety Series document on the medical handling of skin lesions following high level accidental irradiation	AGM 87 CM 87 2 CM 88	1989
8a. Safety Series document on assessment and treatment of external irradiation	CM 87	1989
8b. Guidance for the establishment of basic therapeutic schemes and the formulation of correct prognoses in highly exposed persons	AGM 89	1991
9. Technical document with guidance on biological dosimetry (expansion of current activity)	CM 87 AGM 89	1990
10. Guidelines on methodologies and planning for an epidemiological study of late effects in selected groups exposed in a nuclear accident	TCM 87 CM 87	1987
11. Technical document on introducing the basic principles of the assessment and treatment of radiation injuries into the basic and post-graduate training of physicians	AGM 87 CM 88	1989
<u>Area of Activity H.2: Radiation Protection of the General Public</u>		
12. Establishment of an environmental monitoring data base for use in assessing the radiological impact of a severe nuclear accident	CM 87 AGM 87	1989
13. Fourteen RAPAT missions (6 in 1987, 8 in 1988)	TC	1987/88
14. Four training courses on radiation monitoring and dose assessment	CM 87 (TC) CM 88 (TC)	1987/88

Table 5 (cont.)

Task	Actions and scheduling	Completion date
15. Training course on the maintenance and calibration of radiation measuring equipment	TC	1988
16. Fifteen training missions to Member States (7 in 1987, 8 in 1988)	TC	1987/88
17. Establishment of a data base for the validation of radionuclide transport models and subsequent preparation of a technical report on the modelling of the atmospheric transport of radionuclides	CM 87 AGM 87, 88 CM 88	1991
18. [Transferred to C.2.3a]		
19. Safety Series report on doses per unit intake for selected radionuclides (the results from the CRP on dose intake factors for the public (see Table 80, No. 14 of 777) will be used as input for this document)	CM 88 AGM 88	1990
20. Symposium on experience in monitoring and assessing environmental radioactivity following a major accident	SYM 89	Proceedings, 1989
<u>Area of Activity H.3: Safe Transport of Radioactive Materials</u>		
21. [Combined with task C.3.7]		
<u>Area of Activity H.4: Emergency Planning and Preparedness</u>		
22. Technical report on the effectiveness of evacuation and sheltering measures after a nuclear accident (including iodine prophylaxis unless this subject is covered by WHO)	CM 87	1989
23. Safety Series document on intervention dose levels and corresponding derived intervention levels for application in the event of a major nuclear accident	2 CM 87 AGM 87, 88 CM 88	1990
24. Safety Series document on radiological sampling and monitoring under emergency conditions	CM 87 AGM 88	1990
25. Safety Series document on the rapid reporting, compiling and collating of large quantities of data after a nuclear accident	CM 87	1989
26. Safety Series document on criteria for re-entry into affected facilities and off-site areas and for recovery operations after a nuclear accident	CM 88 AGM 89	1990

Table 5 (cont.)

Task	Actions and scheduling	Completion date
27. Safety Series document on the planning of emergency responses to the impact of transboundary releases of radioactive material (including the impact on the food chain unless this subject is covered by WHO)	CM 87 AGM 87	1988
28. Establishment of a system for the reception and dissemination of data following an accident	CM 87 AGM 87	1988
29. Development of the Agency's emergency response unit	CM 87	1988
29a. Development of the Agency's means for discharging responsibilities under the two Conventions adopted by the General Conference	CM 87 AGM 87	1988
30. Safety Series document on the use of real-time models in predicting the radiological consequences of a nuclear accident	CM 87 AGM 87 2 CM 88	1990

Table 6: Safety of Nuclear Installations

Task	Actions and scheduling	Completion date
<u>Area of Activity I.1: Safety Principles and Regulatory Organization</u>		
1. Safety Series document on safety objectives and principles	2 CM 87	1988
2. Review (by ad hoc AG and NUSSAG) of NUSS codes and guides	AGM 87 AGM 88	1990
2a. Review of NUSS Government Code 50-C-G	TCM 87 CM 87	1988
<u>Area of Activity I.2: Safety Research and Analysis</u>		
3. Technical document on severe accident management	CM 87, 88 AGM 87, 89	1989
3a. AGM to consider means of conducting co-ordinated studies of severe accidents and their consequences	AGM 87 AGM 88	1988

[Task 4 combined with task I.3.16]

Table 6 (cont.)

Task	Actions and scheduling	Completion date
5. [To be implemented under the basic programme of the Nuclear Fuel Cycle]		
6. Technical document on research into material interactions under severe accident conditions	TCM 88	1988
7. CRP on radionuclide behaviour and release after a severe accident (88-90)		1990
8. Advisory Group meeting in 1987 to consider probabilistic safety assessment (PSA) activities including:	AGM 87	1987
(i) Technical document on guidelines for the use of PSA in nuclear power plants	CM 87 TCM 87	1987
(ii) Technical document on the PSA of new power reactor designs and mitigating systems	CM 87 TCM 87	1987
(iii) CRP on standard problems in modelling accident sequences (87-89)	CM 87 2 CM 88	1989
(iv) Technical document on computer codes for the probabilistic assessment of accident consequences	TCM 87	1988
(v) CRP on standard problems in probabilistic consequence assessment (89-91)		1991
[Task 9 moved to I.4]		
<u>Area of Activity I.3: Safe Siting, Design and Construction of Nuclear Installations</u>		
14. Symposium on fire protection and fire-fighting at nuclear facilities	SYM 89 CM 87, 88	Proceedings, 1989
[Task 15 deleted on recommendation of EWG: see GOV/2278, Annex I, para. 8]		
16. Technical document and Safety Series document (NUSS revisions) on safety aspects of reactivity transient accidents	CM 87, 88 TCM 87	1988
17. Safety Series documents (revision of NUSS documents 50-SG-D13 and 50-SG-03) on the monitoring of primary coolant conditions	CM 88	1989

Table 6 (cont.)

Task	Actions and scheduling	Completion date
17a. Review of NUSS Design Code 50-C-D	CM 87 TCM 87	1988
17b. Review of NUSS Siting Code 50-C-S	CM 87 TCM 87	1988
17c. Review of NUSS Siting Guides 50-SG-S1 and S2	CM 87, 88	1988
<u>Area of Activity I.4: Operational Safety of Nuclear Installations</u>		
18. Technical document - Manual on the balance between direct human action and automated controls for enhanced safety of nuclear facilities (moved from I.3)	CM 88	1989
18a. Conference on the man-machine interface in the nuclear industry (in co-operation with Area of Activity A.2)	CONF. 88 CM 87	Proceedings, 1988
18b. Technical document on human error statistics	CM 88 TCM 88	1988
19. Revision of NUSS documents with a bearing on the safe operation of nuclear power plants during non-routine tests (documents 50-SG-07, 08, 010)	CM 87 AGM 88	1988
19a. Review of NUSS Operations Code 50-C-0	CM 87 TCM 87	1988
20. Safety Series documents (revision of NUSS documents 50-SG-G6 and 50-SG-06) on the preparedness of public authorities and of operating organizations (licencees) for emergencies at nuclear power plants	CM 87, 88	1988
21. Revision of NUSS document 50-SG-01 on operator training and qualification	CM 88 TCM 89	1990
22. [Combined with B.4.5]		
23. Nine OSART missions in 1987 and 15 in 1988 to nuclear power plants		Continuing
24. Eight safety review missions in 1987 and eight in 1988 to research reactors		Continuing

Table 6 (cont.)

Task	Actions and scheduling	Completion date
25. Revised guidelines for OSART missions	3 CM 87 CM 88 TCM 88	1988
[Task 26 transferred to basic programme]		
27. Two missions by ASSETs in 1987 and four in 1988 to nuclear power plants (including finalization of methodology)	AGM 87	Continuing
28. Technical report on methodologies for reviewing selected nuclear power plant events with the aim of determining generic lessons of worldwide interest (IRS)	3 CM 87 AGM 88	1988
28a. Symposium on balancing automation and human action in nuclear power plants	1990	1991
28b. Additional NUSS safety guide revisions identified by 1987/88 activities	1989	1990



Actions Cancelled or Postponed

(Reference GC(XXX)/777)

Table 7: Nuclear Power

Table/Task	Action affected	Explanation
69, No. 7	Technical report on national experience with energy, electricity and nuclear power planning studies in developing countries (AGM 87, 88)	Report cancelled as it is expected that the main elements will be covered by the report of the senior expert group on mechanisms to assist developing countries in the promotion and financing of their nuclear power programmes
69, No. 15	Technical document on SMPR capital costs (AGM 88)	Postponed for one year because of lack of response and absence of new information

Table 8: Nuclear Fuel Cycle

Table/Task	Action affected	Explanation
74, No. 1	Seminar on methods of characterization and quality control of nuclear fuel and their feedback to fuel fabrication behaviour (1988)	This seminar will be organized by the Karlsruhe Nuclear Research Centre in 1987
75, No. 7	Technical report on improvement of structural materials resistance to chemical degradation and irradiation (CM 87, TCM 88)	Meetings postponed by one-two years
75, No. 17	Technical report on Sr and Cs arisings, demand and utilization (CM 87 <sup>a/</sup> , TCM 88)	Meetings postponed by one year

<sup>a/</sup> Funds adjusted accordingly in 1988 basic programme estimates.

Table 9: Radioactive Waste Management

Table/Task	Action affected	Explanation
76, No. 9	Technical report on design of ventilation and air-cleaning systems at non-nuclear fuel cycle facilities (CM 87, TCM 87)	To be combined with the technical report on design and operation of off-gas cleaning systems at low- and intermediate-level waste treatment and conditioning facilities (T.76, No. 8)
7, Nos 4-6	Safety Series code of practice on underground disposal of radioactive waste and the two related guides to the code (AGM 87, 88)	Meetings postponed until 1989-90
77, No. 10	Safety Series document on siting, design and construction of geological repositories for high-level and alpha-bearing radioactive wastes	Preparation of document postponed until 1990
77, No. 11	Safety Series document on operation, shutdown and closing of deep geological repositories	Preparation of document postponed until 1991

Table 10: Radiation Protection

Table/Task	Action affected	Explanation
79, No. 1	Safety Series guide on the design of radiation protection systems in nuclear fuel fabrication plants (AGM 87) <sup>a/</sup>	Meeting postponed by one year
79, No. 3	Safety Series guide on radiation protection services in uranium refineries and nuclear fuel fabrication plants (AGM 88)	Meeting postponed by one year
79, No. 10	Safety Series document on beta and gamma radiation monitoring (CM 88)	Meeting postponed by one year
79, No. 17	Review of BSS for radiation protection (CM 87)	Meeting postponed by two years
79, No. 21	Technical report on beta and gamma spectra and detector responses for radiation protection purposes (CM 87, TCM 88)	Meetings postponed to 1989

<sup>a/</sup> See footnote on Table 8.

Table/Task	Action affected	Explanation
79, No. 24	Technical document on radiation protection aspects of fusion safety (TCM 87)	Meeting postponed by two years
81, No. 18	Seminar on the adoption, application and implementation of the Agency's regulations for the safe transport of radioactive materials (1987)	The objectives of this seminar will be met through a training course
82, No. 8	Safety Series guide on radiological protection principles applying to the control of off-site emergency workers under accident conditions at a nuclear installation (CM 87, 88 <sup>a/</sup> ; AGM 87)	The subject will be covered under other activities

Table 11: Safety of Nuclear Installations

Table/Task	Action affected	Explanation
83, No. 3	NUSS Newsletter (AGM 87, AGM 88) <sup>a/</sup>	The Newsletter will be produced within the framework of other NUSSAG activities, so that no meetings will be needed
84, No. 3	Two technical documents on specific research topics (to be determined annually) (CM 87, 88; TCM 87, 88)	The topics planned will be covered under the supplementary programme
84, No. 5	Symposium on the implications of severe accidents for the design and licensing of nuclear power plants (1987)	Symposium postponed by one year
84, No. 13	Technical document on use of expert systems in nuclear safety (TCM 88)	Meeting postponed by one year
85, No. 6	Technical document - Manual on management of nuclear power plant construction and its safety implications (CM 87, AGM 87)	Meetings postponed by two years
85, No. 7	Technical document - Manual on assessment of fire protection design at nuclear power plants (CM 88, AGM 88)	Meetings postponed by one year
86, No. 2	Technical documents - Manual on operational limits and conditions for nuclear power plants (CM 87, 88; AGM 88)	The subject will be covered during the revision of NUSS documents 50-SG-D13 and 50-SG-03 (see Task 17, Table 6 in Appendix)
86, No. 9	Seminar on safety aspects of research reactors and critical assemblies (1988)	The subject will be covered by a symposium in 1989

<sup>a/</sup> See footnote on Table 8.

Additional SNSP Manpower 1987 and 1988

	<u>1987</u>		<u>Additions</u>		<u>1988</u>	
	P	GS	P	GS	P	GS
A. Nuclear Power	-	-	-	-	-	-
B. Nuclear Fuel Cycle	-	-	-	-	-	-
C. Radioactive Waste Management	-	-	-	-	-	-
H. Radiation Protection	4	3	1	-	5	3
I. Safety of Nuclear Installations	4	2	1	1	5	3
<hr/>						
Total	8	5	2	1	10	6

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# Summary of SNSP Estimates by Programme

PROGRAMME	1987 at 1987 prices at AS 14.20	1988 at 1987 prices at AS 14.20	1988 at 1988 prices at AS 14.20 <u>a/</u>	1989 at 1987 prices at AS 14.20 <u>b/</u>
Programme A - Nuclear Power	205 000	302 000	310 000	227 000
Programme B - Nuclear Fuel Cycle	(14 000)	88 000	90 000	112 000
Programme C - Radioactive Waste Management	64 000	221 000	226 000	470 000
Programme E - Human Health	248 000	226 000	232 000	226 000
Programme H - Radiation Protection	822 000	820 000	838 000	1 052 000
Programme I - Safety of Nuclear Installations	963 000	1 884 000	1 931 000	1 455 000
Total	2 288 000 <u>c/</u>	3 541 000	3 627 000	3 542 000

a/ In the detailed tables below, 1988 figures are presented at 1987 prices only.

b/ The 1989 figures only take into account foreseen SNSP costs and activities postponed from either 1987 or 1988. They in no way represent a complete or final programme for 1989 SNSP activities.

c/ The amount included in the 1987 budget for SNSP as presented in GC(XXX)/777/Add.1 totalled \$ 2 030 000 at AS 19.50 or \$ 2 591 000 at AS 14.20. Further programme modifications have since been made, resulting in a revised cost of \$ 1 792 000 at AS 19.50 or \$ 2 288 000 at AS 14.20. The latest status is shown in this appendix.

NUCLEAR POWER		1987	1988	1989 preliminary estimate
		at AS 14.20 1987 prices	at AS 14.20 1987 prices	at AS 14.20 1987 prices
A.1	Adjustments to basic programme budget	(13 000)	(52 000)	37 000
Sub-total for A.1		(13 000)	(52 000)	37 000
A.2	Power Reactor Information System - PRIS	1 CM 4 000	1 AGM 24 000	
	Man-machine interface	1 SPM 1 000 1 IWG 1 000	1 SPM 1 000	
	Qualification Criteria and Accreditation of Operator Training Programme	1 CM, 1 AGM 26 000	1 CM, 1 AGM 24 000	
	Quality Assurance programmes	2 AGM 38 000 Advis. Missions 19 000 5 man/weeks		1 AGM 24 000 1 Symposium and (price not Proceedings yet known)
	Exchange of information and experience between training centres of nuclear power plant operating organizations		1 AGM a/ [36 000]	
Sub-total for A.2		89 000	49 000	24 000
A.3	Review of the present and future generation of power reactors	1 IWG (TCM) 32 000 2 CM 20 000	5 TCM 103 000 1 CRP 35 000 1 SPM 1 000	
	Additional staff	77 000	166 000	166 000
Sub-total for A.3		129 000	305 000	166 000
Programme A Total		205 000	302 000	227 000

a/ To be funded through general savings in Programme A.

NUCLEAR FUEL CYCLE		1987	1988	1989 preliminary estimate
		at AS 14.20 1987 prices	at AS 14.20 1987 prices	at AS 14.20 1987 prices
B.1				
	Adjustments to basic programme budget	(31 000)		
	Sub-total for B.1	(31 000)		
B.3				
	Adjustments to basic programme budget		(31 000)	
	Sub-total for B.3		(31 000)	
B.4				
	Spent fuel management	1 CM 6 000 1 ACM 23 000	1 CM 13 000 1 AGM 25 000 1 TCM 13 000	
	Additional staff		87 000	87 000
	Adjustments to basic programme budget	(12 000)	(19 000)	25 000
	Sub-total for B.4	17 000	119 000	112 000
Programme B Total		(14 000)	88 000	112 000

RADIOACTIVE WASTE MANAGEMENT		1987	at AS 14.20 1987 prices	1988	at AS 14.20 1987 prices	1989 preliminary estimate at AS 14.20 1987 prices	
C.1							
Adjustments to basic programme budget			(25 000)		(24 000)		
Sub-total for C.1			(25 000)		(24 000)		
C.2							
Entombment of nuclear facilities after accidents				1 TCM	22 000	2 AGM	52 000
				2 CM	13 000	4 CM	25 000
						2 TCM	37 000
						1 Safety Series	31 000
Data base for modelling radionuclide transfer		1 CM	6 000	1 CRP	25 000		
				1 RCM	25 000	1 RCM	25 000
Adjustments to basic programme budget			(19 000)		(31 000)		69 000
Sub-total for C.2			(13 000)		54 000		239 000
C.3							
Special technologies for decommissioning after major nuclear accidents		1 CM	6 000	2 CM	23 000	1 CM	6 000
		1 TCM	19 000			1 TCM	19 000
Decontamination of large areas		1 CM	6 000	2 CM	41 000	2 CM	12 000
		1 AGM	26 000	1 TCM	25 000	2 TCM	38 000
						2 AGM	48 000
On-site waste processing						1 CM	6 000
Additional staff			45 000		102 000		102 000
Sub-total for C.3			102 000		191 000		231 000
Programme C Total			64 000		221 000		470 000



HUMAN HEALTH		1987	at AS 14.20 1987 prices	1988	at AS 14.20 1987 prices	1989 preliminary estimate at AS 14.20 1987 prices
E.3	Secondary standards dosimetry laboratories	1 AGM	15 000			
Sub-total for E.3			15 000			
E.4	Measurements of radioactive contaminants	Consultants SSA	80 000	Consultants SSA	78 000	Consultants SSA 78 000
		Equipment	127 000	Equipment	86 000	Equipment 86 000
		Research contracts	26 000	Research contracts	62 000	Research contracts 62 000
Sub-total for E.4			233 000	226 000		226 000
Programme E Total			248 000	226 000		226 000

RADIATION PROTECTION			1987	at AS 14.20 1987 prices	1988	at AS 14.20 1987 prices	1989 preliminary estimate at AS 14.20 1987 prices
H.1							
Contamination assessment, decontamination and protective clothing	1 CM			7 000	1 CM	14 000	1 CM 1 AGM 23 000
Overexposures	2 AGM 3 CM			43 000 19 000	3 CM	19 000	2 AGM 46 000
Epidemiological study	1 TCM 1 CM			19 000 6 000			
Additional staff				239 000		257 000	257 000
Adjustments to basic programme budget				(64 000)		(62 000)	100 000
Sub-total for H.1				269 000		228 000	433 000
H.2							
Environmental monitoring and modelling	2 AGM 2 CM 2 Data Bases			43 000 13 000 32 000	1 AGM 1 CM 2 Data Bases	21 000 6 000 31 000	1 Symposium Proceedings 63 000 95 000
Dose per unit intake					1 CM 1 AGM	6 000 25 000	
Additional staff				153 000		250 000	250 000
Adjustments to basic programme budget					a/	(37 000)	
Sub-total for H.2				241 000		302 000	408 000

a/ General reduction in estimated costs of implementing activities planned for 1988

## RADIATION PROTECTION continued

1987		1988	1989 preliminary estimate
	at AS 14.20 1987 prices	at AS 14.20 1987 prices	at AS 14.20 1987 prices
H.3			
Safe Transport (moved to C.3)			
Adjustments to basic programme budget	(41 000)		
Sub-total for H.3	(41 000)		
H.4			
Functions under conventions	3 CM 19 000		
	2 AGM 43 000		
	Emergency Response Unit 77 000	Emergency Response Unit 25 000	
Emergency response	2 AGM 43 000	1 AGM 25 000	1 AGM 21 000
	5 CM 33 000	3 CM 19 000	
Intervention levels	1 AGM 22 000	1 AGM 25 000	
	2 CM 13 000	1 CM 6 000	
Additional staff	135 000	190 000	190 000
Adjustments to basic programme budget	(32 000)		
Sub-total for H.4	353 000	290 000	211 000
Programme H Total	822 000	820 000	1 052 000

SAFETY OF NUCLEAR INSTALLATIONS			1987	1988	1989 preliminary estimate
			at AS 14.20 1987 prices	at AS 14.20 1987 prices	at AS 14.20 1987 prices
<hr/>					
I.1					
Safety Principles	2 CM	31 000			
	1 AGM	26 000	1 AGM	28 000	
Revision of NUSS document 50-C-G	1 CM	6 000			
	1 TCM	19 000			
Expert Working Group (Implementation of Special Nuclear Safety Programme)					
Additional staff				6 000	
Adjustments to basic programme budget		a/ (57 000)			
<hr/>					
Sub-total for I.1		25 000		34 000	
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I.2					
Severe Accident Management	1 CM	13 000	1 CM	13 000	
	2 AGM	54 000	1 AGM	25 000	1 AGM 31 000
			1 TCM	25 000	
			1 CRP	31 000	
			1 RCM	25 000	
Probabilistic Safety Assessment	3 CM	19 000	2 CM	25 000	
	1 AGM	26 000			1 CRP 19 000
	3 TCM	52 000			
Additional staff				93 000	93 000
Adjustments to basic programme budget		(191 000)		111 000	
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Sub-total for I.2		(27 000)		348 000	143 000
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a/ Includes a general reduction in estimated costs of implementing planned activities in 1987.

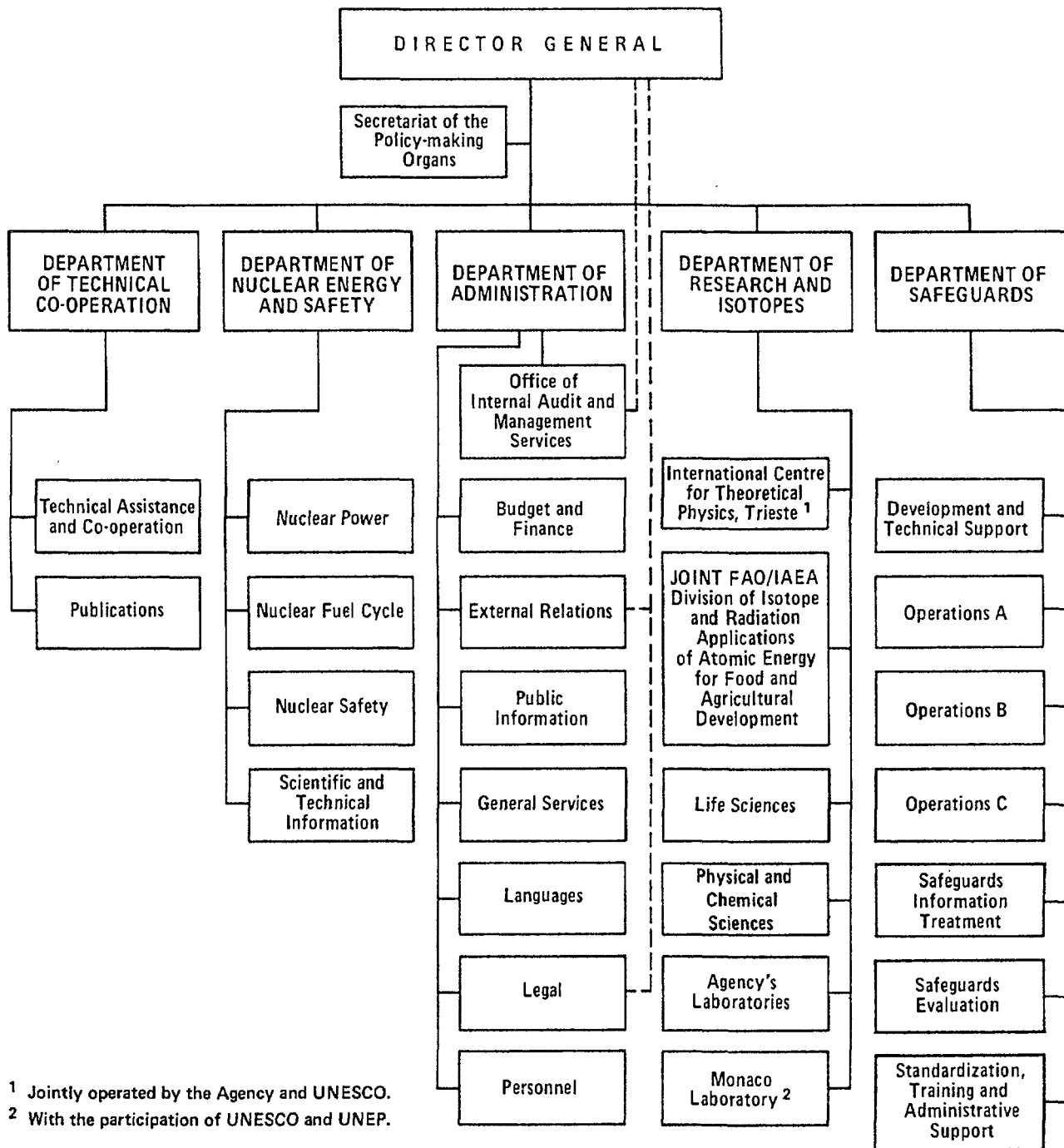
SAFETY OF NUCLEAR INSTALLATIONS continued			1987	1988	1989 preliminary estimate
			at AS 14.20 1987 prices	at AS 14.20 1987 prices	at AS 14.20 1987 prices
I.3	Improved safety features and updating of NUSS Standards	3 TCM 5 CM a/	63 000 36 000	4 CM a/ Consultants	25 000 6 000
	Additional staff		40 000		69 000
	Adjustments to basic programme budget		(26 000)	(38 000)	58 000
Sub-total for I.3			113 000	62 000	368 000
I.4	Man-Machine Interface	1 CM	13 000	1 Conference and Proceedings	247 000
				2 CM	19 000
				1 TCM	14 000
				Consultants	10 000
	Operational improvements & updating of NUSS Standards	3 CM 1 TCM	28 000 19 000	2 CM	28 000
				1 AGM	27 000
	OSARTs	9 Missions to NPPs 3 CM	230 000 26 000	15 Missions	399 000
				1 CM	6 000
				1 TCM	19 000
	Research Reactor Advisory Missions	8 Missions	51 000	8 Missions	49 000
	ASSETs	2 Missions 1 AGM	41 000 19 000	4 Missions	79 000
	IRS	3 CM	32 000	1 AGM	31 000
		Operating Costs	19 000	Operating Costs	19 000
	Additional staff		380 000		551 000
	Adjustments to basic programme budget		(6 000)	(58 000)	639 000
Sub-total for I.4			852 000	1 440 000	944 000
Programme I Total			963 000	1 884 000	1 455 000

a/ 1 CM is funded under the basic programme. It is included here and in task I.3.17c of the Action Plan as the subject matter pertains to SNSP.



# ANNEX A

## ORGANIZATIONAL CHART



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

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

# A N N E X B

## TABLE OF CORRESPONDENCE BETWEEN PART II AND PART I

Part II Appropriation Section	Part I Programme/Area of activity
1. TECHNICAL ASSISTANCE AND CO-OPERATION	S.3
2. NUCLEAR ENERGY AND SAFETY	
Nuclear Power	A (less part of A.3)
Nuclear Fuel Cycle	B, C (less part of C.2)
Nuclear Safety	H, I, S.5.3
Scientific and Technical Information	S.5.2, S 6.5 (Agency's share), part of A.3
3. RESEARCH AND ISOTOPES	
Food and Agriculture	D
Life Sciences	E (less part of E.4)
Physical and Chemical Sciences	F, G (less G.2), part of A.3
Agency Laboratory (allocated)	
4. OPERATIONAL FACILITIES	
International Centre for Theoretical Physics	G.2
International Laboratory of Marine Radioactivity	part of E.4, part of C.2
5. SAFEGUARDS	
Programme Co-ordination	Part of S.1.1
Operations A, Operations B, Operations C	J.2
Development and Technical Support	J.3
Information Treatment	J.1
Evaluation	J.4
Standardization, Training and Administrative Support	J.5
6. POLICY-MAKING ORGANS	S.1.2
7. EXECUTIVE MANAGEMENT AND ADMINISTRATION	
Executive Management	S.1.1 (less Safeguards Programme Co-ordination)
Administration	S.2, S.5.1
Internal audit and management	S.2.3
Budget and finance	S.2.6
External relations	S.2.1
Public information	S.5.1
Legal advice	S.2.2
Personnel	S.2.4
8. GENERAL SERVICES	S.4
9. SHARED SUPPORT SERVICES	
Contract administration services	S.6.1
Conference services	Part of S.6.2
Interpretation	Part of S.6.2
Translation and records services	S.6.3
Medical service	S.6.4
Library	S.6.5
Data processing services	S.6.6
Printing and publishing	S.6.7
Radiation protection services	S.6.8