

# THE AGENCY'S TECHNICAL CO-OPERATION ACTIVITIES IN 1985

Report by the Director General

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INTERNATIONAL ATOMIC ENERGY AGENCY



## P R E F A C E

Following its usual practice, the Board of Governors has requested the communication to the General Conference of the material it used in reviewing the Agency's technical co-operation activities in 1985; this material is accordingly reproduced in the present document. The review was carried out pursuant to paragraph 19 of the Revised Guiding Principles and General Operating Rules to Govern the Provision of Technical Assistance by the Agency.<sup>1/</sup>

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<sup>1/</sup> INFCIRC/267.

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# LIST OF ABBREVIATIONS

Agency	International Atomic Energy Agency
CC	Convertible currency
CEC	Commission of the European Communities
FAO	Food and Agriculture Organization of the United Nations
IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development (World Bank)
ILRAD	International Laboratory for Research on Animal Diseases
NCC	Non-convertible currency
NENF	Division of Nuclear Fuel Cycle
NENP	Division of Nuclear Power
NENS	Division of Nuclear Safety
OECD	Organization for Economic Development
RCA	Regional Co-operative Agreement for Research Development and Training Related to Nuclear Science and Technology
RIAL	Agency's Laboratories
RIFA	Joint FAO/IAEA Division of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development
RILS	Division of Life Sciences
RIRL	Division of Research and Laboratories
SIDA	Swedish International Development Authority
TACF	Technical Assistance and Co-operation Fund
UN/TCD	Department of Technical Co-operation for Development, United Nations
UN-DNRE	Division of Natural Resources and Energy, UN/TCD
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFSSTD	United Nations Financing System for Science and Technology for Development
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization
WMO	World Meteorological Organization

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Byelorussian SSR	Byelorussian Soviet Socialist Republic
Dem. Kampuchea	Democratic Kampuchea
Dem. P.R. Korea	Democratic People's Republic of Korea
German D.R.	German Democratic Republic
Germany, F.R.	Federal Republic of Germany
Iran, I.R.	Islamic Republic of Iran
Korea, R.	Republic of Korea
Libyan A.J.	Libyan Arab Jamahiriya
St. Christopher	St. Christopher-Nevis
Syrian A.R.	Syrian Arab Republic
Ukrainian SSR	Ukrainian Soviet Socialist Republic
USSR	Union of Soviet Socialist Republics
U.A. Emirates	United Arab Emirates
UK	United Kingdom of Great Britain and Northern Ireland
U.R. Tanzania	United Republic of Tanzania
USA	United States of America

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Note: All sums of money are expressed in US dollars and have been rounded off to the nearest hundred or thousands dollars in most instances. Percentages have also been rounded off in statistical tables and figures.

## GLOSSARY

Adjusted programme - the total value of all technical co-operation activities approved for a given calendar year plus all approved assistance brought forward from previous years but not yet implemented.

Backstopping - technical support provided for technical co-operation activities.

Delivery - the actual assistance provided to Member States, e.g. experts in the field, expert man-months served, fellows trained and equipment provided.

Disbursements - actual cash outlays for goods provided and services rendered.

Dynamic programming - the process whereby funds released through rephasing and reprogramming are used to meet requirements of developing Member States through the implementation of approved projects for which funds would otherwise not be available; it serves to keep project planning realistic.

Earmarkings - amounts allotted for funding approved assistance awaiting implementation.

Extrabudgetary funds - funds provided by Member States for financing specific projects or activities. These funds are separate from voluntary contributions to the Technical Assistance and Co-operation Fund.

Funds in trust - funds received from Member States to finance assistance for themselves.

Future-year net expenditure - net expenditure incurred in a calendar year against programmes approved for implementation in future years.

Net expenditure - the sum of disbursements during the year and year-end unliquidated obligations minus unliquidated obligations carried over from the previous year.

Net expenditure rate - Net expenditure as a percentage of the adjusted programme.

Non-project assistance - the provision of assistance through technical co-operation activities, such as individual training, that are not part of specific projects.

Project assistance - the provision of experts, equipment and training within the framework of individual projects.

Regular Programme - the total value of project and non-project assistance approved in a given year, excluding UNDP and Special Programme assistance.

Rephasing - a temporary release of funds approved for inputs which were planned for a given programme year and which cannot be implemented as scheduled. Rephasing does not change total inputs approved for a project; rather, it serves to keep project planning realistic.



Reprogramming - a permanent release of funds approved for inputs which were planned for current or past years and which are no longer required. Reprogramming reduces the amounts previously approved for a project and enables new activities to be financed.

Reserve Fund - an amount set aside by the Board each year for financing assistance of an urgent nature requested after the Board has approved the Regular Programme for the year in question.

Special Programme - projects identified jointly by donor and recipient Member States and executed by the Agency utilizing extrabudgetary cash and in-kind contributions especially made for this purpose.

UNDP Programme - projects executed by the Agency on behalf of UNDP and its associated funds, including UNFSSTD.

Unliquidated obligations - obligations incurred for which no cash outlays have yet been made.

Unobligated balance - total funds available less disbursements and less unliquidated obligations against the current year.

Unused balance - total funds available less disbursements and less all unliquidated obligations against the current year and future years.

## PART I. SUMMARY AND CONCLUSIONS

1. Although total resources and disbursements were higher in 1985 than in previous years, the growth rates for both declined somewhat.
2. New resources for the Technical Assistance and Co-operation Fund (TACF) increased by 13%, the TACF accounting for over 66% of all technical co-operation resources in 1985.
3. Pledges made towards the 1985 target for voluntary contributions to the TACF came close to 90% of the target. Although a significant loss on exchange had to be absorbed by the Fund, 96.9% of the target was covered thanks to additional income.
4. Although extrabudgetary resources declined in 1985, they still accounted for one fifth of all technical assistance resources.
5. There was a significant increase in in-kind contributions; this was attributable to the support for non-destructive testing training in Latin America given by Canada, which was the second largest donor of in-kind assistance after the United States.
6. UNDP resources rose very slightly. With UNDP's new five-year programming cycle beginning in 1987, there may be further increases if new projects are identified and timely action taken.
7. New information on implementation expressed as net expenditure and net expenditure rates has been introduced in the form of Expenditure Summaries I, II and III, which provide a more precise picture of performance by fund, geographic area, programme component, field of activity and technical Division.
8. Net expenditure against all funds stood at 57.9%. Net expenditure against the TACF was 66.3%. As UNDP resources and funds in trust account for relatively small shares of the programme, their utilization does not influence the overall net expenditure rate significantly. However, the slow utilization of extrabudgetary resources did have an adverse effect on programme performance as a whole.
9. Net expenditures from the TACF continued to increase at a higher rate than resources, so that the unobligated balance declined for the second consecutive year. In the past, the growing unobligated balance was a source of concern; this situation has now been brought under control.
10. Expert component implementation increased further. With regard to the TACF, the expert component accounted for most of the year-end earmarkings in previous years, but in 1985 it accounted for only 43.8%, on a par with the percentage of the earmarkings for equipment.

11. During the period 1981-85, there was a 93% increase in the number of purchase orders processed by the Field Procurement Section and a 63% increase in the volume of equipment purchased. During the same period, the number of experts recruited rose by 158% and that of expert assignments by 214%. The number of fellows increased by 7% and that of visiting scientists by 506%. Also, the number of training courses doubled, the number of participants increasing by 86%.
12. From 1980 to 1985 the total volume of technical assistance delivered by the Agency increased by 79%; during the same period, expenditures under the Regular Budget for technical co-operation servicing grew by 18%.
13. The Secretariat is examining how it can best handle the future increases which it expects in the total volume of Agency technical assistance within a frame of severe Regular Budget constraints.
14. The Evaluation Section is playing an important role in Agency efforts to enhance the effectiveness of the technical co-operation programme. Over 500 interim implementation reports were completed in 1985, and 50 mid-project and end-of-project evaluations were conducted. Two evaluations of major processes (equipment provision and group training) were also carried out.

PART II. REVIEW OF THE AGENCY'S  
TECHNICAL CO-OPERATION  
ACTIVITIES

A. RESOURCES: \$38 100 000

15. As shown in Figure 1A, the total new resources available to the Agency for technical co-operation activities grew by 6.1%, reaching \$38.1 million. This increase is largely attributable to 13.3% growth in the TACF; at over \$25 million, the TACF accounted for 66.1% of all available funds. Extrabudgetary resources declined by 17.4% to \$7.5 million, representing 19.6% of the total. Although in-kind resources rose by 33.8%, they accounted for only 7.3% of total resources. The steady decline in UNDP resources was arrested; in fact, there was a slight (4.4%) increase, so that UNDP's share of total resources stood at about 7%.

1. Technical Assistance and Co-operation Fund: \$25 197 000

(66.1% of total resources)

16. The growth of the TACF over the last ten years is shown in Tables 1 and 2.<sup>1/</sup>

17. After declining in 1984, miscellaneous income to the TACF rose in 1985 by about 30% to \$2.4 million, from which a \$512 000 exchange loss has to be deducted. The considerable increase in receipts from assessed programme costs (65%) more than made up for the exchange loss.<sup>2/</sup> A breakdown of miscellaneous income received in the last four years is given in the following table (in thousands of dollars).

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<sup>1/</sup> The general position regarding the TACF is shown in Statements II.A-D in document GOV/2239 (The Agency's accounts for 1985), in which Schedule B.2 shows the status of voluntary contributions to the TACF at the end of 1985 and Schedule D.2 gives a summary of obligations and disbursements during 1985 and unliquidated obligations at the end of the year.

<sup>2/</sup> In this connection, see Schedule D.1 in document GOV/2239.

Year	Interest and other income	Assessed programme costs	Exchange gain (loss)	Total
1982	1134	408	(440)	1102
1983	1045	632	(52)	1625
1984	1236	612	(353)	1495
1985	1444	1007	(512)	1939

18. As assessed programme costs are charged to Member States on the technical assistance delivered to them and as the amounts received are paid into the TACF, developing Member States contributed over \$1 million to the Agency's main fund for technical co-operation activities in addition to their contributions towards the target.

2. Extrabudgetary funds: \$7 484 000

(19.6% of total resources)

19. Italy was again the largest single contributor of extrabudgetary funds for technical co-operation (46%).<sup>3/</sup>

20. The largest portion of extrabudgetary funds - namely, \$4.4 million, or 59% - was contributed in support of the Regular Programme; this reverses the trend observed in the last few years. An amount of \$3.1 million was made available for the Special Programme; of this, \$2.3 million was contributed for the MISR-MED project in Egypt.

21. Support for footnote-a/ projects increased significantly in 1985. Notwithstanding this fact, the percentage of footnote-a/ projects made operational declined once again. A summary of footnote-a/ project funding is given in the following table.

<sup>3/</sup> The general position regarding extrabudgetary contributions is shown in Statements IV.A-D (Funds administered on behalf of Member States, United Nations and other international organizations) in document GOV/2239; however, these statements reflect also extrabudgetary contributions other than those made in support of the Agency's technical co-operation activities. Information about actual expenditures from extrabudgetary resources in 1985 is given in Table 4 of document GOV/2238 (The Agency's programme and budget for 1987 and 1988).

At year-end	Approved footnote <u>a</u> / projects (\$)	Footnote <u>a</u> / projects & components made operational (\$)	Share of footnote- <u>a</u> / projects made operational (%)
1981	2 331 600	1 887 000	80.9
1982	3 952 000	2 837 800	71.8
1983	5 125 400	3 351 870	65.4
1984	5 187 000	3 222 260	62.1
1985	7 779 560	4 187 000	53.8

22. In addition to these various extrabudgetary resources, cash contributions were made by Australia and Japan in 1985 for co-ordinated research within the framework of the RCA; such research is not regarded as a technical co-operation activity. The extrabudgetary funds made available during the period 1983-85 for such co-ordinated research are shown in the following table; the totals represent only funds disbursed by the Agency.

Year	Australia		Japan		Total (\$)
	Isotope hydrology (\$)	Food irradiation (\$)	Cancer therapy (\$)	Diagnosis of liver diseases (\$)	
1983	53 571	-	15 000	15 000	83 571
1984	-	-	34 888	70 112	105 000
1985	-	49 764	35 000	80 000	164 764
Total	53 571	49 764	84 888	165 112	353 335

3. Assistance in kind: \$2 765 000<sup>4/</sup>

(7.3% of total resources)

23. The significant increase in this resource category was due in particular to support received from Canada for training in non-destructive testing in Latin America. In 1985, Canada became the second largest contributor of in-kind resources for technical co-operation, its contribution being valued at \$499 300; the United States was again the largest donor, contributing \$960 500. Details on the utilization of in-kind resources are given in Section B of Part II.

4. UNDP: \$2 654 000<sup>5/</sup>

(7.0% of total resources)

24. Resources available to the Agency for the execution of UNDP-supported projects declined steadily during the previous few years, but the decline was arrested in 1985; in fact, UNDP resources rose slightly (by 4.4%).

B. PROGRAMME DELIVERY AND NET EXPENDITURES

25. Technical co-operation project implementation or programme delivery can be analysed in a number of ways, but it is always useful to compare net expenditures with the estimated costs of the adjusted programme. This gives a ratio, expressed as a net expenditure rate, which indicates the extent to which the Agency has utilized the resources at its disposal during a given period.

26. In addition to the tables, figures and annexes traditionally provided, this report contains - at the end of this section - three "Expenditure Summaries" which, it is hoped, give an unambiguous picture of the status of the Agency's technical co-operation activities.

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<sup>4/</sup> In this connection, see Schedule E (Resources made available to the Agency by Member States during 1985 including contributions in cash and in kind) in document GOV/2239. However, it should be noted that this schedule reflects also in-kind contributions other than those made in support of the Agency's technical co-operation activities; on the other hand, the schedule does not reflect the provision of lecturers and facilities by governments of countries where training courses were held.

<sup>5/</sup> In this connection, see Statements IV.C and D in document GOV/2239.

27. Expenditure Summary I provides an overview of the status of the total programme at the end of 1985. It covers all resources with the exception of contributions in kind. As can be seen from Expenditure Summary I, the net expenditure rates for the different funds differed considerably in 1985. The following table provides an additional perspective.

Net expenditure rates by fund  
(as a percentage of the adjusted programme)

Year	TACF (%)	Funds in trust (%)	Extrabudgetary funds (%)	UNDP (%)	Total (%)
1983	57.9	97.3	31.1	91.8	53.7
1984	65.0	22.7	44.4	81.6	59.3
1985	66.3	24.3	35.4	76.3	57.9

28. It is evident that comparisons of only two years are not adequate for deriving trends; the overall net expenditure rate for 1985 was below the peak reached in 1984, but it virtually equalled the three-year average net expenditure rate of 57.0%. The net expenditure rate for the TACF, which is the most important source of financing for technical assistance, has been increasing steadily. In examining this table, one should, of course, bear in mind the relative importance of each of the resource categories in the total adjusted programme; in 1985, the TACF accounted for 64.7% of the adjusted programme, extrabudgetary funds for 28%, UNDP resources for 6.5% and funds in trust for less than 1%.

#### 1. Analysis by major component

##### Experts

29. The following table shows net expenditure rates for the expert component over a three year period.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	14 908 427	5 715 550	38.3	9 192 877
1984	15 128 681	7 006 446	46.3	8 122 235
1985	15 090 924	7 695 741	51.0	7 395 183



30. The net expenditure rate increase from 46.3% in 1984 to 51% in 1985 represents a 21% increase in the number of expert assignments (from 1530 to 1846), following a 39.0% increase in 1984.

31. At the end of 1984, over half of the earmarked TACF funds related to experts. By the end of 1985, the proportion had dropped to 43.8%, virtually equal to the equipment share of earmarkings.

32. The following table gives a five-year perspective on the delivery of expert services.

Year	Number of persons	Number of assignments	Number of man/months	Man-months per assignment
1981	461	587	851	1.45
1982	642	932	963	1.03
1983	758	1 099	1 020	0.93
1984	1 017	1 530	1 550	1.01
1985	1 188	1 846	1 585	0.86
Increase over 5 years	157.7%	214.5%	86.3%	

33. The increase in the average duration of assignments in 1984 reflected a deviation from the trend towards shorter assignments. It would be tempting to interpret this trend as evidence of growing self-reliance on the part of recipient Member States - that is, as an indication that only short-term and highly sophisticated expertise is required - but this is probably not the only reason. Very often, assignments originally foreseen to last several months are carried out in a series of short-term visits as the experts are not available for lengthy assignments. In addition, there has been an increase in the number of training course lecturer assignments, which are usually of fairly short duration.

#### Equipment

34. The following table shows net expenditure rates for the equipment component over a three-year period.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	19 108 574	11 695 271	61.2	7 413 303
1984	22 970 136	15 335 272	66.8	7 634 864
1985	24 862 095	15 855 553	63.8	9 006 542

35. The equipment component best illustrates that there is often no direct relationship between work performed and performance in terms of funds obligated or disbursed. Workloads as reflected in the number of purchase orders processed increased by 14.2% in 1985, whereas new obligations increased by only 3.4% and disbursements actually dropped by 7.2%:

Year	Number of purchase orders	Equipment disbursements (in thousands of dollars) <sup>a/</sup>
1981	1 759	9 865.5
1982	2 286	11 510.3
1983	2 405	14 746.3
1984	2 970	17 276.4
1985	3 391	16 038.8
Percentage increase over 5 years	92.8%	62.6%

<sup>a/</sup> Figures include disbursements relating to sub-contracts and training courses.

## Fellowships

36. The following table shows net expenditure rates for the fellowship component over a three-year period.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	3 702 828	2 789 640	75.3	913 188
1984	4 274 077	3 848 032	90.0	426 045
1985	4 453 787	3 206 482	72.0	1 247 305

37. Although the number of fellows undergoing training in 1985 (615) was significantly below that for 1984 (702), representing a decline of nearly 12.4%, the total man-months of training received fell by only 3.0%, from 3422.5 to 3323 man-months; in other words, the average duration of fellowships rose from 4.9 months in 1984 to 5.4 in 1985. The number of visiting scientists, which had increased by 89% from 1983 to 1984, registered an increase of 53% in 1985.

## Training courses

38. The following table shows net expenditure rates for the training course component over a three-year period.

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Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	3 322 326	2 549 639	76.7	772 687
1984	4 222 123	3 675 557	87.1	546 566
1985	3 994 200	3 402 912	85.2	591 288

39. Sixty training courses and study tours were organized in 1985 as compared with 51 in 1984 (this number has more than doubled in the last five years), and the number of participants rose by 9%, from 850 to 926. In total, 1729 persons received 4529 man-months of training through the Agency. A summary of training provided during the past five years is given in the following table.

Year	Fellows		Visiting scientists		Training course participants		Total	
	number	m/m	number	m/m	number	m/m	number	m/m
1981	577	3 249.0	31	20.5	498	707.0	1 106	3 976.5
1982	551	3 096.5	41	24.0	703	829.5	1 295	3 950.0
1983	612	3 054.5	65	34.0	659	936.5	1 336	4 025.0
1984	702	3 472.5	123	67.0	850	1 219.5	1 675	4 709.0
1985	615	3 323.0	188	108.5	926	1 097.5	1 729	4 529.0
In- crease over 5 years	7%	2%	506%	429%	86%	55%	56%	14%

#### Sub-contracts

40. The Agency sometimes enters into contractual arrangements with outside organizations for the provision by them of project assistance. For the purpose of the present analysis, the sub-contracts involved in such arrangement are here considered under a separate technical assistance component heading.

41. The following table shows expenditure rates for the sub-contract component over a three-year period.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	3 158 164	932 451	29.5	2 225 713
1984	6 763 730	1 774 654	26.2	4 989 076
1985	5 107 505	831 622	16.3	4 275 883

42. Unlike the other components, sub-contracts cannot be linked directly to a particular administrative unit charged with implementation (for example, the Experts Section). They cover the provision of equipment, expert services or training, or of any combination of these, and the administrative unit responsible for implementation in the case of a particular sub-contract is determined by the most important type of service to be provided under that sub-contract.

## 2. Analysis by resource

### (a) Technical Assistance and Co-operation Fund

Net expenditure: \$23 064 817

Disbursements: \$23 062 300

43. As the TACF is by far the single most important technical co-operation resource - representing 66.1% of total new resources in 1985 - and as its use is explicitly approved by the Board of Governors, it warrants separate treatment. For this reason, a separate table - Expenditure Summary II - giving the status of the TACF as at 31 December 1985 has been provided.

44. A three-year comparison of net expenditure from the TACF is given in the following table.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	27 107 465	15 687 881	57.9	11 419 584
1984	33 344 604	21 670 547	65.0	11 674 057
1985	34 810 179	23 064 817	66.3	11 745 362

45. In addition to net expenditures for implementing the current-year programme, net expenditures are incurred in respect of future years for multi-year projects, as shown in the following table.

Year	Adjusted future year programme (\$)	Net expenditure (\$)	Net expenditure rate (%)
1983	13 941 465	1 437 306	10.3%
1984	20 630 021	4 246 297	20.6%
1985	24 597 053	3 449 455	14.0%

46. The following table provides a three-year comparison for the TACF by area and component. The differences between the totals under "TACF projects by area" and those under "Total TACF by component" are due to the fact that the distribution by area refers only to project funds, whereas the distribution by component includes funds not related to projects (essentially funds for training courses and fellowships).

	1983		1984		1985	
	Adjusted programme (\$)	Imp. rate (%)	Adjusted programme (\$)	Imp. rate (%)	Adjusted programme (\$)	Imp. rate (%)
<u>TACF projects by area</u>						
Africa	5 917 120	45.7	6 501 097	54.2	5 854 377	58.5
Asia & Pacific	6 019 165	54.4	7 555 084	52.0	8 226 508	55.3
Latin America	5 993 213	52.3	6 661 775	59.3	7 025 495	61.6
Middle East & Europe	2 651 593	66.6	4 215 977	64.5	5 685 610	70.5
Interregional	686 795	42.2	1 146 268	77.5	1 661 230	73.8
TOTAL	21 267 886	52.5	26 080 201	57.6	28 453 220	61.6
<u>Total TACF by component</u>						
Experts	9 918 330	36.1	10 143 124	42.3	10 288 714	50.0
Equipment	11 162 306	66.8	15 439 812	66.8	16 700 688	69.6
Fellowships	2 992 368	78.0	3 604 927	97.2	3 870 483	75.6
Training courses	2 792 686	76.9	3 601 896	86.6	3 434 428	85.8
Sub-contracts	144 851	84.0	348 020	93.0	303 844	84.8
Miscellaneous	96 924	51.7	206 825	57.4	212 022	76.1
TOTAL	27 107 465	57.9	33 344 604	65.0	34 810 179	66.3

47. Although growing unobligated balances were formerly a source of concern, in 1985 there was a decrease in the unobligated balance for the second consecutive year. During 1985, disbursements against the TACF continued to increase at a higher rate than new resources available to the Fund, and this further reduced the unobligated balance.

Year	Disbursements from TACF (\$)	Annual increase in disbursements (%)	Annual increase in resources (%)
1982	13 450 800	28.9	23.5
1983	16 736 100	24.4	20.2
1984	20 124 000	20.2	15.5
1985	23 062 300	14.6	13.3

As explained in the report on the Agency's technical co-operation activities in 1984<sup>6/</sup>, a certain level of unobligated balances should be maintained in order to ensure the financial integrity of the TACF; a range of 20-25% of available resources at year-end is felt to be acceptable. At the end of 1985, the unobligated balance stood at 19.8% of the available resources. It should be stressed that the figures for "available resources" are based on the assumption that contributions pledged for 1985 will indeed be paid.

Year	Total available resources (\$)	Unused balance at year-end (\$)	Unobligated balance at year-end (\$)	Unobligated balance as a percentage of available resources (%)
1982	31 306 392	6 756 763	9 042 606	28.9
1983	37 131 228	8 907 250	11 374 918	30.6
1984	42 627 138	5 222 425	10 811 786	25.4
1985	47 700 211	3 905 213	9 454 860	19.8

48. For the last nine years the Agency has been calculating the cash resources available at the end of the year and deducting programme commitments (unliquidated obligations plus earmarkings) from them so as to arrive at the balance representing over- or underprogramming.

<sup>6/</sup> See paragraph 54 of document GC(XXIX)INF/226.

1977 - 1985  
Comparison of available cash resources and programme commitments  
as at 31 December

(in thousands of dollars)

Year	Cash resources			Programme commitments			Balance		
	CC	NCC	Total	CC	NCC	Total	CC	NCC	Total
1977	4 799	2 814	7 613	6 155	1 482	7 637	(1 356)	1 332	(24)
1978	4 896	3 420	8 316	6 978	1 293	8 271	(2 082)	2 127	45
1979	6 418	3 579	9 997	7 672	2 117	9 789	(1 254)	1 462	208
1980	8 267	4 467	12 734	9 470	3 925	13 395	(1 203)	542	(661)
1981	11 336	3 721	15 057	11 277	3 843	15 120	59	(122)	(63)
1982	14 186	3 670	17 856	13 788	4 071	17 859	398	(401)	(3)
1983	17 044	3 351	20 395	17 407	3 442	20 849	(363)	(91)	(454)
1984	19 240	3 274	22 514	19 583	3 782	23 365	(343)	(508)	(851)
1985	18 975	5 663	24 638	21 392	5 536	26 928	(2 417)	127	(2 290)

49. When submitting a new technical co-operation programme to the Board, the Secretariat takes into account the overprogramming still "on the books" in respect of technical assistance not yet delivered; it does so through a downward adjustment of the estimate of the new resources which will become available for that programme. This helps to ensure that the level of overprogramming does not exceed 10%. During the year, the adjusted programme is monitored, and changes are effected - inter alia - through rephasing, the use of savings from completed projects, the upgrading of footnote-a/ projects using resources from the TACF and the use of resources released by project cancellations, and also through formal programme changes.

50. The following table shows planned overprogramming as reported to the Board and actual overprogramming as calculated at the end of the year.



Calendar year	Planned overprogramming at 1 November of the previous year (%)	Actual over- programming as as at 31 December (%)
1983	9.3	2.2
1984	9.6	3.8
1985	9.7	9.3

51. Overprogramming of the convertible currency portion of the programme at the end of 1985 was 12.7%. This was caused in part by a \$1 113 000 exchange loss in respect of the convertible currency resources of the TACF. Underprogramming of the non-convertible currency portion by \$127 000 was caused by an exchange gain of \$601 000. During 1986, programme adjustments must therefore be made to rectify the balance in each currency category.

52. Use of the Reserve Fund, which has been in existence since 1980, increased considerably in 1985.

Year	Approvals for new projects (\$)	Approvals for additional assistance to existing projects (\$)	Total approvals under the Reserve Fund (\$)
1982	157 100	71 300	228 400
1983	321 000	29 000	350 000
1984	276 000	44 300	320 300
1985	363 210	46 800	410 010

The Fund continued to serve its function as a means of meeting unforeseen urgent requests. Although its size at present is still adequate, the maximum amount that can be approved for a single project is only \$25 000. When the Fund was established in 1980, this amount was sufficient to cover 6.0 man-months of expert services; in 1985, it covered only 3.7 man-months.

(b) Extrabudgetary funds

Net expenditure \$5 337 690  
Disbursements \$5 325 700

53. The lower net expenditure rate for extrabudgetary funds was the main factor accounting for a somewhat lower net expenditure rate for the programme as a whole. Performance in this resource category was adversely affected by delays in implementing a large-scale insect pest control project in Egypt.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	12 780 150	3 971 707	31.1	8 808 443
1984	17 044 931	7 566 479	44.4	9 478 452
1985	15 062 658	5 337 690	35.4	9 724 968

Among the circumstances which affect the rate at which extrabudgetary resources can be utilized are the following:

- (a) A sizable portion of extrabudgetary funds sometimes becomes available only in the last quarter of the year, as was the case in 1985;
- (b) Certain constraints on the use of these funds preclude the use of the complete roster of experts and, for equipment, of the full list of vendors normally approached by the Agency; also, additional administrative actions may be required in handling these funds; and
- (c) As these resources are made available for specific projects, there is less flexibility in programming; they cannot be transferred, when unexpected needs arise, to areas where they could be used more rapidly.

(c) Assistance in kind

Utilized: \$2 765 400

54. Although most in-kind assistance again related to training, with 17 countries providing 830 man-months of Type II fellowships valued at \$1 485 000 and ten training courses being financed from in-kind contributions, the percentage of in-kind assistance given in the form of expert services increased further; 425 experts from 53 countries and 19 experts from 9 organizations were provided either completely or partially cost-free.

Distribution of in-kind assistance

Year	Experts (%)	Equipment (%)	Training (%)
1982	3.8	0.8	95.4
1983	10.4	11.0	78.6
1984	13.8	2.6	83.6
1985	18.1	4.4	77.4

(d) UNDP

Net expenditure: \$2 653 512

Disbursements: \$2 562 500

55. The decline in UNDP resources in 1984 and the corresponding low level of new obligations during that year resulted in a decline in disbursements in the UNDP-financed portion of the programme in 1985.

Year	Disbursements from UNDP funds (\$)	UNDP share of total disbursements (%)
1982	3 826 600	16.6
1983	4 284 200	16.1
1984	3 898 700	12.0
1985	2 562 500	7.6

56. As the following table shows, the slight increase in resources in 1985 was reflected in a somewhat higher level of the adjusted programme and in a small increase in new obligations.

Year	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
1983	4 037 446	3 705 628	91.8	331 818
1984	3 112 964	2 541 287	81.6	571 677
1985	3 475 903	2 653 512	76.3	822 391

57. Last year, 25 UNDP-financed projects were under implementation (1984: 23); one project was completed and three new ones were approved. Also, the IAEA acted as an associated agency for three UNDP-financed projects executed by UN/TCD, FAO and the Government of Uruguay.

### 3. Analysis by Division

58. As foreseen in the Revised Guiding Principles<sup>1/</sup>, it is essential that the full technical capabilities of the Agency be at the disposal of its technical co-operation programme. The trend towards growing involvement in technical co-operation activities of staff members serving in Departments other than the Department of Technical Co-operation continued in 1985. In order to reflect fully the workload of each Division involved, Expenditure Summary III shows - inter alia - the net expenditure in respect of future years. Statistical information of the kind given in Expenditure Summary III is available in the computerized Technical Co-operation Management System on a project-by-project basis for each technical officer.

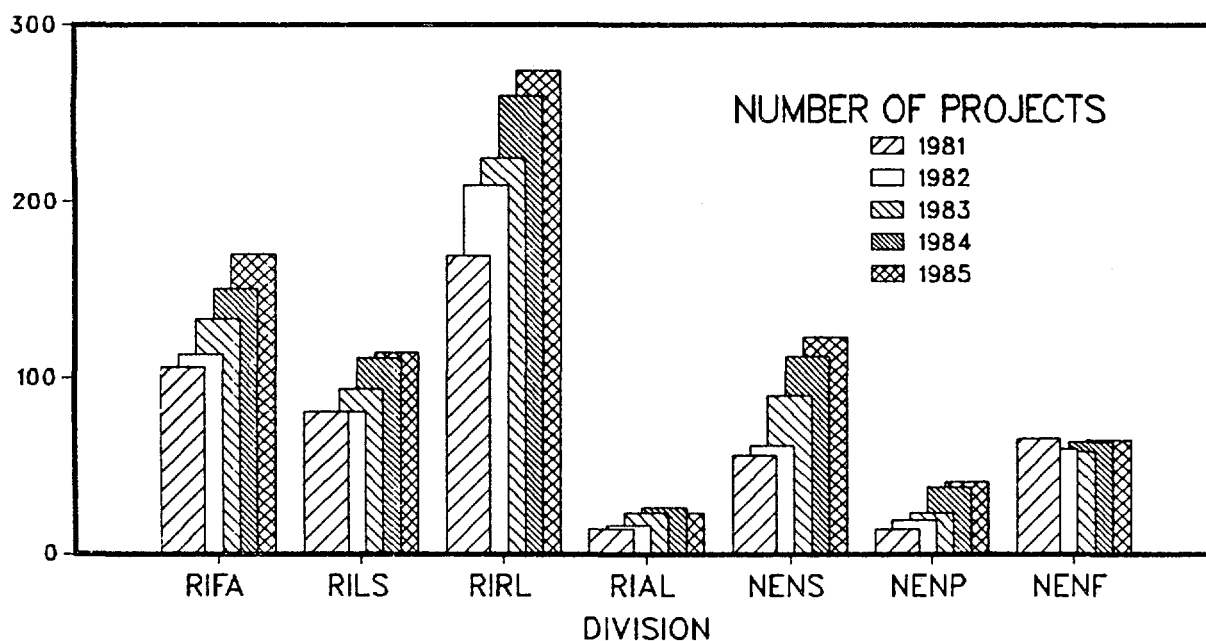
59. In 1985, 121 technical officers provided technical support to 833 on-going projects (1984: 770). In addition, they appraised 642 project requests received from Member States for the 1986 technical co-operation programme (1984: 555).

<sup>1/</sup> The Revised Guiding Principles and General Operating Rules to Govern the Provision of Technical Assistance by the Agency, INFCIRC/267.

Department/Division	Number of projects	Number of technical officers
<b>Research and Isotopes</b>		
Joint FAO/IAEA Division (RIFA)	170	21
Life Sciences (RILS)	129	12
Research and Laboratories (RIRL)	269	19
Agency's Laboratories (RIAL)	20	7
Sub-total	588	59
<b>Nuclear Energy and Safety</b>		
Nuclear Safety (NENS)	123	22
Nuclear Power (NENP)	41	12
Nuclear Fuel Cycle (NENF)	65	12
Sub-total	229	46
<b>Other</b>	16	16
<b>TOTAL</b>	<b>833</b>	<b>121</b>

60. The number of on-going projects handled by individual technical officers varies widely in 1985; it ranged from 1 to 86. The degree of involvement and amount of time each project requires also varies widely, depending on the nature and complexity of the project.

61. The following bar chart shows the number of projects supported by different Divisions over the last five years.

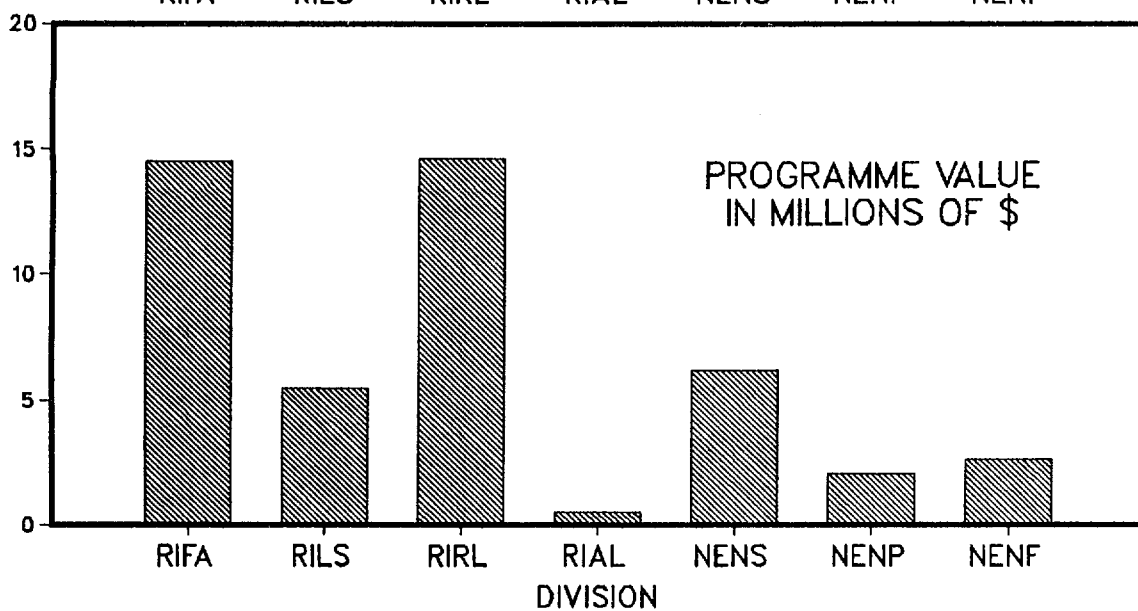
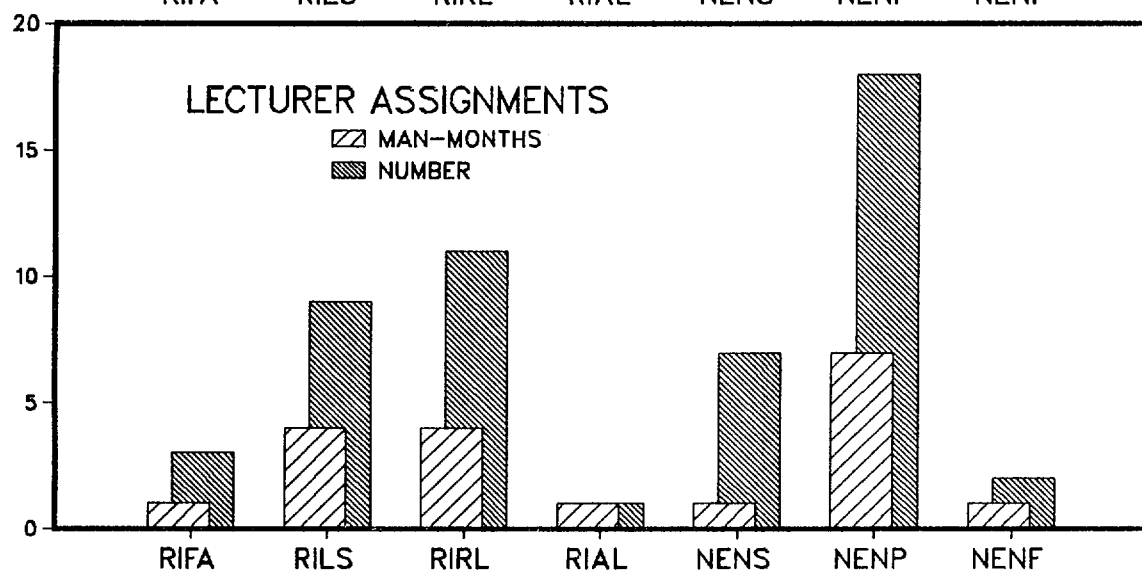
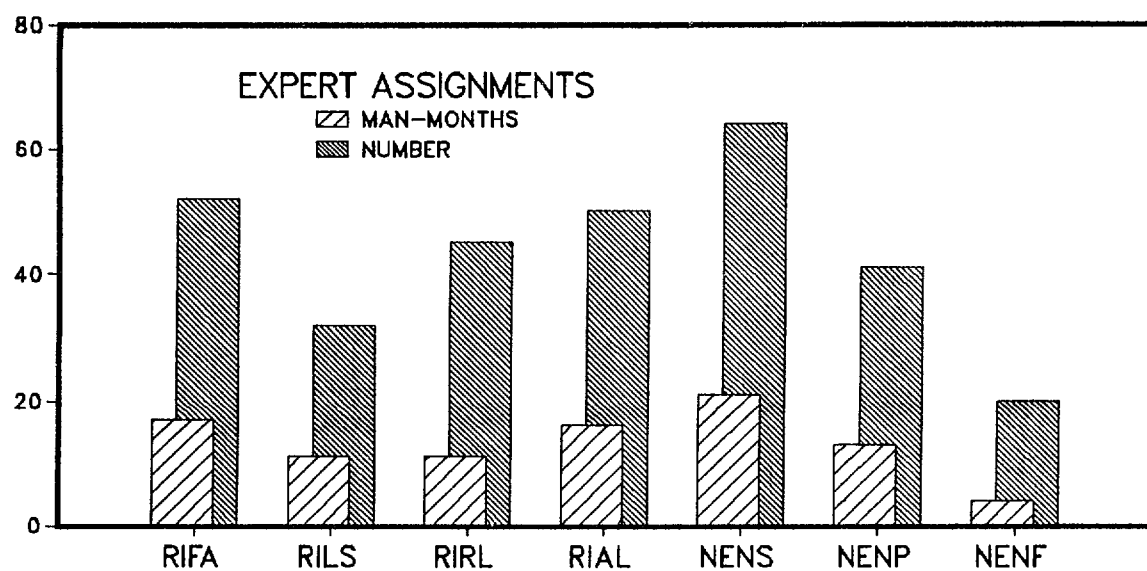


62. During the period 1981-85, the workload in terms of projects handled, grew by 60% in the Joint FAO/IAEA Division (from 106 to 170 projects), by 59% in the Division of Life Sciences (from 81 to 129 projects) and by 59% in the Division of Research and Laboratories (from 169 to 269 projects).

63. In the Department of Nuclear Energy and Safety, the Division of Nuclear Safety handled 120% more projects in 1985 than in 1981 (123 against 56) and the Division of Nuclear Power handled 193% more projects (41 against 14); the number of projects handled by the Division of Nuclear Fuel Cycle remained virtually the same (65 against 66).

64. During the year, Agency staff carried out 418 assignments (1984: 378), serving as experts in 337 cases (1984: 293) and as lecturers in 81 cases (1984: 85). A total of 128 man-months of expert services were thus made available by the Secretariat (1984: 124). The involvement of technical Divisions in technical co-operation activities can also be assessed by the value of the adjusted programme which each Division handles, as shown in the following charts.

# TECHNICAL SUPPORT FOR TECHNICAL CO-OPERATION PROJECTS IN 1985



65. In addition to their involvement in the appraisal of project requests and in the backstopping of on-going projects, technical officers play an important role in the evaluation of fellowship applications. Last year, 926 applications were evaluated (1984: 862) by 118 technical officers. For the most part, such work is not reflected in the financial figures given in Expenditure Summary III, but it is reflected in the following table.

Department/Division	Number of staff members involved	Number of applications evaluated
Research and Isotopes		
Joint FAO/IAEA Division	21	165
Life Sciences	8	121
Research and Laboratories	17	253
Agency's Laboratories	13	29
Sub-total	59	568
Nuclear Energy and Safety		
Nuclear Safety	27	196
Nuclear Power	11	74
Nuclear Fuel Cycle	13	71
Sub-total	51	341
Other	8	17
Total	118	926



#### 4. Expenditure Summaries

##### EXPENDITURE SUMMARY I ALL FUNDS (as at 31 December 1985)

Description	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
PROJECT AND NON-PROJECT				
Project	46 996 238	25 398 735	54.0	21 597 503
Non-project	6 821 239	5 771 419	84.6	1 049 820
Total	53 817 477	31 170 154	57.9	22 647 323
PROJECT FUNDS BY AREA				
Africa	13 990 251	5 733 556	41.0	8 256 695
Asia & Pacific	11 884 310	6 158 122	51.8	5 726 188
Latin America	10 993 334	6 581 175	59.9	4 412 159
Middle East & Europe	7 724 814	5 257 183	68.1	2 467 631
Interregional	2 403 529	1 668 699	69.4	734 830
Total	46 996 238	25 398 735	54.0	21 597 503
TOTAL FUNDS BY COMPONENT				
Experts	15 090 924	7 695 741	51.0	7 395 183
Equipment	24 862 095	15 855 553	63.8	9 006 542
Fellowships	4 453 787	3 206 482	72.0	1 247 305
Training courses	3 994 200	3 402 912	85.2	591 288
Sub-contracts	5 107 505	831 622	16.3	4 275 883
Miscellaneous	308 966	177 844	57.6	131 122
Total	53 817 477	31 170 154	57.9	22 647 323
TOTAL BY FUND TYPE				
TACF	34 810 179	23 064 817	66.3	11 745 362
Funds in trust	468 737	114 135	24.3	354 602
UNDP	3 475 903	2 653 512	76.3	822 391
Extrabudgetary	15 062 658	5 337 690	35.4	9 724 968
Total	53 817 477	31 170 154	57.9	22 647 323
CURRENT AND FUTURE YEARS				
Current	53 817 477	31 170 154	57.9	22 647 323
Future	24 767 053	3 539 839	14.3	21 227 214
Total	78 584 530	34 709 993		43 874 537

**EXPENDITURE SUMMARY II**  
**TECHNICAL ASSISTANCE AND CO-OPERATION FUND**

(as at 31 December 1985)

Description	Adjusted programme (\$)	Net expenditure (\$)	Net expenditure rate (%)	Earmarkings (\$)
<b>PROJECT AND NON-PROJECT</b>				
Project	28 453 220	17 530 375	61.6	10 922 845
Non-project	6 356 959	5 534 442	87.1	822 517
Total	34 810 179	23 064 817	66.3	11 745 362
<b>TACF PROJECTS BY AREA</b>				
Africa	5 854 377	3 421 884	58.5	2 432 493
Asia & Pacific	8 226 508	4 550 395	55.3	3 676 113
Latin America	7 025 495	4 326 023	61.6	2 699 472
Middle East & Europe	5 685 610	4 006 537	70.5	1 679 073
Interregional	1 661 230	1 225 536	73.8	435 694
Total	28 453 220	17 530 375	61.6	10 922 845
<b>TOTAL TACF BY COMPONENT</b>				
Experts	10 288 714	5 140 184	50.0	5 148 530
Equipment	16 700 688	11 629 857	69.6	5 070 831
Fellowships	3 870 483	2 927 793	75.6	942 690
Training courses	3 434 428	2 947 991	85.8	486 437
Sub-contracts	303 844	257 586	84.8	46 258
Miscellaneous	212 022	161 406	76.1	50 616
Total	34 810 179	23 064 817	66.3	11 745 362
<b>TOTAL TACF BY CURRENCY TYPE</b>				
Convertible	30 863 317	20 573 633	66.7	10 289 684
Non-convertible	3 946 862	2 491 184	63.1	1 455 678
Total	34 810 179	23 064 817	66.3	11 745 362
<b>CURRENT AND FUTURE YEARS</b>				
Current	34 810 179	23 064 817	66.3	11 745 362
Future	24 597 053	3 449 455	14.0	21 147 598
Total	59 407 232	26 514 272		32 892 960

EXPENDITURE SUMMARY III

ALL FUNDS BY DEPARTMENT AND DIVISION

(as at 31 December 1985)

Description	Adjusted programme (\$)	Net expenditure (current year) (\$)	Net expenditure rate (%)	Earmarkings (\$)
<b>CURRENT-YEAR PROGRAMME</b>				
Department of Research and Isotopes				
Department of Research and Isotopes	469 271	426 233	90.8	43 038
Joint FAO/IAEA Division	14 521 591	6 393 443	44.0	8 128 148
Division of Life Sciences	5 535 179	2 660 876	48.1	2 874 303
Division of Research and Laboratories	14 626 996	8 779 280	60.0	5 847 716
The Agency's Laboratories	493 878	335 403	67.9	158 475
Sub-Total	35 646 915	18 595 235	52.2	17 051 680
Department of Nuclear Energy and Safety				
Division of Nuclear Safety	6 184 969	3 882 446	62.8	2 302 523
Division of Nuclear Power	2 020 920	1 389 932	68.8	630 988
Division of Scientific and Tech. Info.	88 730	53 670	60.5	35 060
Division of Nuclear Fuel Cycle	2 580 402	1 167 813	45.3	1 412 589
Sub-Total	10 875 021	6 493 861	59.7	4 381 160
Department of Administration				
Legal Division	48 171	7 793	16.2	40 378
Sub-Total	48 171	7 793	16.2	40 378
Department of Safeguards				
Division of Information Treatment	40 715	29 905	73.4	10 810
Sub-Total	40 715	29 905	73.4	10 810
Department of Technical Co-operation				
Department of Technical Co-operation	90 279	85 202	94.4	5 077
Division of Technical Asst. & Co-op.	295 137	186 739	63.3	108 398
Sub-Total	385 416	271 941	70.6	113 475
<b>TOTAL</b>	<b>46 996 238</b>	<b>25 398 735</b>	<b>54.0</b>	<b>21 597 503</b>
<b>FUTURE-YEAR PROGRAMME</b>				
Department of Research and Isotopes				
Joint FAO/IAEA Division	3 386 494	377 110	11.1	3 009 384
Division of Life Sciences	2 034 506	167 366	8.2	1 867 140
Division of Research and Laboratories	10 049 466	2 259 954	22.5	7 789 512
The Agency's Laboratories	229 700	57 915	25.2	171 785
Sub-Total	15 700 166	2 862 345	18.2	12 837 821
Department of Nuclear Energy and Safety				
Division of Nuclear Safety	4 066 677	518 507	12.8	3 548 170
Division of Nuclear Power	608 508	44 908	7.4	563 600
Division of Scientific and Tech. Info.	22 500	-	0.0	22 500
Division of Nuclear Fuel Cycle	1 071 702	100 683	9.4	971 019
Sub-Total	5 769 387	664 098	11.5	5 105 289
Department of Administration				
Legal Division	27 000	-	0.0	27 000
Sub-Total	27 000	-	0.0	27 000
Department of Technical Co-operation				
Department of Technical Co-operation	70 500	-	0.0	70 500
Sub-Total	70 500	-	0.0	70 500
<b>TOTAL</b>	<b>21 567 053</b>	<b>3 526 443</b>	<b>16.4</b>	<b>18 040 610</b>
<b>GRAND TOTAL</b>	<b>68 563 291</b>	<b>28 925 178</b>		<b>39 638 113</b>

## C. EVALUATION

66. Evaluation is playing an important role in the efforts of the Secretariat to make the Agency's technical co-operation programme more effective. In 1985, the work of the Department's Evaluation Section resulted in a substantial number of recommendations for improving the quality of the programme.

67. As from 1 January 1985, the Agency's interim project implementation reporting system, introduced on a trial basis in 1984, was extended to all Agency projects. This system provides national counterparts with a structured procedure for reporting on the progress of their projects, difficulties encountered and achievements and for recommending additional action. Over 500 interim reports were completed in 1985. As anticipated at the time of its introduction, the system has proved to be an effective, economical means of providing Agency area and technical officers, as well as national project staff, with timely information on delays and difficulties so that early corrective action can be taken.

68. A significant number of problems of various kinds were reported -- for example, delays in the placement of fellows; the poor performance of project equipment; difficulties in arranging for the installation of equipment; delays in obtaining operating manuals and spare parts for equipment; and delays in the provision of expert services. Corrective action was taken immediately as individual problems were reported. In addition, where patterns of problems common to many projects were detected, the Secretariat initiated efforts to deal with them as general implementation issues instead of simply waiting for the individual problems to recur.

69. Mid-project and end-of-project evaluations were conducted for 50 projects. In selecting projects for these types of evaluation, every effort was made to cover the fields of activity supported under the Agency's technical co-operation programme and the full range of technical co-operation inputs. In this way, it is hoped that the relatively small number of in-depth evaluations possible with current resources will have a wider impact. The fields covered by such evaluations in 1985 included nuclear power and safety, applied nuclear science laboratories, secondary standards dosimetry laboratories, nuclear data techniques and instrumentation, nuclear instrument maintenance, nuclear techniques in agriculture and nuclear medicine.

70. Two evaluations of major processes which go beyond normal project activities were completed in 1985. These covered the provision of equipment and a general review of the training course programme.

71. Every effort has been made to maintain a balance between the costs and benefits of evaluation. The total value of the projects and programmes for which evaluations were completed in 1985 was \$46 million, while the total cost of all evaluation activities during this same period was \$280 000 -- only 0.6% of the value of those projects and programmes (0.7% in 1984). This is considerably less than the 1% ceiling envisaged when the Evaluation Section was established.

## D. SPECIAL ISSUES

### 1. The role of developing countries in technical co-operation

72. Developing Member States receiving technical assistance through the Agency are often referred to as "recipient countries." In actual fact, the Agency's technical co-operation programme is far from being a "one-way street" whereby goods, services and expertise flow only from north to south. In various tables, figures and annexes in this report, reference is made to inputs provided by Member States that also receive technical assistance. Information on such inputs is summarized in the following paragraphs.

73. Member States receiving technical assistance through the Agency in 1985 pledged a total of \$2.3 million towards the TACF target for that year. Together with the amounts paid by them in the form of assessed programme costs (\$1 million), these Member States contributed 13.2% of the total TACF resources for 1985. Also, a number of developing Member States deposited a total of \$357 020 with the Agency as extrabudgetary funds in trust for use in executing projects in their countries.

74. Developing countries play a significant role in the Agency's training programmes by providing in-kind resources in support of fellowships and training courses.

75. A total of 33 Type II fellowships valued at \$263 100 and representing 181 man-months of training were provided by developing Member States.

76. The contribution made by developing countries in providing experts and lecturers either completely or partially cost-free is likewise not inconsiderable. In 1985, over half of the "in-kind" experts (154 out of 298) and 18% of the "in-kind" lecturers (26 out of 146) were from developing countries. The total estimated value of such experts and lecturers provided in 1985 was \$774 117, of which \$287 048 - or 37% - was contributed by developing countries. As these countries also provided stipends and met the travel costs of training course participants and visiting scientists - contributions valued at \$63 808 - their share in the provision of Agency in-kind assistance amounted to \$613 956, or 22%.

77. Of the 60 training courses held during 1985, 39 took place in developing countries. Of the 638 places around the world at which Agency fellows studied, 109 were in developing countries. Of the 39 countries to which scientific visits were made, 22 were developing countries. Of the 1483 international expert assignments undertaken, 570 were undertaken by developing country nationals; in addition, 75 national experts took part in Agency technical co-operation activities.

78. The value of equipment purchases in developing countries remained rather low in 1985 (see Figure 3B) despite the continuation of Secretariat efforts to diversify its sources of procurement of equipment needed for meeting the technical assistance requests of Member States.

79. In this context, it is important to realize that technical co-operation is always a bipartite undertaking. There are no IAEA or UNDP projects as such, but only government projects in which international organizations participate. The international inputs provided, while often crucial, are nevertheless in most cases only a fraction of the national efforts which such projects entail. Without these unmeasured, unreported national efforts, technical co-operation would cease to exist.

80. Perhaps the most important aspect of the Agency's technical co-operation are the personal and direct links which are forged between developing and developed Member States - between industries, institutes and individuals - and which continue far beyond the completion date of a project. True co-operation is thereby established from which all parties benefit.

## 2. Programme outlook

81. Numerous tables in this report show the rapid growth that has taken place in Agency technical co-operation over the last few years. However, while growth in programme delivery as a whole continued in 1985, a certain levelling-off in rate of growth has occurred. The following table shows the total volume of technical assistance delivered from all sources during the period 1980-85.

Year	Total disbursements (\$)	Annual increase (%)
1980	18 834 300	17.8
1981	20 960 300	11.3
1982	23 005 700	9.8
1983	26 615 400	15.7
1984	32 581 500	22.4
1985	33 715 900	3.5
Percentage increase 1980-1985		79.0

82. While, between 1980 and 1985, a 79% increase in the value of the programme delivered was being achieved, Regular Budget expenditures on the servicing of technical co-operation rose by only 18.4%. As a consequence, direct administrative costs as a percentage of the value of the technical assistance delivered dropped from 19.2% in 1980 to 12.7% in 1985. This development is unusual for the United Nations system, and the overhead costs of the Agency's technical co-operation programme compare well with those of most bilateral aid organizations.

83. The Secretariat is examining how it can best handle the future increases which it expects in the total volume of Agency technical assistance within a framework of severe Regular Budget constraints which are making themselves felt in such areas as staffing and the acquisition of data processing equipment.

84. Dynamic programming and the streamlining of procedures have helped to achieve fuller resource utilization, and the performance in this respect can be maintained with existing staff.

85. Improvement in quality has now come within reach through the work of the Evaluation Section, which is providing the feedback upon which better project design and monitoring can be based. However, manpower shortages in other Sections may impede the immediate and systematic follow-up which the evaluation findings deserve.

86. In a situation where the available manpower is being fully utilized and where budgetary constraints will not permit more than a slight increase in manpower, further growth and qualitative improvement can be achieved only if efforts are concentrated on delivering the programme and raising its quality rather than on formalities associated with programme approval, administration and reporting.

PART III. EXPLANATORY NOTES TO STATISTICAL  
FIGURES, TABLES AND ANNEXES

Figure 1A. Resources available for Agency technical co-operation  
programmes: 1979-1985

87. This figure shows all resources made available to the Agency for technical co-operation activities from all funds for the programme years 1979-85.

88. Amounts given in Figure 1A for UNDP resources correspond to total claims against UNDP resources for projects implemented during each calendar year. These amounts are also used in the Agency's Accounts, reflecting UNDP's requirement to report expenditures as the sum of cash disbursements plus unliquidated obligations. UNDP funds for 1981-85 include resources made available by the UNDP-administered United Nations Financing System for Science and Technology for Development and, starting in 1984, those for projects for which the IAEA acts as associated agency.

89. It should be noted that the amounts shown in Figure 1A do not include resources made available for future years.

Figure 1B. Utilization of resources: 1985

90. This figure shows, by component and by major field of activity, the distribution of all assistance provided in 1985, irrespective of the source of funds.

Figure 1C. Disbursements by programme component: 1976-1985

91. The total assistance provided during the period 1976-1985 is broken down by year and type of input (training, experts and equipment), irrespective of the source of funds.

Figure 2A. Technical co-operation personnel services by field of  
activity: 1985

92. The number of assignments carried out by training course lecturers and experts are shown in the figure, along with the total man-months provided in each of the Agency's ten major fields of activity. Also included in the expert category are 33 assignments undertaken by administrative support staff.



Figure 2B. Technical co-operation personnel services by region: 1985

93. A graphic presentation is given of (i) the origin of technical co-operation field personnel (ii) their destination and (iii) the time spent in the field, grouped by geographic region.

Figure 3A. Distribution of equipment disbursements by field of activity: 1985

94. This figure shows the total amount of equipment provided in the ten major fields of activity.

Figure 3B. Distribution of equipment disbursements by region: 1985

95. Total disbursements for equipment, grouped by origin and recipient regions, are shown in this figure; individual recipient countries are shown in Table 7. "Local payments" include customs, storage and internal transport charges in cases where these were not paid by recipient countries on equipment received. The list at the bottom of the page excludes countries in which the total purchase volume was less than \$10 000.

Figure 4A. Distribution of trainees by field of activity: 1985

96. The number of training course participants and fellowship holders are shown in this figure, along with the total man-months of training provided in each of the Agency's major fields of activity.

Figure 4B. Summary data on training programmes: 1985

97. This graphic presentation shows where trainees studied, where they came from and how much training was received by their home regions. Information on the training provided to nationals of individual recipient countries is given in Tables 6B and 7.

Figure 5A. Distribution of disbursements by type and field of activity

98. In this figure, percentages (obtained by averaging over the past five years) are shown for equipment, expert services and training in the ten major fields of activity.

Figure 5B. Technical Assistance and Co-operation Fund disbursements by type of currency and region: 1985

99. This figure, which refers only to the Technical Assistance and Co-operation Fund, gives total 1985 disbursements broken down by region and for convertible and non-convertible currencies.

Figure 5C. Distribution of technical co-operation inputs by field and region: 1985

100. The pie charts indicate the relative shares of each field per region, and the table below the figure gives actual amounts.

Figure 5D. Distribution of technical co-operation disbursements by source and region: 1985

101. In this graphic presentation, disbursements from the Technical Assistance and Co-operation Fund, extrabudgetary funds, assistance in kind and from UNDP funds are shown for each region, as are total disbursements from all funds by region.

Figure 6. Utilization of the Technical Assistance and Co-operation Fund

102. The bar chart shows, over a ten-year period, the total resources available to the Technical Assistance and Co-operation Fund year by year - each year including the unobligated and unspent funds of prior years - as well as the disbursements and obligations incurred against these resources as at 31 December of each year. Obligations incurred against future years for approved multi-year projects are shown separately, reflecting the status at the end of 1985.

103. The graph below it shows, in per cent, the unobligated balance, unliquidated obligations and disbursements for the same ten-year period.

Table 1. Available resources: 1976-1985

104. This table is directly related to Figure 1A, but shows resources over a ten-year period. The Technical Assistance and Co-operation Fund is broken down by its various components; other resources (extrabudgetary funds, assistance in kind and UNDP) are shown separately, along with their sub-total.

Table 2. Technical Assistance and Co-operation Fund: 1976-1985

105. The ten-year development of the target, of the amounts pledged and of the funds actually made available are shown (see Annex IV for contributions made by Member States to the Technical Assistance and Co-operation Fund for 1985). It should be noted that, in this table, voluntary contributions are shown not by the year in which they became available but for the programme year for which they are pledged. The graphic presentation following the table shows, on a logarithmic scale, actual contributions to the Technical Assistance and Co-operation Fund from 1958 to 1985. For 1986, the actual target is shown. Indicative Planning Figures are given for 1987-89.

Table 3A. Project personnel by place of origin: 1985

106. This table shows the number of individuals, both international and national, who undertook technical co-operation assignments during 1985. Information on the number of assignments is also provided. It should be noted that IAEA staff, as well as staff of other international organizations, are grouped under those headings and are not listed by nationality.

Table 3B. Trainees in the field by place of study: 1985

107. A breakdown is given for trainees (fellows, training course participants and visiting scientists) based on the place of study.

Table 4. Distribution of technical co-operation disbursements by type: 1981-1985

108. This financial table shows technical assistance disbursements from all funds during the last five years, broken down by programme component. It is the only table that shows (in column 10) the balance for assistance in kind. This balance represents the estimated value of man-months of training beyond the end of 1985 for fellows who had already started their studies in 1985. "Miscellaneous" refers to disbursements in all components for telex charges, health insurance, copying fees and for other minor items or services.

Table 5. Extrabudgetary funds for technical co-operation activities by donor as at 31 December 1985

109. This table shows the status of all extrabudgetary funds, including the monies received, their utilization and the balance remaining for further implementation for each donor fund.

Table 6A. Technical co-operation personnel services: 1985

110. A list is given of recipient countries showing the number of assignments undertaken and man-months provided to each country. Persons not serving on country projects are shown under intercountry projects and training courses.

Table 6B. Recipients of training abroad: 1985

111. The list shows, by recipient country, the number of trainees and the total man-months of training received in 1985.

Table 7. Financial summary: 1985

112. This major table shows, by type of assistance and by source, the total technical assistance furnished to each recipient country as well as to intercountry projects and training courses.

Table 8. Financial summary: 1958-1985

113. A summary is given of all assistance provided since the beginning of the Agency's technical co-operation activities, in 1958.

Annex I. Utilization of extrabudgetary and in-kind contributions

114. Related to Table 5, this Annex shows, by donor and by type, the technical assistance disbursements made during 1985 utilizing extrabudgetary resources and, separately, contributions in kind.

Annex II. Training courses and study tours: 1985

115. All courses organized by the Agency in 1985 are listed along with the numbers of participants and the amounts obligated. This is the only table in which local participants and participants not financed from training course resources are shown.

### Annex III. Reports submitted to recipient-country governments

116. Technical co-operation project reports produced in 1985 are listed by country, with an indication of their distribution status. Of the 254 reports prepared in 1985, 61 were issued as published documents and 193 as informal mission synopses.

### Annex IV. Voluntary contributions pledged and paid to the Technical Assistance and Co-operation Fund for 1985

117. Data on voluntary contributions by Member States to the Technical Assistance and Co-operation Fund are given in this table. Figures reflect the status as at 31 December 1985.

### Annex V. Cost-free fellowships offered and awarded: 1985

118. Information is made available in this table on the number of cost-free fellowships offered by Member States and the number of awards.

### Annex VI. Projects under implementation for UNDP

119. This table includes two projects being implemented for the United Nations Financing System for Science and Technology for Development. It excludes projects with budgetary provisions of less than \$1000 for 1985, as well as those projects for which the IAEA acts only as an associated agency.

### Annex VII. Projects completed or cancelled during 1985

120. Part A shows projects completed during the year, along with the years of approval and the assistance provided. Part B shows cancelled projects.

### Annex VIII. Footnote-a/ projects made operational or extended during 1985

121. These projects are shown with the source of the funds that made upgrading to operational status or extension possible.

#### Annex IX. Approvals against the Reserve Fund in 1985

122. Information is provided on Reserve Fund approvals for new and existing projects.

#### Annex X. Changes to approved projects

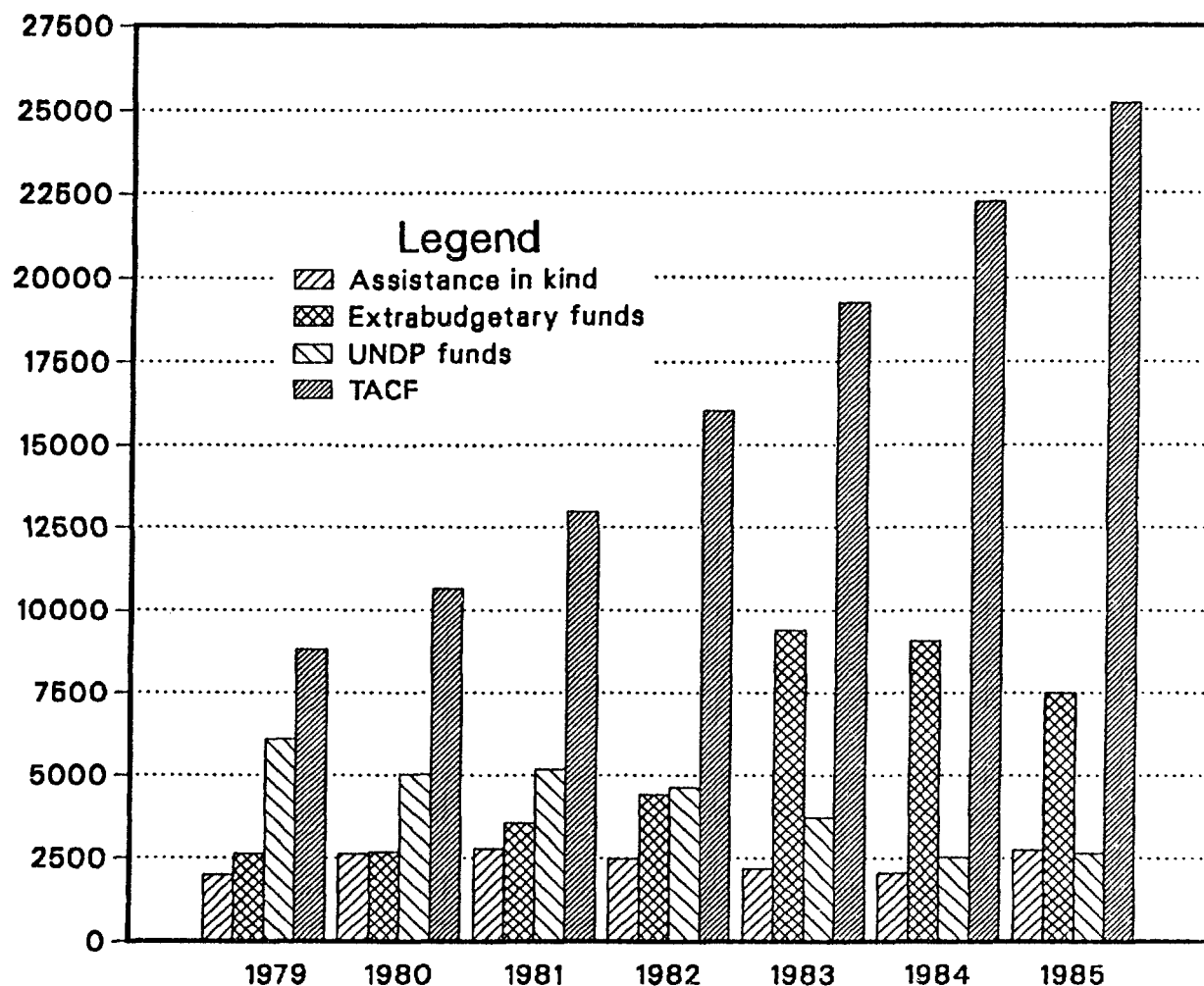
123. The Secretariat is obliged to furnish information on changes to approved projects under the provisions of the Revised Guiding Principles. While projects may undergo more than one change in the course of a year, the list shows only net changes. For projects rephased, upgraded or made operational from the Reserve Fund, the existing approval is not given as of 1 January but as of the date such action took place. All such projects are footnoted appropriately.

#### Annex XI. Projects rephased during 1985

124. As a result of dynamic programming, which was approved as part of the Board's 1983 policy review, it is possible for the Secretariat to reallocate to future years project funds originally intended for use in the current year. This mechanism, known as "rephasing", may be invoked in cases where project requirements differ from those originally foreseen so as to keep project plans realistic. The funds released as a result of rephasing are used as additional inputs to other projects and for the upgrading or extension of footnote a/ projects. The Annex shows only net changes to projects rephased in 1985.

FIGURE 1A

RESOURCES AVAILABLE FOR  
AGENCY TECHNICAL CO-OPERATION PROGRAMMES: 1979 - 1985  
(in thousands of dollars)



TACF	8 802	10 632	12 956	16 003	19 241	22 232	25 197
Extra-budgetary funds	2 635	2 669	3 525	4 413	9 394	9 062	7 484
Assistance in kind	2 015	2 628	2 788	2 493	2 172	2 066	2 765
UNDP	6 066	5 018	5 186	4 631	3 706	2 541	2 654
TOTAL	19 518	20 947	24 455	27 540	34 513	35 901	38 100

FIGURE 1B

UTILIZATION OF RESOURCES: 1985  
(in thousands of dollars)

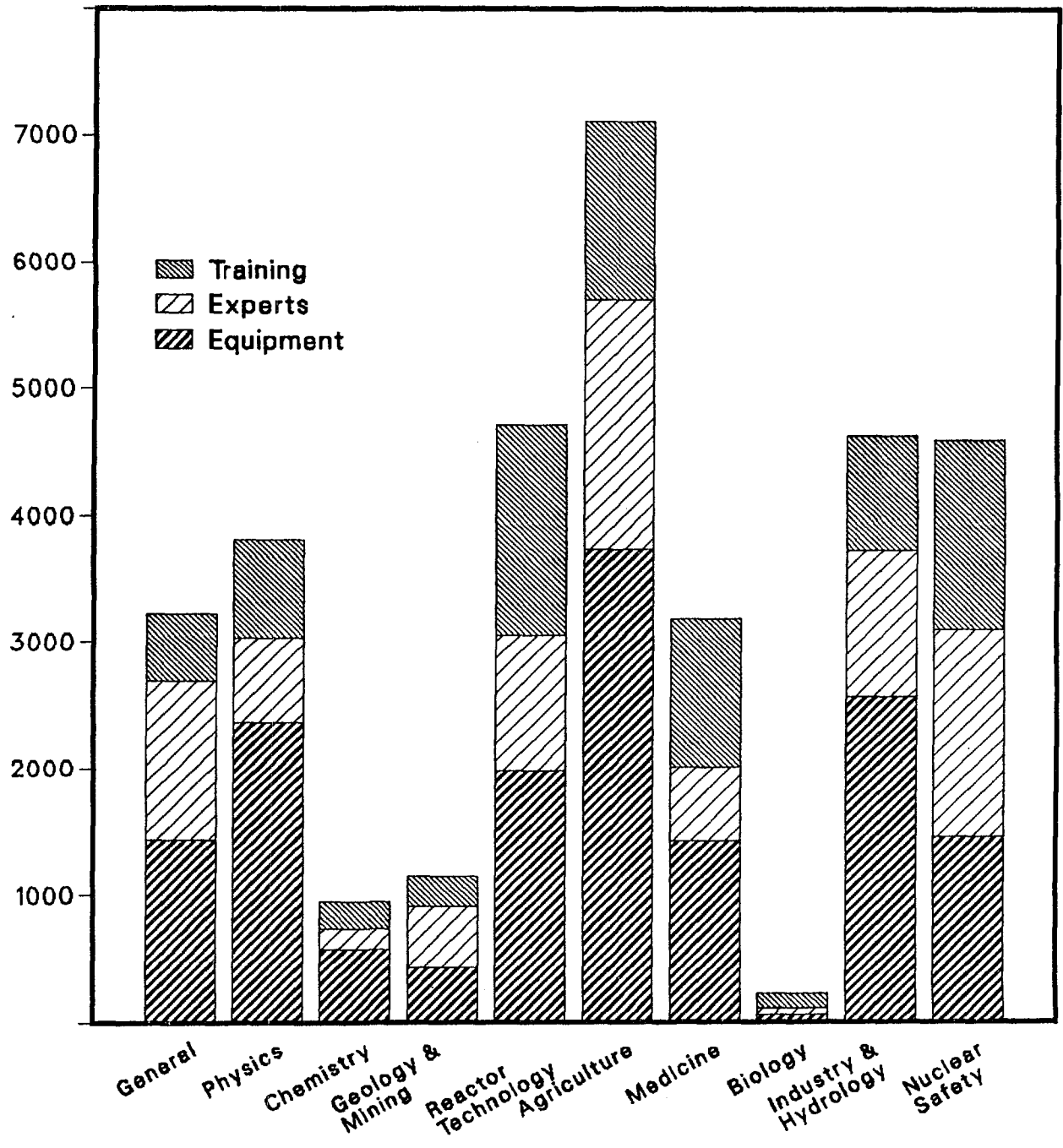




FIGURE 1C

DISBURSEMENTS  
BY PROGRAMME COMPONENT: 1976-1985  
(in thousands of dollars)

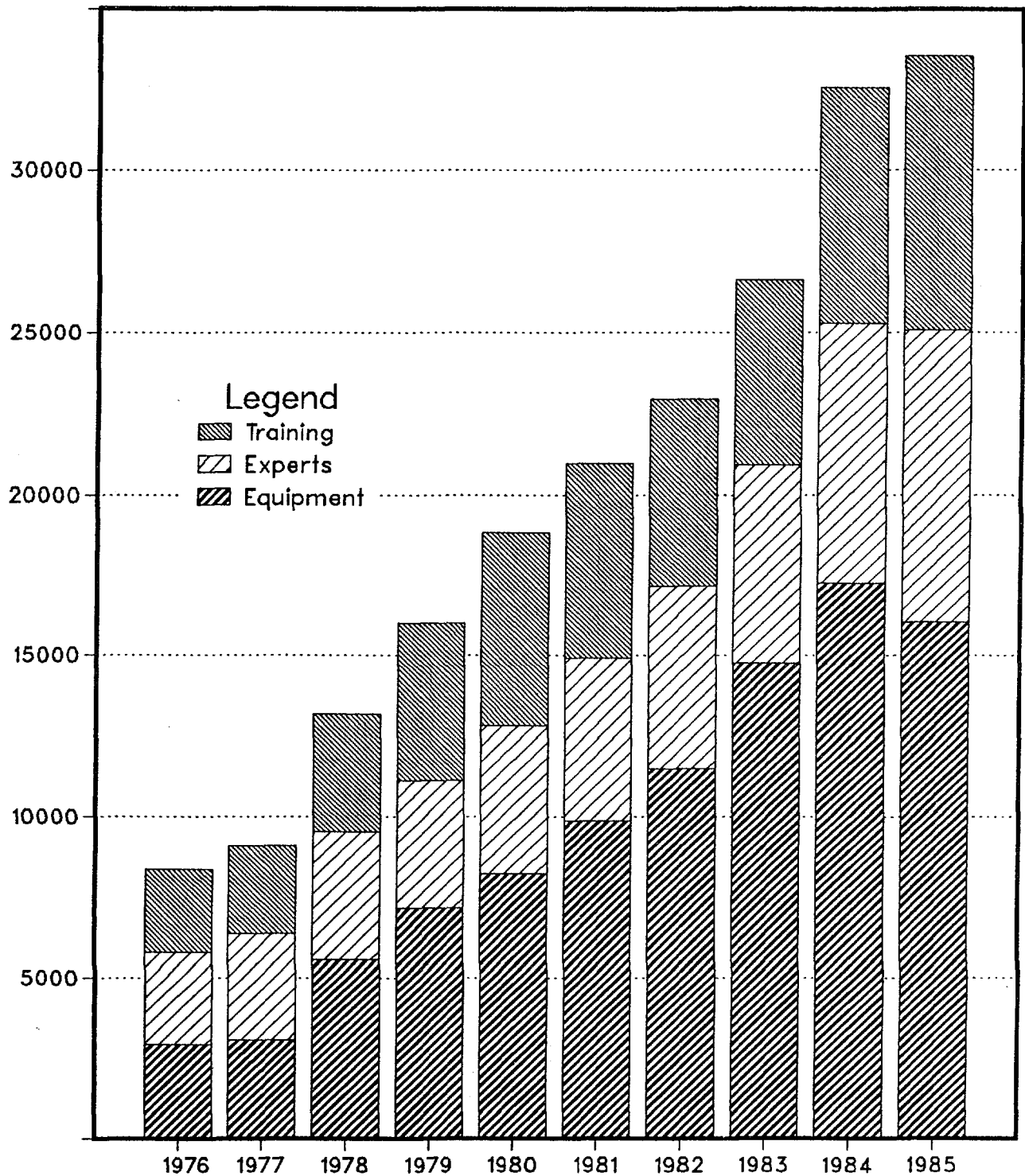


FIGURE 2A

TECHNICAL CO-OPERATION  
PERSONNEL SERVICES BY FIELD OF ACTIVITY: 1986

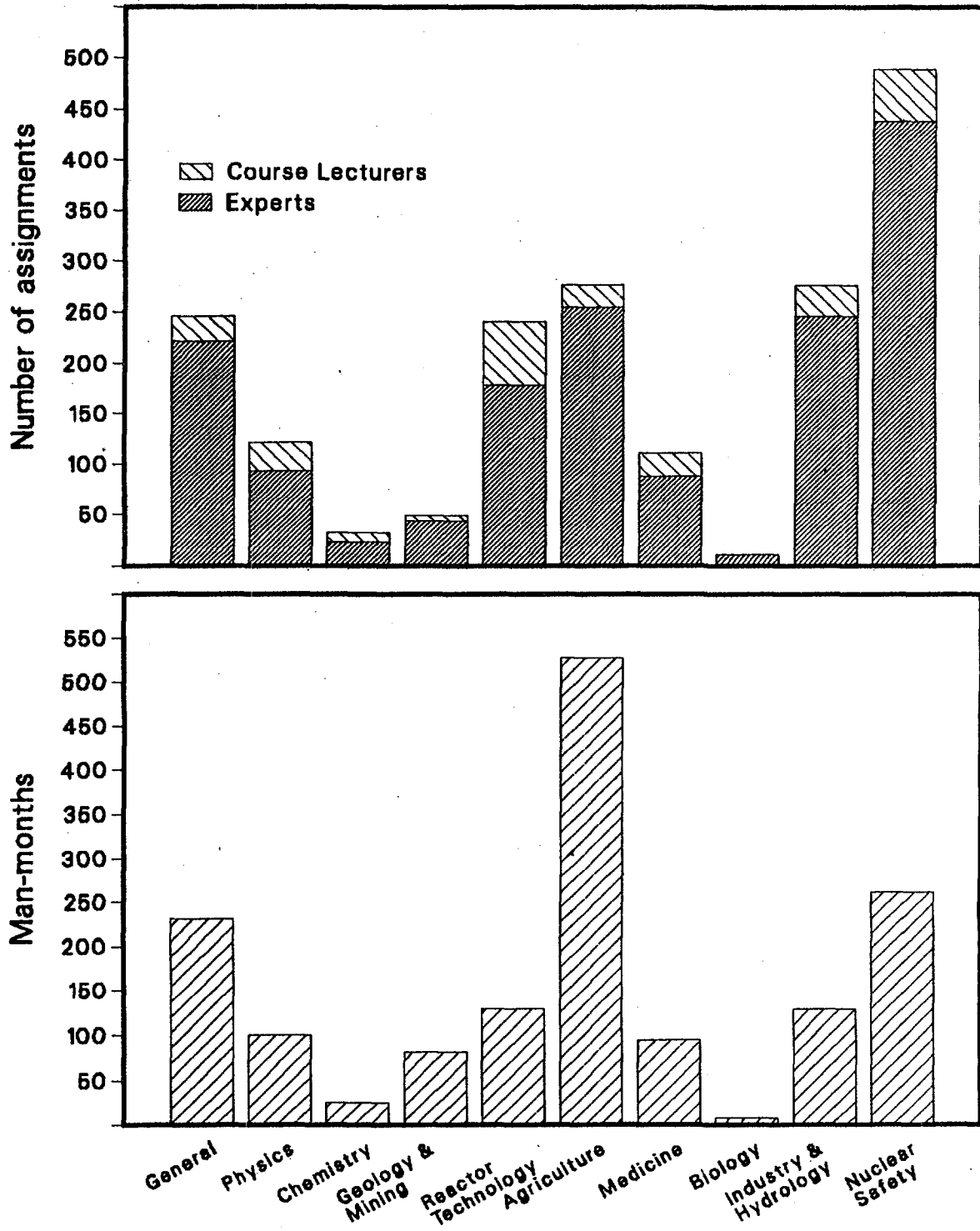
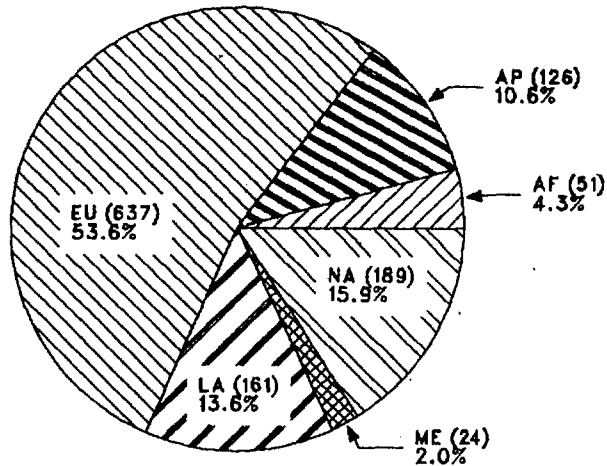


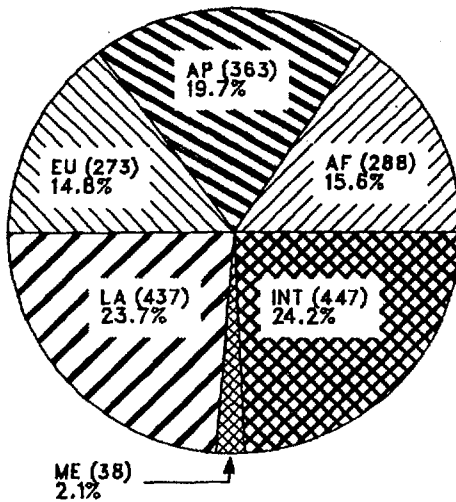
FIGURE 2B

TECHNICAL CO-OPERATION PERSONNEL SERVICES BY REGION: 1985

Where they came from:  
(1188 persons)



Where they went:  
(1846 assignments)



Abbreviations

AF = Africa  
AP = Asia and the Pacific  
EU = Europe  
LA = Latin America  
ME = Middle East  
NA = North America  
INT = Interregional Projects  
and Training Courses

For how long:  
(1585 man-months)

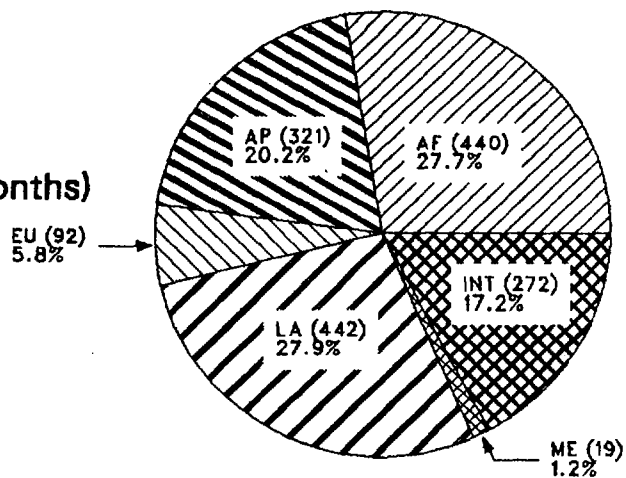


FIGURE 3A

DISTRIBUTION OF EQUIPMENT DISBURSEMENTS  
BY FIELD OF ACTIVITY: 1985  
(in thousands of dollars)

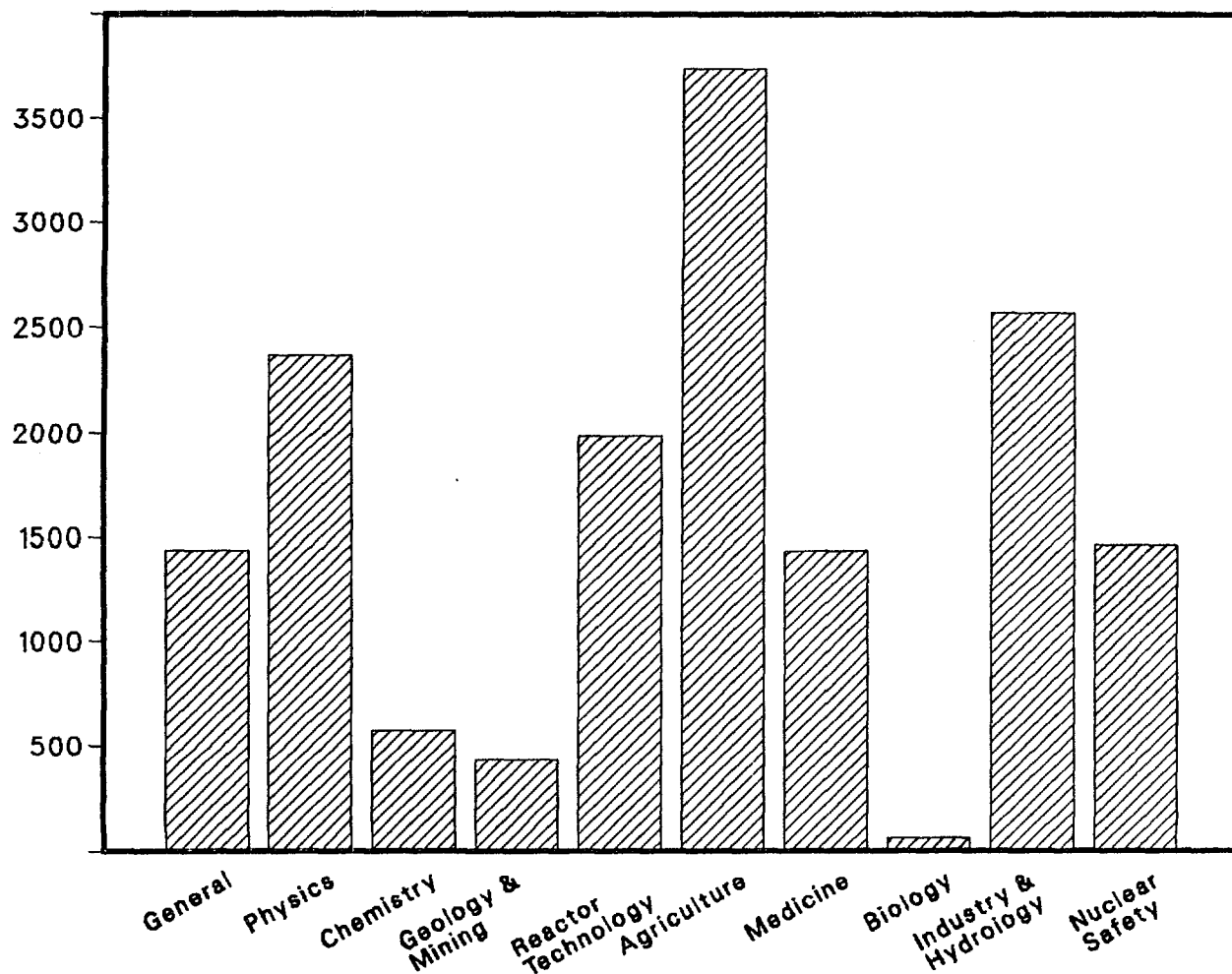
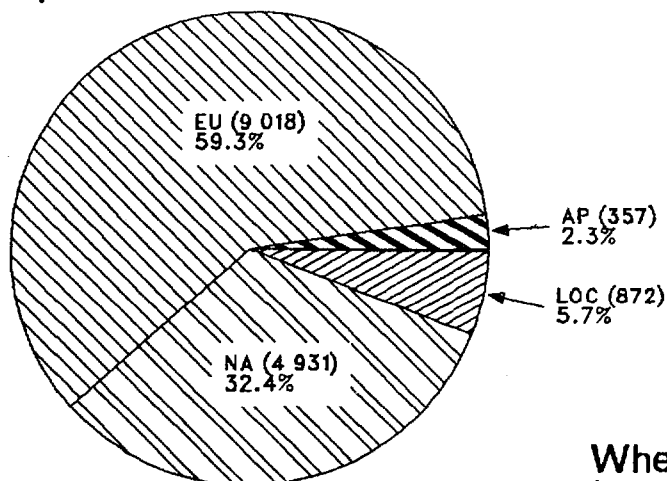


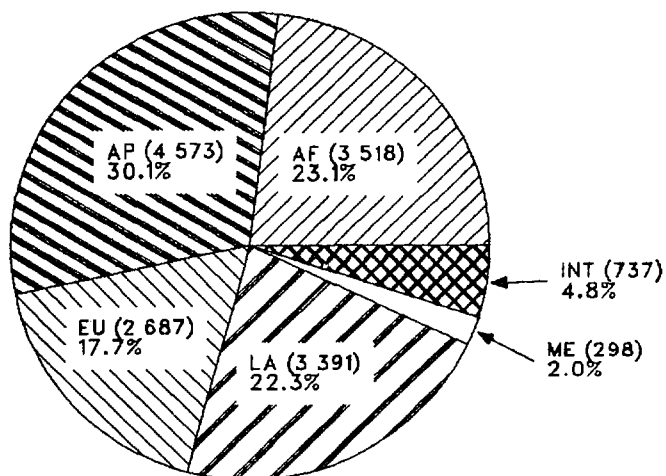
FIGURE 3B

DISTRIBUTION OF EQUIPMENT DISBURSEMENTS BY REGION: 1985  
(in thousands of dollars)

Where it came from:  
(15 203 purchased)



Where it went:  
(15 203 delivered)



Abbreviations

- AF = Africa
- AP = Asia and the Pacific
- EU = Europe
- LA = Latin America
- ME = Middle East
- NA = North America
- INT = Interregional Projects and Training Courses
- LOC = Local Payments

Where equipment was purchased:

Australia	11	Finland	134	Japan	216
Austria	1 436	France	262	Netherlands	181
Belgium	17	German D. R.	527	Poland	133
Bulgaria	146	Germany, F. R.	1 818	Sweden	67
Canada	646	Hong Kong	34	Switzerland	157
China	15	Hungary	342	USSR	1 686
Czechoslovakia	86	India	70	UK	1 266
Denmark	17	Italy	628	USA	4 285

FIGURE 4A

DISTRIBUTION OF TRAINEES BY FIELD OF ACTIVITY: 1985

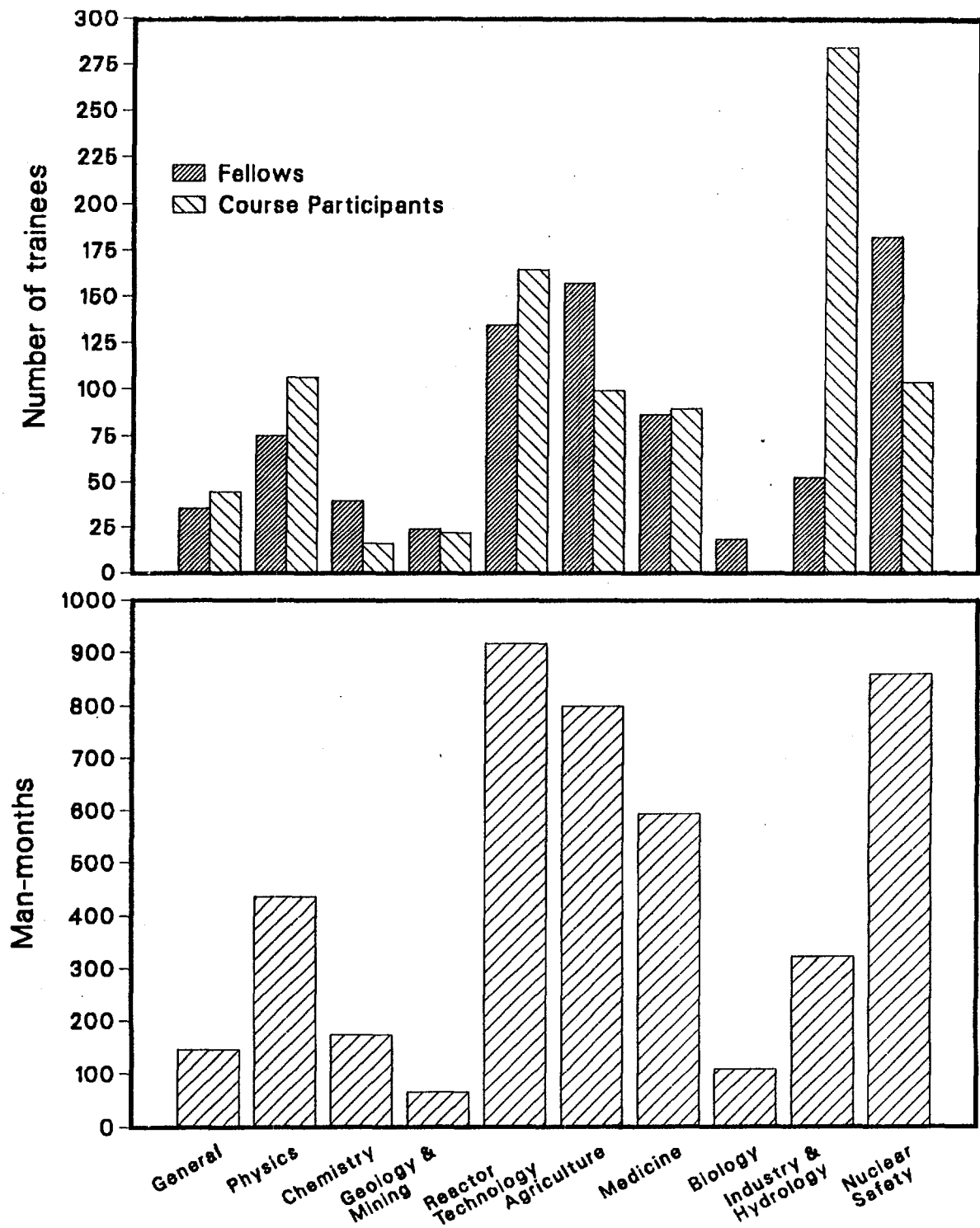
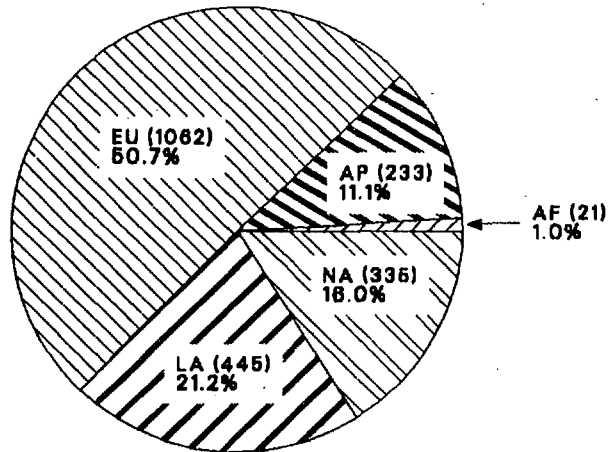


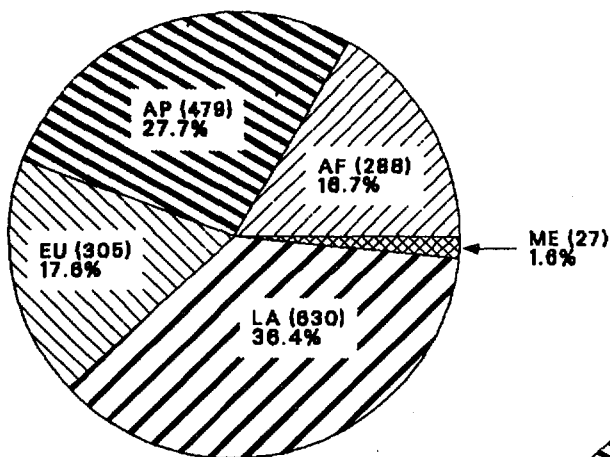
FIGURE 4B

SUMMARY DATA ON TRAINING PROGRAMMES: 1985

Where training was given:  
(2096 places of study)



Where trainees came from:  
(1729 persons)



Abbreviations

AF = Africa  
AP = Asia and the Pacific  
EU = Europe  
LA = Latin America  
ME = Middle East  
NA = North America

Amount of training received:  
(4529 man-months)

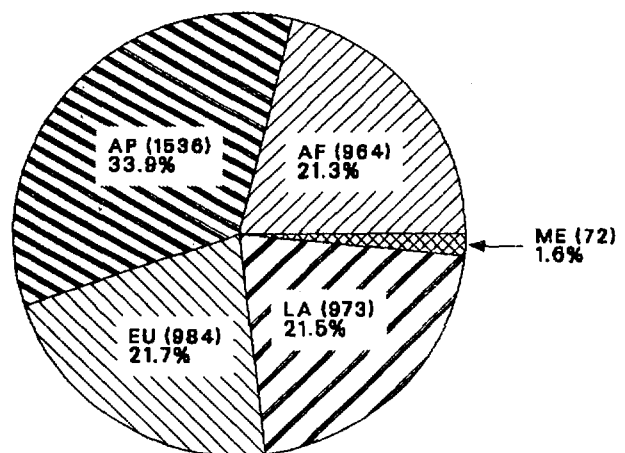


FIGURE 5A

DISTRIBUTION OF DISBURSEMENTS BY TYPE AND FIELD OF ACTIVITY  
(averaged over the period 1981-1985)

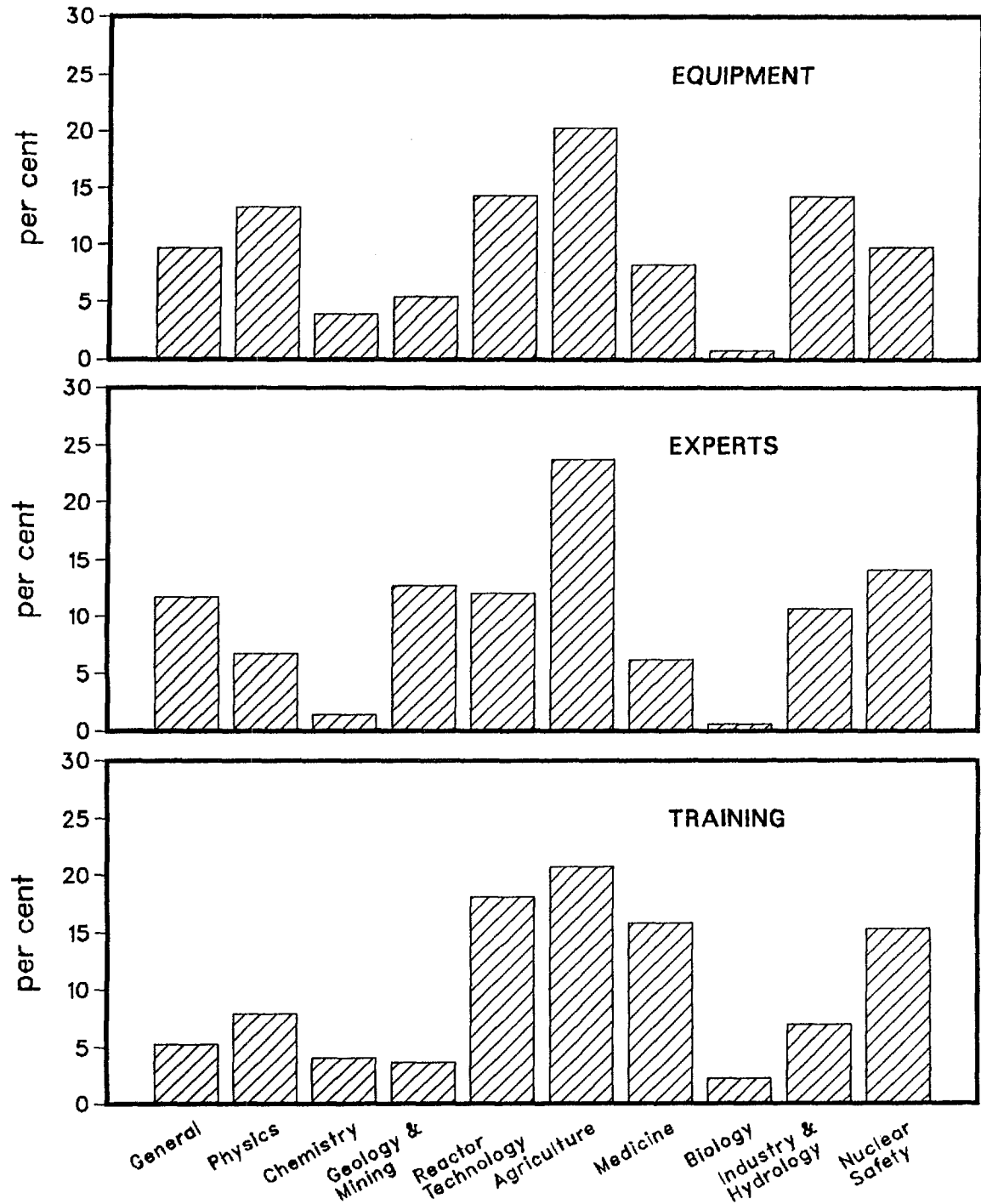
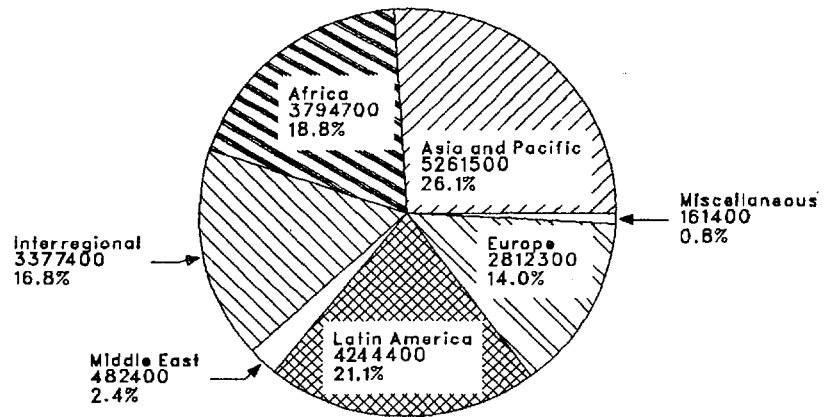




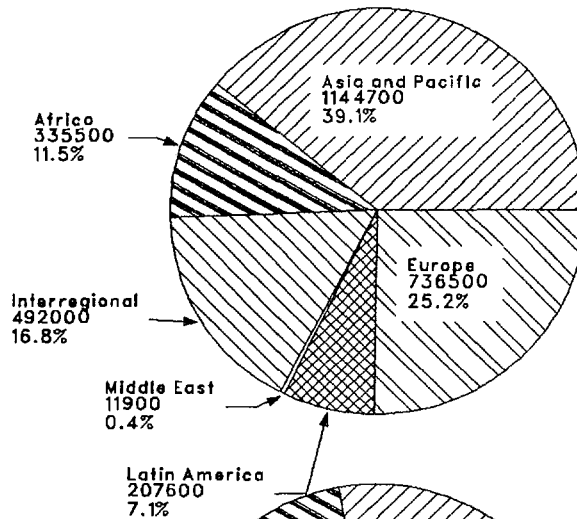
FIGURE 5B

TECHNICAL ASSISTANCE AND CO-OPERATION FUND DISBURSEMENTS  
BY TYPE OF CURRENCY AND REGION: 1985

CONVERTIBLE CURRENCY  
20 134 100 DOLLARS



NON-CONVERTIBLE CURRENCY  
2 928 200 DOLLARS



TOTAL  
23 062 300 DOLLARS

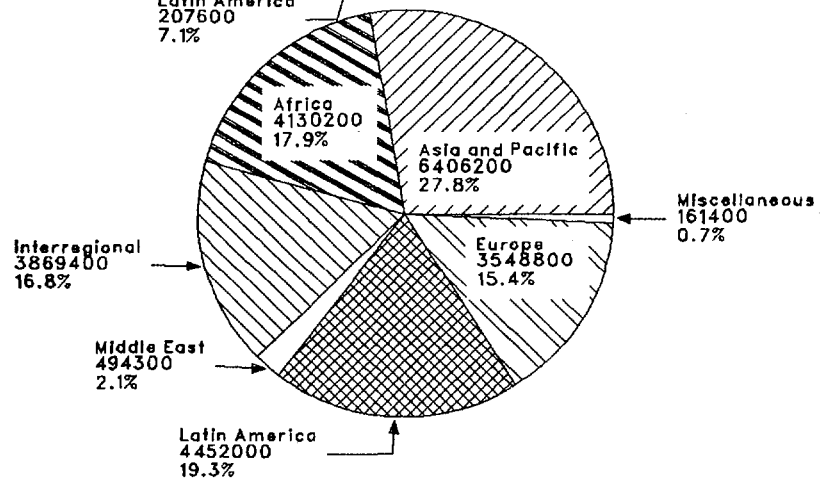
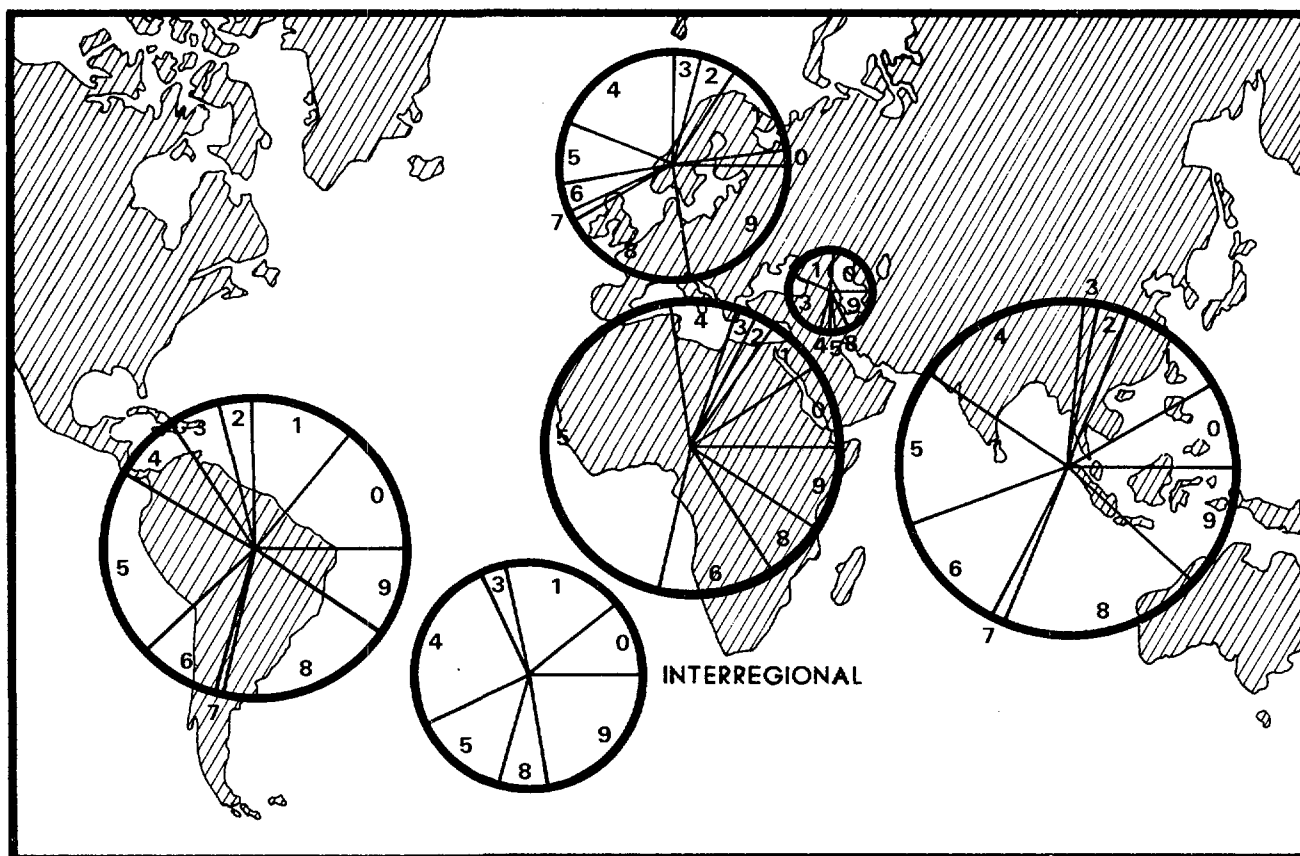


FIGURE 5C

DISTRIBUTION OF TECHNICAL CO-OPERATION INPUTS BY FIELD AND REGION, 1985



## SUMMARY

(in thousands of dollars)

Field of activity	Africa \$	Asia and the Pacific \$	Europe \$	Latin America \$	Middle East \$	Inter- regional \$	All regions \$
0 - General atomic energy development	656.7	799.7	87.6	1 063.5	123.5	487.7	3 218.7
1 - Nuclear physics	433.5	1 026.5	614.5	853.5	103.1	778.0	3 809.1
2 - Nuclear chemistry	158.9	292.0	227.8	263.3	-	-	942.0
3 - Prospecting, mining and processing of nuclear materials	145.7	116.2	167.0	413.3	146.3	156.7	1 145.2
4 - Nuclear engineering and technology	509.0	1 635.5	840.6	567.3	19.8	1 138.6	4 710.8
Application of isotopes and radiation in							
5 - Agriculture	3 098.7	1 437.0	392.6	1 561.5	10.1	604.4	7 104.3
6 - Medicine	893.0	1 135.4	177.0	664.5	-	309.0	3 178.9
7 - Biology	7.7	108.5	53.3	53.5	-	-	223.0
8 - Industry and Hydrology	456.9	1 840.1	852.5	1 435.1	28.0	12.4	4 625.0
9 - Safety in nuclear energy	645.6	1 137.4	997.8	727.0	93.7	996.0	4 597.5
Sub-total	7 005.7	9 528.3	4 410.7	7 602.5	524.5	4 482.8	33 554.5
Miscellaneous	-	-	-	-	-	-	161.4
GRAND TOTAL	7 005.7	9 528.3	4 410.7	7 602.5	524.5	4 482.8	33 715.9

FIGURE 5D

DISTRIBUTION OF TECHNICAL CO-OPERATION DISBURSEMENTS  
BY SOURCE AND REGION: 1985  
(in thousands of dollars)

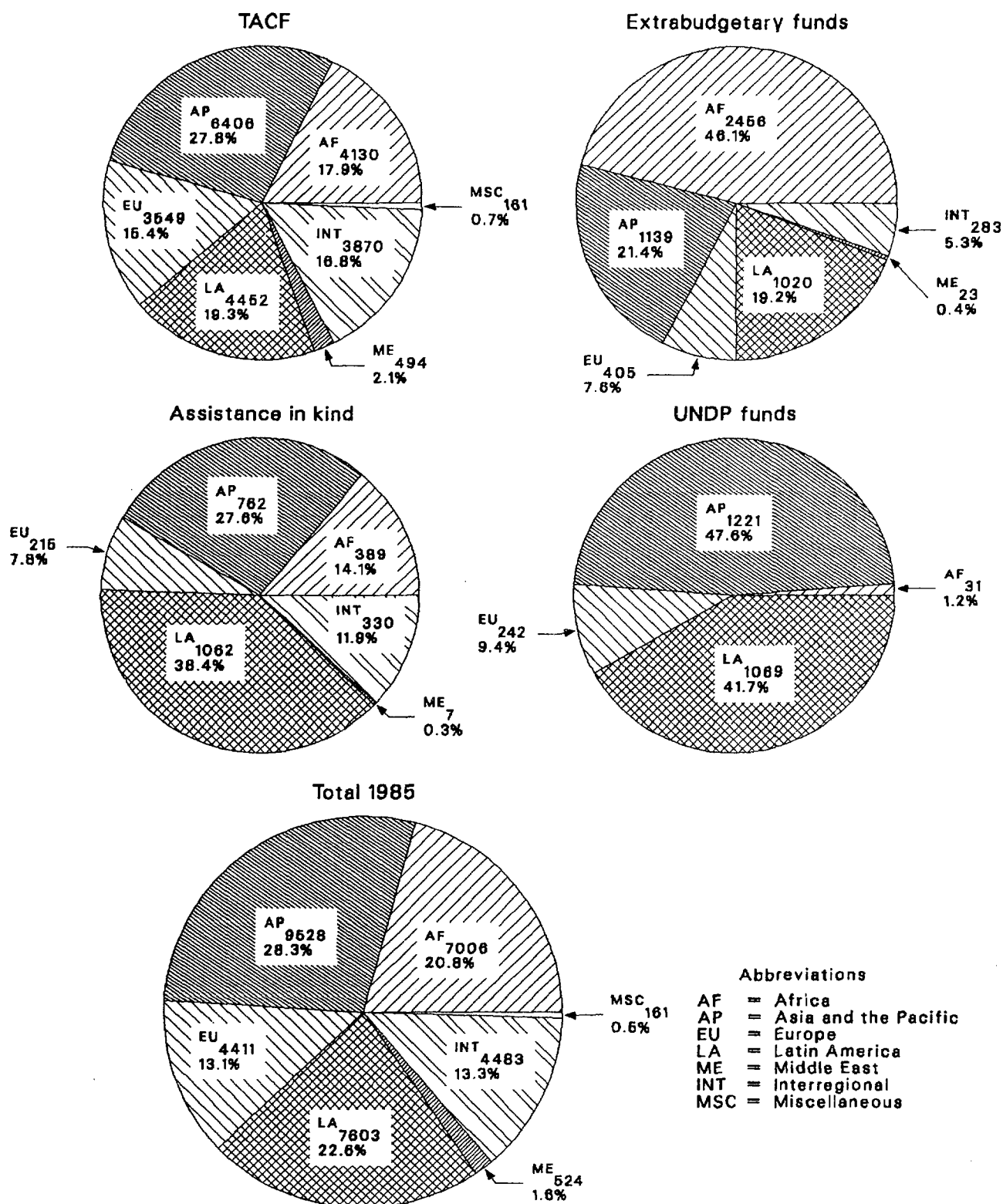


FIGURE 6

UTILIZATION OF THE TECHNICAL ASSISTANCE AND CO-OPERATION FUND  
(status at year-end)

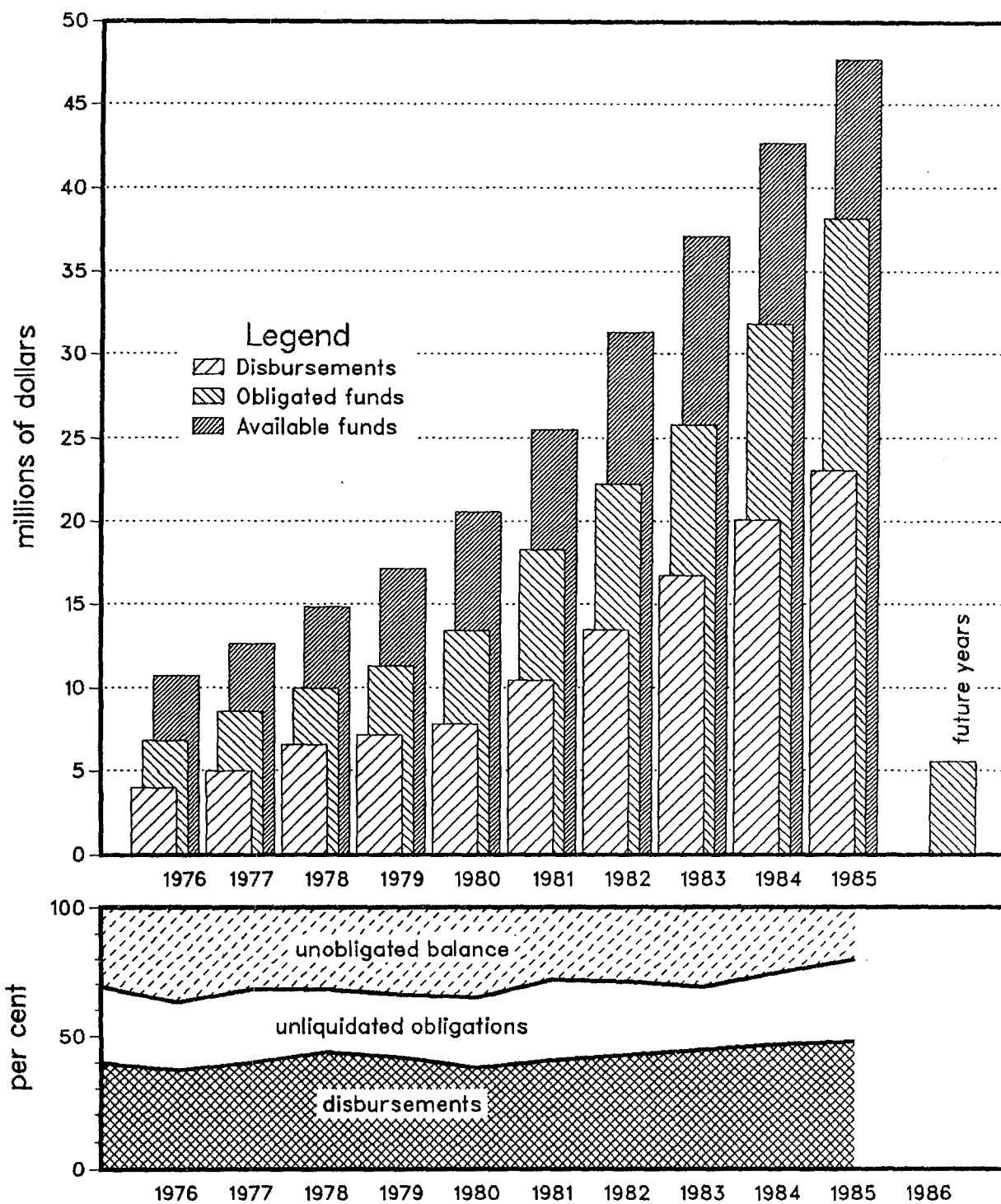


TABLE I

AVAILABLE RESOURCES: 1976-1985  
(in thousands of dollars)

Year	Technical Assistance and Co-operation Fund				Other resources				GRAND TOTAL (1+5)  (6)
	Voluntary contributions		Miscellaneous income  (1c)	Sub-total  (1)	Extrabudgetary funds  (2)	Assistance in kind  (3)	UNDP  (4)	Sub-total  (5)	
	Convertible currency (1a)	Non-convertible currency (1b)							
1976	3 982	1 080	430	5 492	729	1 021	3 002	4 752	10 244
1977	4 307	1 142	513	5 962	2 147	1 284	2 836	6 267	12 229
1978	5 090	1 362	670	7 122	2 851	1 987	3 205	8 043	15 165
1979	6 448	1 614	740	8 802	2 635	2 015	6 066	10 716	19 518
1980	7 977	2 083	572	10 632	2 669	2 628	5 018	10 315	20 947
1981	9 873	2 181	902	12 956	3 525	2 788	5 186	11 499	24 455
1982	12 112	2 789	1 102	16 003	4 413	2 493	4 631	11 537	27 540
1983	14 169	3 447	1 625	19 241	9 394	2 172	3 706	15 272	34 513
1984	17 213	3 524	1 495	22 232	9 062	2 066	2 541	13 669	35 901
1985	19 282	3 976	1 939	25 197	7 484	2 765	2 654	12 903	38 100
1976- 1985	100 453	23 198	9 988	133 639	44 909	21 219	38 845	104 973	238 612

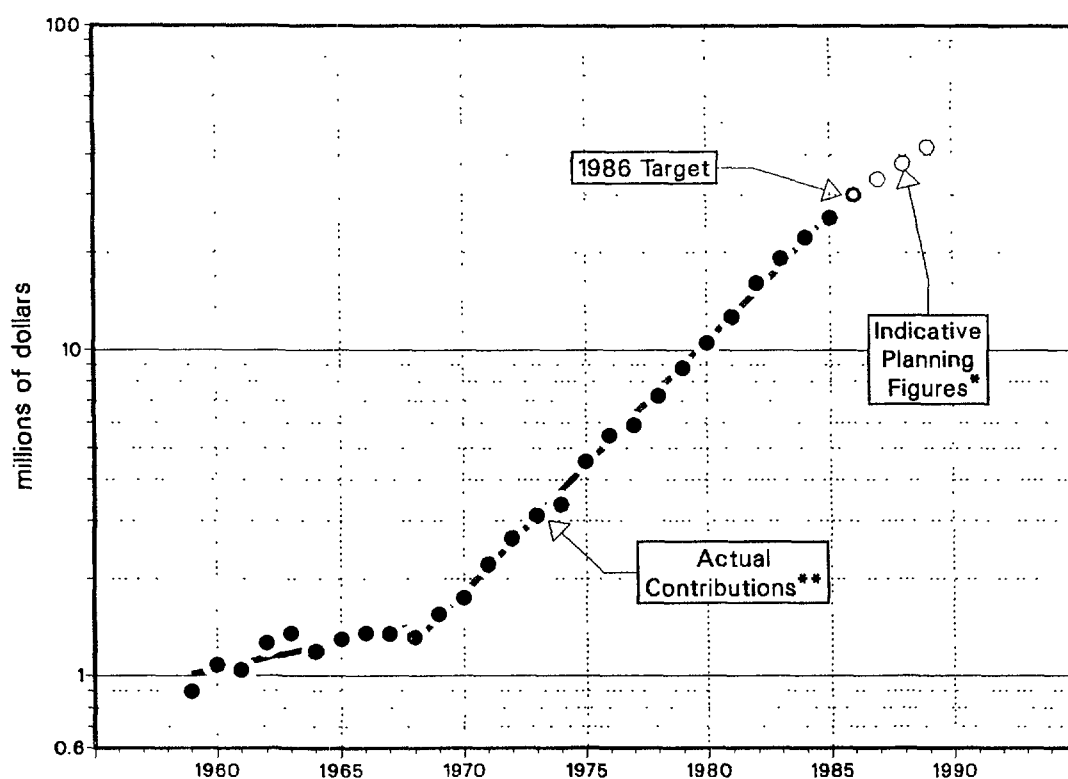
TABLE 2

## TECHNICAL ASSISTANCE AND CO-OPERATION FUND: 1976-1985

Programme Year	Target for voluntary contributions to the Technical Assistance and Co-operation Fund	Amount pledged <sup>a/</sup>	Amount actually made available for technical co-operation by programme year <sup>a/</sup>
1976	5 500 000	5 061 957	5 492 167
1977	6 000 000	5 449 466	5 962 688
1978	7 000 000	6 451 332	7 121 508
1979	8 500 000	8 062 513	8 802 221
1980	10 500 000	10 059 733	10 632 033
1981	13 000 000	12 053 611	12 955 595
1982	16 000 000	14 901 346	16 003 198
1983	19 000 000	17 619 372	19 244 903
1984	22 500 000	20 735 931	22 231 347
1985	26 000 000	23 255 051	25 193 932

<sup>a/</sup> These amounts include miscellaneous income over and above the amounts pledged. For a breakdown of miscellaneous income in 1985 see para. 17.

Technical Assistance and Co-operation Fund  
Voluntary Contributions



\* as approved by  
the Board of Governors

\*\* including  
miscellaneous income

TABLE 3A

## PROJECT PERSONNEL BY PLACE OF ORIGIN: 1985

Place of origin	Total individuals	Assignments				TOTAL
		Inter- national experts	National experts	Lecturers	Other project personnel	
Algeria	2	1	-	2	-	3
Argentina	39	48	-	4	4	56
Australia	16	20	-	4	1	25
Austria	21	13	-	8	7	28
Bangladesh	2	2	-	-	-	2
Barbados	3	3	-	-	-	3
Belgium	13	12	-	4	-	16
Bolivia	4	4	-	1	-	5
Brazil	41	48	3	1	1	53
Bulgaria	15	24	-	1	-	25
Canada	54	54	-	8	-	62
Chile	6	7	-	1	-	8
China	3	4	-	-	-	4
Colombia	5	6	-	-	-	6
Costa Rica	3	2	-	-	1	3
Cyprus	1	2	-	-	-	2
Czechoslovakia	13	18	-	1	-	19
Dominican Republic	2	3	-	-	-	3
Denmark	3	2	-	1	-	3
Ecuador	4	7	-	-	-	7
Egypt	27	5	19	-	4	28
El Salvador	1	1	-	-	-	1
Finland	10	11	-	-	-	11
France	51	48	-	21	-	69
German D.R.	5	7	-	2	-	9
Germany, F.R.	75	76	-	19	1	96
Ghana	1	1	-	-	-	1
Greece	4	5	-	-	-	5
Guatemala	3	3	-	-	-	3
Guyana	1	3	-	-	-	3
Hungary	38	67	2	4	-	73
Iceland	1	1	-	-	-	1
India	25	24	-	5	1	30
Indonesia	9	5	5	-	1	11
Iraq	13	4	9	-	1	14
Israel	3	3	-	-	-	3
Italy	35	39	-	7	-	46
Jamaica	3	5	-	-	-	5
Japan	25	22	-	9	-	31
Jordan	1	-	-	1	-	1

Place of origin	Total individuals	Assignments				TOTAL
		Inter- national experts	National experts	Lecturers	Other project personnel	
Kenya	4	4	-	-	-	4
Korea, R.	8	6	2	-	-	8
Libyan A.J.	1	1	-	-	-	1
Luxembourg	1	1	-	-	-	1
Malaysia	10	7	3	1	-	11
Mexico	15	13	1	2	-	16
Morocco	7	3	6	-	-	9
Netherlands	5	6	-	-	-	6
New Zealand	1	1	-	-	-	1
Nigeria	1	-	2	-	-	2
Norway	2	5	-	-	-	5
Pakistan	5	3	-	2	-	5
Panama	1	1	-	-	-	1
Paraguay	3	4	-	-	-	4
Peru	15	13	2	-	8	23
Philippines	4	4	1	-	-	5
Poland	19	29	-	-	1	30
Portugal	11	8	7	2	-	17
Romania	2	2	-	-	-	2
Singapore	2	1	-	1	-	2
Spain	33	43	-	4	1	48
Sri Lanka	9	15	4	1	-	20
Sudan	4	6	-	-	-	6
Sweden	16	13	-	5	-	18
Switzerland	7	6	-	3	-	9
Syrian A.R.	5	5	-	-	-	5
Thailand	6	8	-	-	-	8
Tunisia	3	4	-	-	-	4
Turkey	9	32	5	-	-	37
USSR	1	3	-	-	-	3
UK	64	75	-	14	-	89
USA	134	156	-	22	-	178
Uruguay	5	6	-	-	-	6
Venezuela	4	4	-	-	-	4
Viet Nam	1	1	-	-	-	1
Yemen	1	1	-	-	-	1
Yugoslavia	30	40	4	3	-	47
IAEA	142	336	-	81	1	418
Other international organizations	16	7	-	10	-	17
<b>TOTAL</b>	<b>1 188</b>	<b>1 483</b>	<b>75</b>	<b>255</b>	<b>33</b>	<b>1 846</b>



TABLE 3B

## TRAINEES IN THE FIELD BY PLACE OF STUDY: 1985

Place of study	Fellows	Training course participants	Visiting scientists	TOTAL
Argentina	10	134	3	147
Australia	14	28	2	44
Austria	12	-	8	20
Belgium	14	-	1	15
Brazil	12	90	11	113
Canada	27	68	8	103
Chile	-	15	8	23
China	-	41	-	41
Colombia	1	-	1	2
Costa Rica	1	28	-	29
Czechoslovakia	8	-	4	12
Denmark	5	-	5	10
Ecuador	1	35	8	44
Finland	7	-	4	11
France	39	29	26	94
German D.R.	5	16	2	23
Germany, F.R.	55	125	42	222
Greece	1	-	-	1
Hungary	20	48	5	73
India	12	30	6	48
Indonesia	-	16	1	17
Italy	22	26	12	60
Jamaica	-	6	-	6
Japan	12	31	7	50
Kenya	-	16	-	16
Korea, R.	-	-	1	1
Malaysia	-	-	1	1
Mexico	5	-	2	7
Netherlands	17	-	5	22
Nigeria	3	-	1	4
Norway	1	-	-	1
Peru	-	18	-	18
Philippines	-	11	3	14
Poland	4	-	3	7
Portugal	-	-	3	3
Senegal	1	-	-	1
Singapore	4	-	-	4
Spain	18	8	8	34
Sweden	9	24	9	42
Switzerland	4	-	1	5
Thailand	-	12	1	13
Turkey	1	-	1	2
USSR	4	78	1	83
UK	84	17	16	117
USA	124	78	30	232
Uruguay	2	-	9	11
Venezuela	1	28	16	45
Yugoslavia	4	16	1	21
IAEA	72	83	27	182
Other international organizations	2	-	-	2
TOTAL	638	1 155	303	2 096

a/ The difference between the number of trainees (1729) and the number of places of study (2096) is due to the fact that a number of fellows, training course participants and visiting scientists went to more than one country/place.

TABLE 4

DISTRIBUTION OF TECHNICAL CO-OPERATION DISBURSEMENTS BY TYPE: 1981-1985  
(in thousands of dollars)

Year and source	Experts		Equipment		Fellowships		Scientific visits		Training courses		Sub-contracts		Miscellaneous		TOTAL		Assistance outstanding as at 31 December 1985		TOTAL (8+9+10)
																	Unliquidated obligations	In-kind balance	
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)	(10)	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	\$	\$
1981																			
UNDP funds	1 692.7	33.9	2 689.4	53.9	340.8	6.8	-	-	90.5	1.8	88.9	1.8	91.4	1.8	4 993.7	100.0	-	-	4 993.7
Agency funds	2 215.3	21.2	5 003.6	48.0	1 214.0	11.6	154.0	1.5	1 813.9	17.4	-	-	35.7	0.3	10 436.5	100.0	-	-	10 436.5
Extrabudgetary funds	517.5	18.9	1 637.6	59.7	236.9	8.6	4.0	0.2	326.9	11.9	19.2	0.7	-	-	2 742.1	100.0	-	-	2 742.1
Assistance in kind	132.4	4.8	-	-	2 551.5	91.5	-	-	104.1	3.7	-	-	-	-	2 788.0	100.0	-	-	2 788.0
TOTAL	4 557.9	21.8	9 330.6	44.5	4 343.2	20.7	158.0	0.8	2 335.4	11.1	108.1	0.5	127.1	0.6	20 960.3	100.0	-	-	20 960.3
1982																			
UNDP funds	1 202.2	31.4	1 751.3	45.8	196.8	5.1	-	-	418.5	10.9	163.0	4.3	94.8	2.5	3 826.6	100.0	-	-	3 826.6
Agency funds	2 868.6	21.3	7 057.6	52.5	1 533.4	11.4	112.4	0.8	1 810.9	13.5	16.3	0.1	51.6	0.4	13 450.8	100.0	-	-	13 450.8
Extrabudgetary funds	532.0	16.4	1 988.9	61.5	177.6	5.5	6.4	0.2	335.1	10.4	195.3	6.09	-	-	3 235.3	100.0	-	-	3 235.3
Assistance in kind	95.1	3.8	20.0	0.8	2 110.8	84.7	-	-	267.1	10.7	-	-	-	-	2 493.0	100.0	-	-	2 493.0
TOTAL	4 697.9	20.4	10 817.8	47.0	4 018.6	17.5	118.8	0.5	2 831.6	12.3	374.6	1.6	146.4	0.7	23 005.7	100.0	-	-	23 005.7
1983																			
UNDP funds	882.3	20.6	1 785.4	41.7	217.2	5.1	-	-	136.8	3.2	1 167.2	27.2	95.3	2.2	4 284.2	100.0	-	-	4 284.2
Agency funds	3 186.9	19.0	9 438.4	56.4	2 139.7	12.8	149.9	0.9	1 693.5	10.1	62.7	0.4	65.0	0.4	16 736.1	100.0	-	-	16 736.1
Extrabudgetary funds	1 232.9	36.0	1 710.9	50.0	263.3	7.7	2.3	0.1	207.9	6.1	5.3	0.1	-	-	3 422.6	100.0	-	-	3 422.6
Assistance in kind	227.3	10.5	239.5	11.0	1 520.5	70.0	-	-	185.2	8.5	-	-	-	-	2 172.5	100.0	-	-	2 172.5
TOTAL	5 529.4	20.8	13 174.2	49.5	4 140.7	15.6	152.2	0.6	2 223.4	8.3	1 235.2	4.6	160.3	0.6	26 615.4	100.0	-	-	26 615.4
1984																			
UNDP funds	935.4	24.0	2 145.2	55.0	197.8	5.1	-	-	263.5	6.7	291.5	7.5	65.3	1.7	3 898.7	100.0	-	-	3 898.7
Agency funds	4 118.2	20.5	10 010.1	49.7	2 739.6	13.6	364.6	1.8	2 530.9	12.6	241.8	1.2	118.8	0.6	20 124.0	100.0	-	-	20 124.0
Extrabudgetary funds	1 538.3	23.7	3 802.5	58.6	243.4	3.7	6.0	0.1	209.9	3.2	692.6	10.7	-	-	6 492.7	100.0	-	-	6 492.7
Assistance in kind	285.4	13.8	53.0	2.6	1 491.1	72.2	-	-	236.6	11.4	-	-	-	-	2 066.1	100.0	-	-	2 066.1
TOTAL	6 877.3	21.1	16 010.8	49.1	4 671.9	14.3	370.6	1.1	3 240.9	10.0	1 225.9	3.8	184.1	0.6	32 581.5	100.0	-	-	32 581.5
1985																			
UNDP funds	877.2	34.2	1 101.9	43.0	141.2	5.5	91.1	3.6	218.3	8.5	99.9	3.9	32.9	1.3	2 562.5	100.0	1 341.5	-	3 904.0
Agency funds	5 032.7	21.8	10 448.2	45.3	3 153.9	13.7	448.1	1.9	3 447.2	15.0	370.8	1.6	161.4	0.7	23 062.3	100.0	20 732.7	-	43 795.0
Extrabudgetary funds	1 581.2	29.7	2 887.5	54.2	125.6	2.3	2.4	0.1	158.1	3.0	570.9	10.7	-	-	5 325.7	100.0	4 057.8	-	9 383.5
Assistance in kind	501.9	18.1	-	-	1 484.7	53.7	2.7	0.1	776.1	28.1	-	-	-	-	2 765.4	100.0	-	357.5	3 122.9
TOTAL	7 993.0	23.7	14 437.6	42.8	4 905.4	14.5	544.3	1.6	4 599.7	13.6	1 041.6	3.1	194.3	0.6	33 715.9	100.0	26 132.0	357.5	60 205.4
1981-1985																			
UNDP funds	5 589.8	28.5	9 473.2	48.4	1 093.8	5.6	91.1	0.5	1 127.6	5.8	1 810.5	9.2	379.7	2.0	19 565.7	100.0	1 341.5	-	20 907.2
Agency funds	17 421.7	20.8	41 957.9	50.0	10 780.6	12.9	1 229.0	1.5	11 296.4	13.5	691.6	0.8	432.5	0.5	83 809.7	100.0	20 732.7	-	104 542.4
Extrabudgetary funds	5 401.9	25.5	12 027.4	56.7	1 046.8	4.9	21.1	0.1	1 237.9	5.8	1 483.3	7.0	-	-	21 218.4	100.0	4 057.8	-	25 276.2
Assistance in kind	1 242.1	10.1	312.5	2.5	9 158.6	74.6	2.7	0.1	1 569.1	12.7	-	-	-	-	12 285.0	100.0	-	357.5	12 642.5
GRAND TOTAL	29 655.5	21.7	63 771.0	46.6	22 079.8	16.1	1 343.9	1.0	15 231.0	11.1	3 985.4	2.9	812.2	0.6	136 878.8	100.0	26 132.0	357.5	163 368.3

TABLE 5

**EXTRABUDGETARY FUNDS FOR TECHNICAL CO-OPERATION ACTIVITIES BY DONOR  
AS AT 31 DECEMBER 1985**

Donor	Funds available 1 January 1985	New funds in 1985	Total funds available	Expenditures in 1985	Unliquidated obligations at year end	Unobligated balance
<b>A. Funds for activities where donor is not recipient</b>						
Austria	261 349	-	261 349	97 304	25 966	138 079
Belgium	32 197	39 215	71 412	15 494	11 621	44 297
Canada	22 147	-	22 147	16 726	3 100	2 321
Chile	10 000	-	10 000	-	-	10 000
Finland	86 059	-	86 059	56 807	2 672	26 580
France	22 030	-	22 030	6 002	-	16 028
Germany, F.R.	1 146 258	478 548	1 624 806	596 530	299 487	728 789
Italy	8 700 023	2 551 000 <sup>b/</sup>	11 251 023	2 414 810	1 751 879 <sup>d/</sup>	7 084 334
Japan	185 263	259 500	444 763	213 074	98 389	133 300
Saudi Arabia	12 229	-	12 229	-	-	12 229
Sweden	290 480 <sup>a/</sup>	(8 440) <sup>c/</sup>	282 040	66 475	45 888	169 677
USSR	805 039	722 012	1 527 051	70 879	1 060 476	395 696
UK	457 968	196 079	654 047	105 591	122 702	425 754
USA	3 072 396	1 756 618	4 829 014	1 504 586	614 230	2 710 198
Sub-total	15 103 438	5 994 532	21 097 970	5 164 278	4 036 410	11 897 282
<b>B. Funds for activities where donor is recipient</b>						
Brazil	(7 417)	(180)	(7 597)	541	-	(8 138)
Ecuador	132	200 000	200 132	-	-	200 132
Iran, I.R.	27 906	63 700	91 606	91 471	-	135
Libyan A.J.	67	6 500	6 567	5 780	220	567
Nigeria	9 012	-	9 012	-	-	9 012
Syrian A.R.	100 000	-	100 000	22 828	21 200	55 972
Thailand	42 742	-	42 742	40 759	-	1 983
Yugoslavia	-	87 000	87 000	-	-	87 000
Sub-total	172 442	357 020	529 462	161 379	21 420	346 663
<b>TOTAL</b>	<b>15 275 880</b>	<b>6 351 552</b>	<b>21 627 432</b>	<b>5 325 657</b>	<b>4 057 830</b>	<b>12 243 945</b>

<sup>a/</sup> Adjusted by deducting 1985 overhead costs of \$6 332.

<sup>b/</sup> Includes \$170 000 programmed for 1986.

<sup>c/</sup> Loss on exchange of receivable.

<sup>d/</sup> Includes \$90 384 against future years.

TABLE 6A  
TECHNICAL CO-OPERATION PERSONNEL SERVICES: 1985

Recipient	Number of assignments	Number of man-months served	Recipient	Number of assignments	Number of man-months served
Albania	1	1.0	Mexico	27	30.5
Algeria	11	8.0	Mongolia	2	3.0
Argentina	11	19.0	Morocco	18	6.0
Bangladesh	4	2.5	Nicaragua	2	1.0
Bolivia	10	6.0	Niger	5	6.0
Brazil	34	47.0	Nigeria	9	32.0
Bulgaria	3	1.5	Pakistan	4	7.0
Burma	2	1.5	Panama	7	3.0
Cameroon	2	3.0	Paraguay	3	1.5
Chile	16	16.0	Peru	35	104.0
China	23	12.0	Philippines	27	66.0
Colombia	12	11.5	Poland	5	1.0
Costa Rica	12	48.0	Portugal	20	8.0
Cote d'Ivoire	7	12.0	Romania	3	1.0
Cuba	11	8.5	Saudi Arabia	1	0.5
Cyprus	3	2.0	Senegal	7	5.5
Dem. P.R. Korea	6	2.5	Sierra Leone	2	2.0
Dominican Republic	4	3.0	Singapore	2	7.5
Ecuador	14	7.5	Spain	3	4.0
Egypt	91	269.5	Sri Lanka	15	17.0
El Salvador	4	1.5	Sudan	7	3.5
Ethiopia	9	11.5	Syrian A.R.	13	11.0
Gabon	6	1.5	Thailand	30	26.5
Ghana	11	10.0	Tunisia	7	2.0
Greece	6	1.5	Turkey	60	20.0
Guatemala	7	4.0	U.A. Emirates	1	1.0
Hungary	5	1.0	U.R. Tanzania	7	11.5
Indonesia	41	57.0	Uruguay	9	2.5
Iran, I.R.	6	3.0	Venezuela	18	20.0
Iraq	19	5.0	Viet Nam	11	7.0
Jamaica	2	0.5	Yugoslavia	69	18.0
Jordan	4	1.0	Zaire	2	1.0
Kenya	10	7.5	Zambia	11	8.5
Korea, R.	49	30.5			
Libyan A.J.	5	3.0			
Liberia	1	0.5			
Madagascar	6	4.0			
Malaysia	30	26.0			
Mali	8	5.0			
Mauritius	1	0.5			
			Sub-total	949	1 095.5
			Intercountry projects	642	411.0
			Training courses	255	78.5
			Sub-total	897	489.5
			GRAND TOTAL	1 846	1 585.0

TABLE 6B  
RECIPIENTS OF TRAINING ABROAD: 1985

Recipient	Fellows		Visiting scientists		Training course participants		TOTAL	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Albania	4	12.0	-	-	-	-	4	12.0
Algeria	3	10.5	-	-	7	10.0	10	20.5
Argentina	4	8.0	8	6.5	39	29.5	51	44.0
Bangladesh	16	95.5	3	2.0	16	17.5	35	115.0
Barbados	-	-	-	-	13	3.5	13	3.5
Bolivia	3	27.0	3	1.0	24	34.0	30	62.0
Brazil	18	54.5	14	7.5	33	25.0	65	87.0
Bulgaria	28	166.0	2	1.5	10	22.5	40	190.0
Chile	6	29.0	5	3.0	21	19.0	32	51.0
China	8	25.0	1	0.5	28	32.0	37	57.5
Colombia	7	32.5	5	3.0	30	20.0	42	55.5
Congo	-	-	-	-	1	1.0	1	1.0
Costa Rica	2	8.0	5	1.5	3	2.0	10	11.5
Cuba	4	10.5	3	1.5	13	18.5	20	30.5
Cyprus	3	22.5	-	-	2	2.0	5	24.5
Czechoslovakia	1	3.0	2	1.0	10	13.0	13	17.0
Dem. P.R. Korea	7	73.0	-	-	5	15.0	12	88.0
Dominican Republic	4	6.0	1	0.5	16	6.5	21	13.0
Ecuador	2	12.0	6	3.5	27	13.0	35	28.5
Egypt	32	149.5	5	2.5	15	16.5	52	168.5
El Salvador	-	-	-	-	3	3.5	3	3.5
Ethiopia	5	26.0	-	-	4	11.0	9	37.0
Ghana	14	75.5	1	1.0	11	16.0	26	92.5
Greece	7	45.0	-	-	3	5.0	10	50.0
Guatemala	7	39.0	4	2.5	17	7.5	28	49.0
Guyana	-	-	-	-	15	6.0	15	6.0
Hungary	18	99.5	20	6.5	8	11.0	46	117.0
Iceland	1	1.0	-	-	-	-	1	1.0
India	4	8.5	-	-	27	32.5	31	41.0
Indonesia	13	72.0	4	3.0	23	30.0	40	105.0
Iran, I.R.	13	70.5	4	3.0	10	11.5	27	85.0
Iraq	-	-	-	-	8	15.5	8	15.5
Ivory Coast	3	5.5	-	-	1	1.0	4	6.5
Jamaica	2	5.0	-	-	12	4.5	14	9.5
Jordan	-	-	1	0.5	5	5.0	6	5.5
Kenya	14	49.5	1	1.0	1	2.0	16	52.5
Korea, R.	20	144.0	2	1.0	21	21.5	43	166.5
Lebanon	1	3.0	-	-	-	-	1	3.0
Liberia	-	-	-	-	1	1.0	1	1.0
Libyan A.J.	15	87.0	-	-	7	12.0	22	99.0

Recipient	Fellows		Visiting scientists		Training course participants		TOTAL	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Madagascar	1	3.0	-	-	3	3.0	4	6.0
Malaysia	2	20.0	3	1.5	22	27.5	27	49.0
Mali	8	40.5	-	-	-	-	8	40.5
Mauritius	1	4.0	1	0.5	2	6.5	4	11.0
Mexico	26	128.5	9	5.0	54	76.0	89	209.5
Mongolia	2	8.0	-	-	1	2.0	3	10.0
Morocco	3	13.5	1	0.5	5	13.0	9	27.0
Nepal	-	-	-	-	2	2.0	2	2.0
Nicaragua	-	-	-	-	3	3.5	3	3.5
Niger	1	1.0	-	-	-	-	1	1.0
Nigeria	8	39.0	2	2.0	18	32.5	28	73.5
Pakistan	26	159.0	6	4.0	23	28.5	55	191.5
Panama	1	5.5	1	0.5	8	10.5	10	16.5
Paraguay	4	16.5	5	2.5	15	21.0	24	40.0
Peru	18	102.5	8	5.0	30	50.5	56	158.0
Philippines	29	164.5	6	4.0	21	35.5	56	204.0
Poland	15	98.0	3	2.0	9	14.5	27	114.5
Portugal	12	48.5	1	0.5	7	6.5	20	55.5
Romania	2	5.0	2	1.5	9	13.5	13	20.0
Saudi Arabia	-	-	-	-	3	4.0	3	4.0
Senegal	-	-	-	-	2	3.0	2	3.0
Sierra Leone	1	5.0	-	-	1	2.0	2	7.0
Singapore	2	4.5	-	-	2	1.5	4	6.0
Somalia	-	-	-	-	1	2.0	1	2.0
Spain	-	-	-	-	2	3.0	2	3.0
Sri Lanka	16	103.0	2	1.5	16	19.0	34	123.5
Sudan	21	107.0	-	-	6	7.0	27	114.0
Syrian A.R.	3	29.0	-	-	5	13.0	8	42.0
Thailand	31	195.0	3	1.5	34	35.5	68	232.0
Trinidad	-	-	-	-	2	0.5	2	0.5
Tunisia	5	46.5	1	0.5	3	3.5	9	50.5
Turkey	16	109.0	2	3.0	24	38.5	42	150.5
Uganda	5	28.0	-	-	3	3.0	8	31.0
U.R. Tanzania	9	45.5	2	1.0	9	16.0	20	62.5
Uruguay	3	16.0	6	4.0	25	17.5	34	37.5
Venezuela	3	14.0	3	1.5	27	38.5	33	54.0
Viet Nam	21	134.0	2	1.0	9	7.5	32	142.5
Yemen	-	-	-	-	1	1.5	1	1.5
Yugoslavia	20	111.0	16	8.5	19	25.5	55	145.0
Zaire	5	20.0	-	-	3	3.0	8	23.0
Zambia	6	23.0	3	2.5	7	9.0	16	34.5
TOTAL	615	3323.0	188	108.5	926	1097.5	1729	4529.0

(1) Number of trainees. (2) Number of man-months of training received.

TABLE 7

FINANCIAL SUMMARY: 1985  
(In thousands of dollars)

Recipient	Assistance provided, by type					Assistance provided, by source						Unliquidated obligations as at 31 December 1985	TOTAL (11)+(12)
	Experts	Equipment	Fellowships	Sub-contracts	TOTAL	UNDP	Convertible currency	Non-convertible currency	Extra-budgetary funds	In kind	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
AFGHANISTAN	-	14.0	-	-	14.0	-	12.1	1.9	-	-	14.0	0.7	14.7
ALBANIA	6.2	323.4	11.2	-	340.8	-	266.1	74.7	-	-	340.8	124.2	465.0
ALGERIA	53.5	159.2	11.0	-	223.7	-	223.7	-	-	-	223.7	201.1	424.8
ARGENTINA	81.9	19.2	42.1	-	143.2	138.5	4.7	-	-	-	143.2	56.6	199.8
BANGLADESH	21.4	871.1	175.7	-	1068.2	0.8	535.4	456.4	7.2	68.4	1068.2	953.5	2021.7
BOLIVIA	33.9	153.8	33.2	-	220.9	6.1	194.0	-	20.8	-	220.9	124.0	344.9
BRAZIL	243.8	297.7	163.0	-	704.5	5.8	563.6	8.2	99.0	27.9	704.5	634.2	1338.7
BULGARIA	17.7	261.0	175.0	-	453.7	-	321.6	130.5	-	1.6	453.7	1370.9	1824.6
BURMA	12.0	179.8	-	-	191.8	-	131.3	60.5	-	-	191.8	32.3	224.1
CAMEROON	19.6	2.6	-	-	22.2	-	22.2	-	-	-	22.2	-	22.2
CHILE	103.3	78.6	70.6	-	252.5	(15.9)	223.9	-	-	44.5	252.5	83.8	336.3
CHINA	89.1	12.7	40.4	-	142.2	-	108.4	-	-	33.8	142.2	32.7	174.9
COLOMBIA	80.2	138.8	51.5	-	270.5	5.0	248.2	15.9	1.4	-	270.5	249.3	519.8
COSTA RICA	221.4	181.1	26.9	-	429.4	299.5	129.8	-	0.1	-	429.4	179.2	608.6
COTE D'IVOIRE	57.9	58.5	10.1	-	126.5	-	119.7	-	-	6.8	126.5	54.4	180.9
CUBA	52.1	176.8	17.7	-	246.6	136.9	87.7	21.2	-	0.8	246.6	291.9	538.5
CYPRUS	13.8	144.2	36.5	-	194.5	-	137.7	-	31.5	25.3	194.5	12.8	207.3
CZECHOSLOVAKIA	-	-	8.6	-	8.6	-	8.6	-	-	-	8.6	-	8.6
DEM. P.R. KOREA	12.3	247.1	103.0	-	362.4	-	239.9	41.5	-	81.0	362.4	1880.6	2243.0
DOMINICAN REP.	15.9	152.3	12.9	-	181.1	-	119.1	61.9	-	0.1	181.1	60.4	241.5
ECUADOR	57.7	128.6	47.5	-	233.8	20.1	170.7	2.1	24.1	16.8	233.8	304.5	538.3
EGYPT	657.8	1056.1	322.1	458.8	2494.8	6.1	345.0	134.1	1804.0	205.6	2494.8	2939.8	5434.6
EL SALVADOR	9.0	15.5	-	-	24.5	-	24.5	-	-	-	24.5	10.1	34.6
ETHIOPIA	63.9	83.1	50.2	-	197.2	-	191.6	5.6	-	-	197.2	95.4	292.6
GABON	25.6	(30.5)	-	-	(4.9)	-	(4.9)	-	-	-	(4.9)	22.0	17.1
GHANA	50.2	88.8	121.7	-	260.7	-	184.0	9.5	29.4	37.8	260.7	199.7	460.4
GREECE	10.6	12.8	51.4	-	74.8	-	61.9	4.6	2.7	5.6	74.8	123.6	198.4
GUATEMALA	16.8	205.8	48.2	-	270.8	-	182.0	24.6	50.4	13.8	270.8	89.3	360.1
HAITI	-	-	-	0.5	0.5	0.5	-	-	-	-	0.5	2.1	2.6
HONDURAS	-	-	-	-	-	-	-	-	-	-	-	0.6	0.6
HONG KONG	-	-	-	-	-	-	-	-	-	-	-	2.5	2.5
HUNGARY	2.8	238.0	133.0	-	373.8	4.3	224.1	135.9	-	9.5	373.8	1056.2	1430.0
ICELAND	-	33.7	(0.6)	-	33.1	-	33.1	-	-	-	33.1	52.3	85.4
INDIA	0.9	14.9	18.1	-	33.9	-	-	-	33.9	-	33.9	30.5	64.4
INDONESIA	370.8	222.8	145.3	-	738.9	247.2	415.2	0.5	45.1	30.9	738.9	316.5	1055.4
IRAN, I.R.	29.3	391.2	104.3	131.5	656.3	387.0	170.4	-	91.5	7.4	656.3	138.8	795.1
IRAQ	35.0	11.9	-	-	46.9	-	29.4	11.9	-	5.6	46.9	145.7	192.6
JAMAICA	5.2	105.8	14.7	-	125.7	4.9	114.7	6.1	-	-	125.7	20.8	146.5
JORDAN	11.4	92.0	1.0	-	104.4	-	104.4	-	-	-	104.4	44.5	148.9
KENYA	49.3	99.6	86.1	-	235.0	-	196.1	-	11.4	27.5	235.0	125.9	360.9
KOREA, R.	317.6	164.3	247.4	-	729.3	15.4	457.1	-	116.8	140.0	729.3	272.5	1001.8
LEBANON	-	0.7	10.1	-	10.8	-	10.8	-	-	-	10.8	46.9	57.7
LIBERIA	2.1	-	-	-	2.1	-	2.1	-	-	-	2.1	-	2.1
LIBYAN A.J.	16.9	22.3	95.1	-	134.3	-	115.7	12.8	5.8	-	134.3	59.5	193.8
MADAGASCAR	31.3	82.9	5.4	-	119.6	11.8	107.8	-	-	-	119.6	21.4	141.0
MALAWI	2.7	-	-	-	2.7	2.7	-	-	-	-	2.7	-	2.7
MALAYSIA	180.9	286.0	48.4	-	515.3	-	370.7	66.3	78.3	-	515.3	266.6	781.9
MALI	35.9	76.5	31.2	-	143.6	-	127.8	-	13.3	2.5	143.6	89.5	233.1
MAURITIUS	2.4	47.2	5.0	-	54.6	-	54.6	-	-	-	54.6	35.2	89.8
MEXICO	188.2	62.1	262.1	81.8	594.2	-	310.7	2.8	108.5	172.2	594.2	451.8	1046.0
MONGOLIA	23.3	138.3	6.4	-	168.0	-	165.1	0.3	-	2.6	168.0	45.4	213.4
MOROCCO	31.1	31.9	15.9	14.0	92.9	-	73.7	4.0	11.8	3.4	92.9	73.2	166.1
NICARAGUA	5.1	81.9	5.3	-	92.3	-	34.8	57.5	-	-	92.3	15.2	107.5
NIGER	54.8	119.3	3.9	-	178.0	-	175.3	-	-	2.7	178.0	40.4	218.4
NIGERIA	170.1	193.0	74.1	4.5	441.7	0.8	74.9	-	360.6	5.4	441.7	229.5	671.2
PAKISTAN	34.2	160.9	236.3	-	431.4	-	409.8	5.3	-	16.3	431.4	588.7	1020.1
PANAMA	26.7	119.8	6.5	-	153.0	-	74.9	-	78.1	-	153.0	50.7	203.7
PARAGUAY	9.9	107.1	27.1	-	144.1	-	143.4	-	-	0.7	144.1	135.3	279.4
PERU	367.4	556.1	197.2	-	1120.7	157.3	249.3	6.5	596.9	110.7	1120.7	1358.8	2479.5
PHILIPPINES	422.2	219.9	311.8	9.8	963.7	241.8	437.3	1.1	190.6	92.9	963.7	411.7	1375.4

Recipient	Assistance provided, by type					Assistance provided, by source						Unliquidated obligations as at 31 December 1985	TOTAL (11)+(12) (13)
	Experts	Equip- ment	Fellow- ships	Sub- contracts	TOTAL	UNDP	Convertible currency	Non- convertible currency	Extra- budgetary funds	In kind	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
POLAND	5.8	186.2	109.7	-	301.7	-	288.0	12.9	-	0.8	301.7	917.8	1219.5
PORTUGAL	30.5	610.4	45.9	-	686.8	-	175.5	365.2	125.5	22.6	686.8	523.1	1209.9
ROMANIA	10.1	241.7	15.4	-	267.2	84.7	168.4	11.0	0.4	2.7	267.2	305.0	572.2
SAUDI ARABIA	7.4	-	-	-	7.4	-	7.4	-	-	-	7.4	-	7.4
SENEGAL	36.6	117.7	-	-	154.3	4.4	95.8	50.9	3.2	-	154.3	84.6	238.9
SIERRA LEONE	12.2	54.6	10.6	-	77.4	-	66.8	-	-	10.6	77.4	3.3	80.7
SINGAPORE	62.2	36.7	8.5	-	107.4	-	101.0	-	-	6.4	107.4	64.6	172.0
SPAIN	22.8	-	-	-	22.8	-	22.8	-	-	-	22.8	14.7	37.5
SRI LANKA	51.3	244.1	143.5	-	438.9	-	384.4	-	47.7	6.8	438.9	364.1	803.0
SUDAN	41.6	311.4	188.4	-	541.4	-	333.9	0.7	157.2	49.6	541.4	160.1	701.5
SYRIAN A.R.	115.2	184.9	38.7	-	338.8	-	314.2	-	22.8	1.8	338.8	318.7	657.5
THAILAND	169.5	645.8	302.1	-	1117.4	-	634.7	74.0	244.1	164.6	1117.4	483.8	1601.2
TUNISIA	6.0	101.7	56.7	-	164.4	-	133.5	-	9.3	21.6	164.4	119.0	283.4
TURKEY	180.9	103.5	209.6	8.3	502.3	-	417.5	0.2	-	84.6	502.3	191.7	694.0
UGANDA	-	29.3	44.0	-	73.3	-	70.2	3.1	-	-	73.3	36.8	110.1
UNITED ARAB EMIRATES	8.1	8.1	-	-	16.2	-	16.2	-	-	-	16.2	6.2	22.4
U.R. TANZANIA	42.7	246.2	70.6	-	359.5	-	307.3	52.2	-	-	359.5	268.8	628.3
URUGUAY	33.4	163.3	46.2	-	242.9	3.0	195.0	0.8	28.5	15.6	242.9	182.4	425.3
VENEZUELA	121.0	110.2	23.3	-	254.5	4.5	250.0	-	-	-	254.5	162.7	417.2
VIET NAM	44.4	607.0	167.2	-	818.6	-	308.1	436.9	70.9	2.7	818.6	561.4	1380.0
YUGOSLAVIA	129.0	519.1	179.7	8.2	836.0	152.8	374.4	1.5	244.3	63.0	836.0	518.6	1354.6
ZAIRE	17.0	168.0	23.6	-	208.6	1.2	161.2	6.0	40.2	-	208.6	41.7	250.3
ZAMBIA	58.0	225.4	56.2	-	339.6	-	262.4	56.6	9.8	10.8	339.6	726.6	1066.2
SUB-TOTAL	5660.8	13627.5	5461.5	717.4	25467.2	1927.2	14622.4	2436.2	4817.1	1664.3	25467.2	22311.4	47778.6
<u>Intercountry projects</u>													
AFRICA	125.5	133.9	-	-	259.4	3.9	255.5	-	-	-	259.4	82.8	342.2
ASIA AND THE PACIFIC	483.0	96.4	193.3	10.2	782.9	329.1	154.4	-	213.1	86.3	782.9	335.5	1118.4
EUROPE	59.8	13.3	-	241.5	314.6	-	314.6	-	-	-	314.6	5.9	320.5
LATIN AMERICA	745.0	507.1	305.2	72.5	1629.8	302.3	698.8	-	-	628.7	1629.8	807.2	2437.0
INTERREGIONAL	1019.3	328.1	-	-	1347.4	-	972.8	51.3	221.1	102.2	1347.4	1308.2	2655.6
<u>Training courses</u>													
AFRICA	29.4	38.8	34.9	-	103.1	-	98.8	-	-	4.3	103.1	42.6	145.7
ASIA AND THE PACIFIC	46.4	19.5	181.8	-	247.7	-	226.2	-	-	21.5	247.7	88.0	335.7
LATIN AMERICA	99.1	29.4	138.5	-	267.0	-	224.6	-	12.1	30.3	267.0	88.4	355.4
INTERREGIONAL	618.4	340.5	2176.5	-	3135.4	-	2404.6	440.7	62.3	227.8	3135.4	1062.0	4197.4
SUB-TOTAL	3225.9	1507.0	3030.2	324.2	8087.3	635.3	5350.3	492.0	508.6	1101.1	8087.3	3820.6	11907.9
MISCELLANEOUS	44.4	68.4	45.6	3.0	161.4	-	161.4	-	-	-	161.4	-	161.4
GRAND TOTAL	8931.1	15202.9	8537.3	1044.6	33715.9	2562.5	20134.1	2928.2	5325.7	2765.4	33715.9	26132.0	59847.9



TABLE 8  
FINANCIAL SUMMARY: 1958-1985  
(in thousands of dollars)

Recipient	Assistance provided by type					Assistance provided by source				
	Experts	Equip- ment	Fellow- ships	Sub- contracts	TOTAL	UNDP	Agency funds	Extra- budgetary funds a/	In kind	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Afghanistan	378.6	424.6	120.5	-	923.7	92.9	749.0	-	81.8	923.7
Albania	78.9	1 095.6	87.2	-	1 261.7	119.2	1 122.0	-	20.5	1 261.7
Algeria	185.2	545.9	145.5	-	876.6	21.7	801.5	-	53.4	876.6
Argentina	3 131.7	1 930.4	1 167.7	-	6 229.8	4 024.5	1 652.4	17.5	535.4	6 229.8
Bangladesh	799.3	2 639.7	1 900.3	-	5 339.3	63.8	2 973.7	1 066.4	1 235.4	5 339.3
Bolivia	435.4	1 150.2	325.3	-	1 910.9	159.5	1 320.4	267.3	163.7	1 910.9
Brazil	4 489.8	3 820.6	1 907.8	-	10 218.2	5 660.4	3 131.1	716.3	710.4	10 218.2
Bulgaria	119.5	1 788.1	1 592.5	-	3 500.1	543.9	2 382.2	-	574.0	3 500.1
Burma	767.6	1 267.6	200.6	-	2 235.8	537.0	1 595.2	-	103.6	2 235.8
Cameroon	363.5	162.2	44.2	-	569.9	297.3	243.4	22.4	6.8	569.9
Cape Verde	3.1	0.1	-	-	3.2	3.2	-	-	-	3.2
Chad	116.3	30.6	-	-	146.9	146.9	-	-	-	146.9
Chile	2 529.4	2 118.2	1 205.3	-	5 852.9	3 574.1	1 866.4	-	412.4	5 852.9
China	89.1	12.7	99.3	-	201.1	-	167.3	-	33.8	201.1
Colombia	1 132.0	2 077.7	723.8	-	3 933.5	1 693.6	1 453.9	188.2	597.8	3 933.5
Costa Rica	625.0	792.7	188.2	-	1 605.9	331.7	857.6	234.3	182.3	1 605.9
Cote d'Ivoire	265.8	497.8	36.0	-	799.6	73.4	690.2	29.2	6.8	799.6
Cuba	358.1	3 936.1	266.1	-	4 560.3	1 509.6	2 870.6	39.2	140.9	4 560.3
Cyprus	111.4	541.7	182.1	-	835.2	24.1	620.0	34.6	156.5	835.2
Czechoslovakia	-	104.8	917.8	-	1 022.6	6.2	631.9	12.9	371.6	1 022.6
Dem. P.R. Korea	32.5	1 107.2	463.6	-	1 603.3	-	1 186.3	23.9	393.1	1 603.3
Dominican Republic	104.4	416.1	50.4	-	570.9	-	551.0	3.9	16.0	570.9
Ecuador	1 086.1	1 783.2	336.5	-	3 205.8	547.0	2 120.2	220.8	317.8	3 205.8
Egypt	2 552.3	7 414.8	2 563.3	814.8	13 145.2	1 483.2	5 131.5	4 838.0	1 692.5	13 145.2
El Salvador	110.1	163.5	150.9	-	424.5	14.1	215.4	20.4	174.6	424.5
Ethiopia	443.2	399.9	289.6	-	1 132.7	437.5	644.4	-	50.8	1 132.7
Gabon	41.5	26.0	-	-	67.5	-	67.5	-	-	67.5
Ghana	525.6	1 085.1	1 982.2	-	3 592.9	269.0	1 685.3	339.7	1 298.9	3 592.9
Greece	1 898.9	1 198.8	1 102.8	-	4 200.5	1 561.9	1 741.1	298.1	599.4	4 200.5
Guatemala	185.5	703.0	119.7	-	1 008.2	56.2	735.5	108.0	108.5	1 008.2
Haiti	0.9	-	-	0.5	1.4	0.5	0.9	-	-	1.4
Honduras	-	-	0.7	-	0.7	-	0.7	-	-	0.7
Hong Kong	59.9	106.7	26.1	-	192.7	-	183.7	-	9.0	192.7
Hungary	102.3	3 232.8	1 466.6	-	4 801.7	677.8	3 818.4	8.0	297.5	4 801.7
Iceland	66.9	534.8	144.9	-	746.6	-	621.3	-	125.3	746.6
India	1 015.8	3 801.6	2 629.3	-	7 446.7	2 920.3	1 280.7	2 083.5	1 162.2	7 446.7
Indonesia	2 033.2	2 126.2	1 276.6	-	5 436.0	1 577.4	2 596.0	534.8	727.8	5 436.0
Iran, I.R.	763.7	1 240.5	650.6	131.5	2 786.3	1 638.2	756.5	101.0	290.6	2 786.3
Iraq	423.7	977.7	763.4	-	2 164.8	242.5	1 480.6	25.0	416.7	2 164.8
Israel	257.8	819.8	438.7	-	1 516.3	170.9	900.6	18.0	426.8	1 516.3
Jamaica	179.3	449.8	42.3	-	671.4	15.3	585.3	-	70.8	671.4
Jordan	313.2	539.4	195.2	-	1 047.8	89.3	755.6	100.6	102.3	1 047.8
Kenya	619.7	746.8	636.4	-	2 002.9	33.2	1 301.0	384.3	284.4	2 002.9
Korea, R.	2 097.2	1 489.5	2 253.5	-	5 840.2	582.2	2 830.7	839.7	1 587.6	5 840.2
Kuwait	12.0	-	3.9	-	15.9	-	15.9	-	-	15.9
Lebanon	248.5	266.0	106.8	-	621.3	139.3	427.4	31.4	23.2	621.3
Liberia	117.3	29.0	-	-	146.3	60.2	29.8	-	56.3	146.3
Libyan A.J.	289.2	218.1	272.1	-	779.4	7.3	710.0	8.3	53.8	779.4
Madagascar	1 234.1	1 310.7	154.2	-	2 699.0	1 435.5	976.3	244.2	43.0	2 699.0
Malawi	5.1	-	-	-	5.1	5.1	-	-	-	5.1
Malaysia	956.6	1 544.1	763.4	-	3 264.1	1.6	2 162.8	630.5	469.2	3 264.1
Mali	500.1	667.2	224.7	-	1 392.0	13.4	1 197.2	112.3	69.1	1 392.0
Mauritius	30.4	127.8	21.7	-	179.9	-	176.1	3.8	-	179.9
Mexico	2 057.4	743.9	959.5	172.3	3 933.1	419.3	2 346.2	568.9	598.7	3 933.1
Mongolia	174.1	861.5	25.1	-	1 060.7	-	1 040.9	10.6	9.2	1 060.7
Morocco	1 490.8	1 001.2	303.3	14.0	2 809.3	909.6	1 500.5	173.2	226.0	2 809.3
Nicaragua	42.7	89.5	27.5	-	159.7	-	159.7	-	-	159.7
Niger	245.1	364.5	46.6	-	656.2	-	628.0	-	28.2	656.2
Nigeria	2 512.5	1 791.9	789.5	29.1	5 123.0	980.9	1 013.0	2 520.0	609.1	5 123.0
Niue	7.8	6.9	-	-	14.7	14.7	-	-	-	14.7

Recipient	Assistance provided, by type					Assistance provided, by source				
	Experts	Equip- ment	Fellow- ships	Sub- contracts	TOTAL	UNDP	Agency funds	Extra- budgetary funds <sup>a/</sup>	In kind	TOTAL
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Pakistan	1 589.3	2 520.6	2 767.2	-	6 877.1	1 842.0	3 687.5	90.6	1 257.0	6 877.1
Panama	249.8	479.3	179.4	-	908.5	4.1	690.4	99.7	114.3	908.5
Paraguay	165.4	584.1	201.0	-	950.5	-	758.5	94.1	97.9	950.5
Peru	2 891.5	4 685.0	1 118.4	-	8 694.9	3 681.0	2 209.2	2 092.4	712.3	8 694.9
Philippines	2 101.9	2 445.7	3 037.4	57.7	7 642.7	1 884.0	2 871.5	1 005.7	1 881.5	7 642.7
Poland	72.3	1 666.4	1 815.2	-	3 553.9	202.9	2 833.7	1.4	515.9	3 553.9
Portugal	206.6	1 365.9	270.1	-	1 842.6	-	1 185.4	515.6	141.6	1 842.6
Romania	708.3	3 656.5	815.2	134.5	5 314.5	2 642.4	2 390.0	52.2	229.9	5 314.5
St. Christopher	-	-	8.5	-	8.5	-	-	8.5	-	8.5
Saudi Arabia	59.7	8.6	12.8	-	81.1	-	74.1	-	7.0	81.1
Senegal	361.7	896.6	178.4	-	1 436.7	322.9	893.6	154.7	65.5	1 436.7
Sierra Leone	401.7	222.7	127.6	-	752.0	174.5	464.9	12.4	100.2	752.0
Singapore	327.8	841.4	97.0	-	1 266.2	-	1 103.7	103.3	59.2	1 266.2
Somalia	6.3	-	-	-	6.3	6.3	-	-	-	6.3
Spain	367.9	-	98.4	-	466.3	-	387.2	56.0	23.1	466.3
Sri Lanka	820.2	1 712.7	1 220.1	-	3 753.0	307.7	2 630.0	392.7	422.6	3 753.0
Sudan	587.4	1 441.2	1 203.1	-	3 231.7	296.7	2 025.5	453.9	455.6	3 231.7
Syrian A.R.	294.9	589.0	353.1	-	1 237.0	229.6	894.2	27.3	85.9	1 237.0
Thailand	1 524.8	2 839.9	3 000.8	3.8	7 369.3	545.5	3 534.1	1 387.4	1 902.3	7 369.3
Tunisia	615.2	745.5	275.1	-	1 635.8	141.2	1 150.1	238.7	105.8	1 635.8
Turkey	1 721.9	1 755.7	2 572.1	22.2	6 071.9	1 628.7	2 771.9	123.5	1 547.8	6 071.9
Uganda	264.2	229.0	233.2	-	726.4	131.0	552.9	-	42.5	726.4
U.A. Emirates	31.1	8.1	-	-	39.2	-	39.2	-	-	39.2
U.R. Tanzania	334.9	773.7	340.1	-	1 448.7	9.6	1 333.3	7.1	98.7	1 448.7
Uruguay	574.3	1 712.9	330.6	-	2 617.8	193.1	1 566.4	571.3	287.0	2 617.8
Venezuela	894.5	624.9	288.9	-	1 808.3	135.2	1 424.8	65.9	182.4	1 808.3
Viet Nam	251.2	2 312.1	673.7	-	3 237.0	31.4	2 759.3	108.7	337.6	3 237.0
Yugoslavia	1 026.2	3 742.7	1 918.9	23.1	6 710.9	3 030.9	2 524.8	584.1	571.1	6 710.9
Zaire	563.7	1 262.2	566.7	-	2 392.6	577.2	1 387.0	129.9	298.5	2 392.6
Zambia	864.0	1 147.5	506.1	-	2 517.6	152.5	1 952.7	156.1	256.3	2 517.6
Other countries <sup>b/</sup>	451.4	228.7	1 455.9	-	2 136.0	397.6	886.5	-	851.9	2 136.0
Sub-total	60 947.2	104 821.4	58 056.8	1 403.5	225 228.9	53 754.4	115 685.2	25 412.4	30 376.9	225 228.9
<u>Interregional projects and training courses</u>										
Africa	430.2	533.9	214.7	-	1 178.8	332.8	834.9	-	11.1	1 178.8
Asia and the Pacific	2 663.4	2 902.0	1 580.3	81.1	7 226.8	4 343.4	1 392.8	828.0	662.6	7 226.8
Europe	123.1	35.8	17.3	421.5	597.7	56.9	539.4	-	1.4	597.7
Latin America	2 415.8	1 694.4	958.4	148.4	5 217.0	1 851.6	2 215.1	275.3	875.0	5 217.0
Middle East	5.8	1.2	5.3	-	12.3	12.3	-	-	-	12.3
Interregional	6 365.6	3 516.8	14 706.2	213.0	24 801.6	1 790.5	18 547.5	2 331.0	2 132.6	24 801.6
Sub-total	12 003.9	8 684.1	17 482.2	864.0	39 034.2	8 387.5	23 529.7	3 434.3	3 682.7	39 034.2
Miscellaneous	274.8	300.7	107.5	4.7	687.7	23.2	664.5	-	-	687.7
GRAND TOTAL	73 225.9	113 806.2	75 646.5	2 272.2	264 950.8	62 165.1	139 879.4	28 846.7	34 059.6	264 950.8

<sup>a/</sup> The assistance provided from extrabudgetary funds prior to 1977 is included under assistance "in kind".

<sup>b/</sup> Includes the following countries which have not received technical assistance during the last ten or more years: Austria, Democratic Kampuchea, Denmark, Finland, France, the Federal Republic of Germany, Italy, Japan, Monaco, the Netherlands, New Zealand, Norway, South Africa, Sweden, Switzerland, the United States of America and Zimbabwe.

ANNEX I

UTILIZATION OF EXTRABUDGETARY AND IN-KIND CONTRIBUTIONS

A. Assistance for activities where donor is not recipient  
(in thousands of dollars)

Donor	Extrabudgetary					In kind					TOTAL	
	Experts	Equipment	Fellowships	Other training	Sub-contracts	Sub-total	Experts	Equipment	Fellowships	Other training		Sub-total
<u>Countries</u>												
Algeria	-	-	-	-	-	-	-	-	-	0.7	0.7	0.7
Argentina	-	-	-	-	-	-	43.5	-	2.8	1.8	48.1	48.1
Australia	-	-	-	-	-	-	9.2	-	-	9.8	19.0	19.0
Austria	-	97.3	-	-	-	97.3	1.2	-	11.8	10.4	23.4	120.7
Barbados	-	-	-	-	-	-	2.9	-	-	-	2.9	2.9
Bangladesh	-	-	-	-	-	-	2.2	-	-	-	2.2	2.2
Belgium	4.7	10.8	-	-	-	15.5	1.4	-	12.2	4.5	18.1	33.6
Bolivia	-	-	-	-	-	-	2.4	-	-	-	2.4	2.4
Brazil	-	-	-	-	-	-	37.6	-	73.0	0.3	110.9	110.9
Bulgaria	-	-	-	-	-	-	1.1	-	-	13.4	14.5	14.5
Canada	-	16.7	-	-	-	16.7	44.7	122.9	-	331.7	499.3	516.0
Chile	-	-	-	-	-	-	5.3	-	-	-	5.3	5.3
China	-	-	-	-	-	-	3.9	-	-	-	3.9	3.9
Colombia	-	-	-	-	-	-	3.9	-	-	-	3.9	3.9
Czechoslovakia	-	-	-	-	-	-	1.9	-	81.0	0.5	83.4	83.4
Denmark	-	-	-	-	-	-	-	-	6.0	0.7	6.7	6.7
Dominican Republic	-	-	-	-	-	-	2.4	-	-	-	2.4	2.4
Ecuador	-	-	-	-	-	-	10.2	-	-	-	10.2	10.2
Finland	6.7	50.1	-	-	-	56.8	2.9	-	-	-	2.9	59.7
France	-	6.0	-	-	-	6.0	30.4	-	31.6	37.1	99.1	105.1
German D.R.	-	-	-	-	-	-	-	-	-	0.9	0.9	0.9
Germany, F.R.	192.0	366.2	-	38.3	-	596.5	29.3	-	125.7	32.7	187.7	784.2
Guatemala	-	-	-	-	-	-	2.5	-	-	-	2.5	2.5
Guyana	-	-	-	-	-	-	2.4	-	-	-	2.4	2.4
Hungary	-	-	-	-	-	-	8.6	-	14.1	11.8	34.5	34.5
India	-	-	-	-	-	-	2.9	-	30.6	34.9	68.4	68.4
Indonesia	-	-	-	-	-	-	4.4	-	-	-	4.4	4.4
Italy	817.9	1139.2	4.2	-	453.5	2414.8	22.8	-	82.6	17.5	122.9	2537.7
Jamaica	-	-	-	-	-	-	3.6	-	-	-	3.6	3.6
Japan	129.4	-	-	83.7	-	213.1	16.2	-	6.3	11.5	34.0	247.1
Jordan	-	-	-	-	-	-	-	-	-	0.9	0.9	0.9
Kenya	-	-	-	-	-	-	0.3	-	-	-	0.3	0.3
Korea, R.	-	-	-	-	-	-	9.0	-	-	-	9.0	9.0
Malaysia	-	-	-	-	-	-	4.6	-	-	0.2	4.8	4.8
Mexico	-	-	-	-	-	-	20.2	-	-	0.5	20.7	20.7
Netherlands	-	-	-	-	-	-	-	-	50.8	-	50.8	50.8
Pakistan	-	-	-	-	-	-	2.0	-	-	1.2	3.2	3.2
Paraguay	-	-	-	-	-	-	4.8	-	-	-	4.8	4.8
Peru	-	-	-	-	-	-	9.2	-	-	-	9.2	9.2
Philippines	-	-	-	-	-	-	3.2	-	-	-	3.2	3.2
Poland	-	-	-	-	-	-	5.6	-	28.9	-	34.5	34.5
Portugal	-	-	-	-	-	-	-	-	-	2.8	2.8	2.8
Romania	-	-	-	-	-	-	0.7	-	-	2.7	3.4	3.4
Singapore	-	-	-	-	-	-	1.0	-	-	0.5	1.5	1.5
Spain	-	-	-	-	-	-	10.4	-	32.7	3.0	46.1	46.1
Sri Lanka	-	-	-	-	-	-	4.1	-	-	3.1	7.2	7.2
Sweden	11.4	17.6	36.2	1.3	-	66.5	3.1	-	-	2.6	5.7	72.2
Switzerland	-	-	-	-	-	-	2.7	-	-	4.4	7.1	7.1
Thailand	-	-	-	-	-	-	2.5	-	-	-	2.5	2.5
USSR	-	-	70.9	-	-	70.9	-	-	-	-	-	70.9
United Kingdom	38.2	56.5	10.9	-	-	105.6	11.0	-	42.1	10.0	63.1	168.7
USA	380.9	998.3	-	34.8	90.6	1504.6	80.4	-	852.5	27.6	960.5	2465.1
Uruguay	-	-	-	-	-	-	2.4	-	-	-	2.4	2.4
Venezuela	-	-	-	-	-	-	6.6	-	-	-	6.6	6.6
Yugoslavia	-	-	-	-	-	-	1.2	-	-	43.1	44.3	44.3
Sub-total	1581.2	2758.7	122.2	158.1	544.1	5164.3	484.8	122.9	1484.7	622.8	2715.2	7879.5

Donor	Extrabudgetary						In kind					TOTAL
	Experts	Equipment	Fellowships	Other training	Sub-contracts	Sub-total	Experts	Equipment	Fellowships	Other training	Sub-total	
<u>Organizations</u>												
CEC	-	-	-	-	-	-	1.0	-	-	0.5	1.5	1.5
FAO	-	-	-	-	-	-	4.4	-	-	-	4.4	4.4
IBRD	-	-	-	-	-	-	-	-	-	4.7	4.7	4.7
ILRAD	-	-	-	-	-	-	1.0	-	-	-	1.0	1.0
OECD	-	-	-	-	-	-	-	-	-	1.1	1.1	1.1
UNDP	-	-	-	-	-	-	-	-	-	0.3	0.3	0.3
UNESCO	-	-	-	-	-	-	6.5	-	-	-	6.5	6.5
UN-DNRE	-	-	-	-	-	-	-	-	-	2.4	2.4	2.4
WHO	-	-	-	-	-	-	4.2	-	-	24.1	28.3	28.3
Sub-total	-	-	-	-	-	-	17.1	-	-	33.1	50.2	50.2
GRAND TOTAL	1581.2	2758.7	122.2	158.1	544.1	5164.3	501.9	122.9	1484.7	655.9	2765.4	7929.7

B. Assistance for activities where donor is recipient  
(in thousands of dollars)

Donor	Project title and code	Assistance provided			
		Equipment	Fellowships	Sub-contracts	Country total
Brazil	Agricultural research and development, BRA/5/009	(0.8)	-	-	
	Nitrogen-15 utilization, BRA/5/018	1.3	-	-	0.5
Iran, I.R.	Procurement assistance, IRA/0/005	63.7	-	-	
	Radioisotope production, IRA/2/004	1.0	-	-	
	Quality assurance, IRA/4/014	-	-	26.8	91.5
Libyan A.J.	Nuclear raw materials, LIB/3/004	-	5.8	-	5.8
Syrian A.R.	Procurement assistance, SYR/0/005	22.8	-	-	22.8
Thailand	Radioisotope production facility, THA/4/008	40.8	-	-	40.8
TOTAL		128.8	5.8	26.8	161.4

## TRAINING COURSES AND STUDY TOURS: 1985

Project title and code	Place(s) and dates	Source of funds	Participation <sup>a/</sup>			Amount(s) obligated <sup>b/</sup> (\$)
			(1)	(2)	(3)	
UNDP Industrial training course/ demonstration on radiation curing of surface coatings of wood products, RAS/8/030	Jakarta, Indonesia 1 November 1984 - 28 February 1985	UNDP Japan	5	-	2	21 752 (CC) 13 838 (CC)
Training course on radiation protection, INT/9/062	Bombay, India 3 December 1984 - 17 May 1985	Agency	12	-	15	91 249 (CC)
Training course on electric system expansion planning (WASP), INT/4/072	Argonne, Illinois, USA 28 January - 29 March	Agency	27	-	-	151 629 (CC)
Workshop on neutron activation analysis, RAS/1/006	Bombay, India 4 - 22 February	Agency India	9	-	3	3 489 (CC) in kind
Training demonstration workshop on the use of nucleonic control systems in the paper industry, RAS/8/039	Ban Pong, Thailand and Tokyo, Japan 25 February - 15 March	UNDP Japan	12	-	-	32 040 (CC) 9 183 (CC)
Training course on basic and applied nuclear physics, INT/1/034	Legnaro, Italy 4 March - 5 April	Agency	7	-	-	14 551 (CC)
Advanced training course on nuclear electronics, INT/4/078	Vienna, Austria 4 March - 5 June	Agency Federal Republic of Germany	16	-	-	162 839 (CC) 8 618 (CC)
Executive management seminar on the use of nucleonic control systems for steel manufacture, RAS/8/037	Bokaro Steel City, India 11 - 13 March	UNDP	2	-	-	14 072 (CC)
Training course on ultrasonics - level I, RLA/8/005	Kingston, Jamaica 25 - 29 March	Agency	4	-	-	65 177 (CC)
Training course on radiological protection and nuclear safety, INT/9/059	Buenos Aires, Argentina 1 April - 29 November	Agency	15	-	-	142 169 (CC)
Study tour on the utilization of low-energy accelerators, INT/1/031	Italy, Federal Republic of Germany, USSR and Hungary 2 - 30 April	Agency	24	-	-	70 013 (CC) 32 321 (NCC)
Train-the-trainers course on data processing in radioimmunoassay, RLA/6/010	Buenos Aires, Argentina 15 - 26 April	Agency	14	-	2	53 016 (CC)
Training course on surface methods - level III, RLA/8/008	São Paulo, Brazil 15 - 26 April	UNFSSTD	13	-	-	22 391 (CC)
Training course on exploration drilling and ore reserve estimation for uranium deposits, INT/3/014	Poços de Caldas, Brazil 22 April - 16 May	Agency	21	1	-	116 245 (CC)
Training course on conversion of research reactors to low enrichment, INT/4/074	Caracas, Venezuela 22 April - 17 May	Agency	15	-	5	82 431 (CC)
Training course on energy planning in developing countries with special reference to nuclear energy, INT/0/036	Buenos Aires, Argentina and Rio de Janeiro, Brazil 22 April - 24 May	Agency Federal Republic of Germany	21	-	8	111 548 (CC) 17 597 (CC)
Workshop on IAEA technical co-operation practice and procedures, RLA/0/008	Santiago de Chile, Chile 29 April - 4 May	Agency	15	-	4	39 213 (CC)
Training course on elemental analysis by nuclear techniques, INT/1/036	Beijing, China 6 - 31 May	Agency	13	-	-	90 842 (CC) 8 115 (NCC)
Training course on the use of isotope and radiation techniques in studies on soil/plant relationships with emphasis on biological nitrogen fixation, INT/5/096	Seibersdorf, Austria 7 May - 28 June	Agency	19	1	-	102 536 (CC)

Project title and code	Place(s) and dates	Source of funds	Participation <sup>a/</sup>			Amount(s) obligated <sup>b/</sup> (\$)
			(1)	(2)	(3)	
Training course on the use of nitrogen-15 in soil science plant nutrition and agricultural biotechnology, INT/5/098	Leipzig, German Democratic Republic 14 May - 7 June	Agency	16	-	-	25 919 (CC) 26 593 (NCC)
Training course on the use, quality control and maintenance of nuclear medicine equipment, RLA/6/009	San José, Costa Rica 3 June - 26 July	Agency	15	-	-	77 483 (CC)
Study tour for members of the regional Latin America working group on non-destructive testing, RLA/8/005	Toronto, Canada 24 - 28 June	Canada	16	-	-	In kind
Training course on ultrasonics - level II, RLA/8/005	Lima, Peru 15 - 26 July	Canada	18	-	-	In kind
Train-the-trainers course on magnetic particles, RLA/8/005	Toronto, Canada 12 - 16 August	Canada	27	-	-	In kind
Seminar on non-destructive testing in aeronautic maintenance, RLA/8/005	Quito, Ecuador 26 - 30 August	Canada	22	-	-	In kind
Regional course on ultrasonics - level II, RLA/8/009	Cordoba, Argentina 26 August - 6 September	UNFSSD	15	-	-	28 420 (CC)
Training course on the use of isotope-aided techniques in ruminant nutrition, INT/5/097	Seibersdorf, Austria 26 August - 20 September	Agency	16	-	-	85 051 (CC)
Training course and study tour on nuclear medicine, INT/6/031	USSR 1 September - 31 October	Agency	30	-	-	89 725 (CC) 126 375 (NCC)
Training course on thermography, RLA/8/005	Buenos Aires, Argentina 2 - 6 September	Agency	14	-	-	£/
Training course on solid-state nuclear track detectors and their application, INT/1/032	Kiel, Federal Republic of Germany 2 - 20 September	Agency	17	1	-	95 264 (CC)
Training course on quality assurance, INT/4/077	Buenos Aires, Argentina 2 September - 4 October	Agency	14	-	-	59 668 (CC)
Training course on the uses of probabilistic safety assessment (PSA), INT/9/056	Oldbury on Severn, UK 3 - 20 September	Agency	17	-	-	69 610 (CC)
Train-the-trainers course on ultrasonics, RLA/8/005	Toronto, Canada 9 - 13 September	Canada	29	-	-	In kind
Training course on acoustic emission and holography, RLA/8/010	São Paulo, Brazil 9 - 13 September	UNFSSD	11	-	-	15 766 (CC)
RCA training course on advanced non-destructive testing, RAS/8/040	Tokyo, Japan 9 September - 4 October	UNDP Japan	12	-	-	39 990 (CC) 51 228 (CC)
Training course on radioactive waste management, INT/9/058	Saclay, France 9 September - 11 October	Agency	28	1	-	80 977 (CC)
Training course on control and instrumentation of nuclear power plants, INT/4/075	Karlsruhe, Federal Republic of Germany 9 September - 18 October	Agency	30	1	-	105 426 (CC)
RCA industrial training course/demonstration workshop on on-stream analysis and control of mineral concentrators employing nucleonic systems, RAS/8/048	Sydney and Brisbane, Australia, and Manila and Bangui City, Philippines 16 September - 18 December	Australia	11	-	-	In kind
Training course on the induction and use of mutations in plant breeding, INT/5/095	Seibersdorf, Austria 7 September - 25 October	Agency	18	-	-	82 174 (CC)
Study tour on secondary standard dosimetry laboratories for technical staff of SSDs, INT/1/033	Federal Republic of Germany, Sweden, USSR and Hungary 23 September - 15 October	Agency	24	-	-	65 643 (CC) 33 741 (NCC)
RCA training course/demonstration workshop on radiation vulcanization of natural rubber latex, RAS/8/042	Jakarta, Indonesia 30 September - 25 October	UNDP	7	-	-	12 708 (CC)

Project title and code	Place(s) and dates	Source of funds	Participation <sup>a/</sup>			Amount(s) obligated <sup>b/</sup> (\$)
			(1)	(2)	(3)	
RCA training demonstration workshop on the use of nucleonic control systems in the steel industry, RAS/8/046	Bokaro Steel City, India and Tokyo, Japan 3 - 25 October	UNDP Japan	8	-	-	23 923 (CC) 9 379 (CC)
Training course on eddy currents - level II, RLA/8/005	Buenos Aires, Argentina 7 - 18 October	Canada	12	-	-	In kind
Train-the-trainers course on medical radioimmunoassay, RAS/6/007	Beijing, China 7 - 25 October	Agency	16	-	-	92 583 (CC) 11 777 (NCC)
Training course on safety inspection during nuclear power plant operation, INT/9/060	Madrid, Spain 7 October - 9 November	Agency	8	-	-	26 785 (CC)
Seminar on non-destructive testing in the petroleum industry, RLA/8/005	Caracas, Venezuela 14 - 18 October	Canada	13	-	-	In kind
Training course on industrial radiography - level II, RLA/8/005	Guayaquil, Ecuador 14 - 25 October	Canada	13	-	-	In kind
Training course/demonstration on radiation cross-linking applications in the wire and cable industry, RAS/8/041	Shanghai, China 14 October - 2 November	UNDP Japan	16	-	-	42 808 (CC) 899 (CC)
Training course on hospital radiopharmacy, RAS/6/008	Sydney and Perth, Australia 21 October - 8 November	Agency	17	-	-	75 477 (CC)
Training course on electricity demand forecasting in nuclear power planning, INT/4/073	Argonne, Illinois, USA 21 October - 22 November	Agency	33	-	-	157 160 (CC)
Training course on quality assurance during nuclear power plant operation, INT/4/080	Karlsruhe, Federal Republic of Germany 23 October - 29 November	Agency	29	1	-	98 180 (CC)
Training course on physical protection of nuclear facilities and materials, INT/9/061	Albuquerque, New Mexico, USA 30 October - 22 November	USA	18	7	-	93 642 (CC)
Seminar on non-destructive testing in concrete structures, RLA/8/005	Buenos Aires, Argentina 4 - 8 November	Canada	11	-	-	In kind
Training course on the use of isotope and radiation techniques to enhance biological nitrogen fixation, INT/5/100	Seibersdorf and Vienna, Austria, 4 - 29 November	Agency	14	-	-	60 308 (CC)
RCA industrial training course/demonstration workshop on radiation curing of surface coating of wood products, RAS/8/044	Jakarta, Indonesia 11 November - 6 December	UNDP Japan	9	-	-	15 177 (CC) 9 153 (CC)
Advanced training course on data processing interpretation in X-ray fluorescence analysis, INT/1/037	Zagreb, Yugoslavia 11 November - 13 December	Agency	16	-	1	65 889 (CC)
Training course on isotope techniques in agrochemical research, RLA/5/018	San José, Costa Rica 11 November - 13 December	Agency	16	-	4	83 147 (CC)
Radiochemistry and nuclear analytical techniques, RAF/2/002	Nairobi, Kenya 18 November - 20 December	Agency	16	-	6	98 127 (CC)
Training course on surface method in non-destructive testing - level II, RLA/8/005	Kingston, Jamaica 2 - 10 December	Agency	6	-	-	c/
Seminar on non-destructive testing in fracture mechanics, RLA/8/005	Rio de Janeiro, Brazil 9 - 13 December	Agency	15	-	-	c/

<sup>a/</sup> The figures under (1) denote the number of award-holders whose cost of participation was met out of project funds; those under (2) denote the number of participants who attended at the expense of their government, or of another organization or programme; and those under (3) denote the number of local participants. No stipends or international travel costs were paid out of project funds in respect of participants shown under (2) and (3).

<sup>b/</sup> The amounts obligated (i.e. expenditures plus unliquidated obligations) do not include expenditures by host governments in respect of local lecturers, or expenditures for laboratory, lecture room and other facilities.

<sup>c/</sup> Amount included under "Training course on ultrasonics - level I", which was held in Kingston, Jamaica, during the period 25-29 March.

## ANNEX III

## REPORTS SUBMITTED TO RECIPIENT-COUNTRY GOVERNMENTS

RECIPIENT	SUBJECT AND PROJECT CODE	AUTHOR(S)	REFERENCE NO.	STATUS <sup>a/</sup>
ALGERIA	INSTALLATION OF NEUTRON GENERATOR AT CEN (ALG/0/006) ACTIVATION ANALYSIS USING A NEUTRON GENERATOR (ALG/0/006) STORAGE EXPERIENCE WITH POTATOES AND ONIONS (ALG/5/005) STORAGE EXPERIMENTS WITH POTATOES AND ONIONS (ALG/5/005) TECHNICAL SPECIFICATIONS FOR A DISPENSING AND LABELLING HOT CELL FOR IODINE-131 AND TECHNETIUM-99M (ALG/6/003)	SZTARICKSAI, TIBOR BAKOS, LASZLO LANGERAK, DIRK ISAAC LANGERAK, DIRK ISAAC BEYER, GERD-JUERGEN	IAEA-RU-0172 IAEA-RU-0294 IAEA-RU-0235 IAEA-RU-0246 IAEA-RU-0209	F F F F F
ARGENTINA	REPORT OF A CONSULTANCY MISSION (ARG/4/077)	POMRANING, GERARD CARLTON STEGEMANN, DIETER HELMUT WILLIAMS, MICHAEL MAURICE R.	IAEA/UNDP-ARG/78/020-24	R
BANGLADESH	SAMPLE PREPARATION FOR PIXE TRACE ELEMENT DETERMINATION (BGD/2/006) EXPLORATION FOR URANIUM AND THORIUM (BGD/3/004) VENTILATION AND FILTRATION IN ACTIVE BUILDING (BGD/4/006) PACKAGING OF STORED PRODUCTS (BGD/5/010) IMAGING AND DYNAMIC STUDIES WITH GAMMA CAMERA (BGD/6/003) ENVIRONMENTAL RADIOACTIVITY MONITORING (BGD/9/004)	KOLTAY, EDE ROMERO, ROLANDO GREGORIO ALBEL BHARGAVA, BANSI LAL HIGHLAND, HENRY A. BERGMANN, HELMAR BHAT, IRODI SUBRAYA	IAEA-TA-2310 IAEA-TA-2309 IAEA-TA-2319 IAEA-TA-2311 IAEA-TA-2328 IAEA-TA-2315	S S R R R S
BOLIVIA	RADIOISOTOPES IN AGRICULTURE (BOL/5/004) RADIOISOTOPES IN AGRICULTURE (BOL/5/004) EFFICIENT USE OF FERTILIZERS AND WATER (BOL/5/004)	BROESHART, HANS URQUIAGA, SEGUNDO URQUIAGA SEBASTIANELLI, JOSE ALDO URQUIAGA, SEGUNDO URQUIAGA	IAEA-RU-0211 IAEA-RU-0214 IAEA-RU-0311	F F F
BRAZIL	TECHNICIAN TRAINING (BRA/0/009) REPORT OF A CONSULTANCY MISSION (BRA/0/010) CALIBRATION PROCEDURES (BRA/1/022) URANIUM RESOURCES - CALIBRATION OF EQUIPMENT (BRA/3/010) INSTRUMENTATION AND VIBRATION TECHNOLOGY (BRA/4/034) NUCLEAR POWER PLANT SIMULATOR TRAINING (BRA/4/035) ADJUSTMENT OF SIMULATOR AND TRAINING MATERIAL TO ANGRA II DESIGN (BRA/4/035) SIMULATOR TRAINING FOR NUCLEAR POWER PLANTS (BRA/4/035) ANIMAL SCIENCE (BRA/5/015) NITROGEN-15 UTILIZATION (BRA/5/018) CYCLOTRON PRODUCTION OF RADIOISOTOPES AND RADIOPHARMACEUTICALS AT IEN (BRA/6/009) RADIOISOTOPES IN MEDICINE (BRA/6/009) CYCLOTRON PRODUCTION OF RADIOPHARMACEUTICALS (BRA/6/009) INCORPORATION OF RADIOACTIVE SUBSTANCES (BRA/9/020) PROBLEMS AND ORGANIZATION OF SEISMOLOGY (BRA/9/022) SEISMOTECTONIC PROVINCES AND DESIGN BASIS EARTHQUAKE PARAMETERS (BRA/9/022) RADWASTE SOLIDIFICATION (BRA/9/024)	RECKER, MANFRED-HEINZ STREER, KLAUS HANS VOSE, PETER BROWNHILL JENNINGS, WILLIAM ALAN DODD, PHILIP HORACE BRUNSWICK, JOACHIM MARTIN, HANS-DIETER MARTIN, HANS-DIETER BALLESTERO, BLANCO VICENTE DUNCAN, JAMES LINDSAY WAREMBOURG, FERNAND ROBERT KNUST, ERNST JOACHIM KOGLER, WILLI WEINREICH, REGIN JOACHIM MEDRANO, GREGORIO WILLMORE, PATRICK LEVER SLEMMONS, DAVID BURTON FUCHS, FRANZ GEORG	IAEA-RU-0277 IAEA-RU-0303 IAEA-RU-0247 IAEA-RU-0243 IAEA-RU-0167 IAEA-RU-0183 IAEA-RU-0285 IAEA-RU-0302 IAEA-RU-0182 IAEA-RU-0212 IAEA-RU-0164 IAEA-RU-0244 IAEA-RU-0275 IAEA-RU-0217 IAEA-RU-0320 IAEA-RU-0321 IAEA-RU-0163	F F F F F F F F F F F F F F F F
BULGARIA	ELECTRON ACCELERATOR PROJECT PLANNING (BUL/8/009)	YUAN, HONG-CHIEN	IAEA-TA-2341	R
BURMA	MUTATION BREEDING OF JUTE, SUGAR-CANE AND SESAME (BUR/5/005) TISSUE BANKING (BUR/7/004)	MIKAELSEN, KNUT M. DEXTER, FRANK SWIFT, FRANK	IAEA-RU-0261 IAEA-TA-2302	U S
CAMEROON	INTRODUCTION OF RADIOMETRIC METHODS FOR THE ANALYSIS OF GEOCHEMICAL SAMPLES (CMR/3/006) REPAIR AND MAINTENANCE OF ELECTRONIC INSTRUMENTS (CMR/3/006)	MONSECOUR, MARCEL RICHARD LAMPROYE, MICHEL	IAEA-RU-0200 IAEA-RU-0313	F F
CHILE	NEUTRON DOSIMETRY: TECHNIQUES FOR PERSONNEL DOSIMETRY (CHI/1/013) PREPARATION OF RADIOPHARMACEUTICALS (CHI/2/008) URANIUM PROSPECTION (CHI/3/005) URANIUM PROSPECTION (CHI/3/005) RADIATION DAMAGE EXPERIMENTS (CHI/4/010) MOESSBAUER SPECTROMETRY (CHI/4/012) REPRODUCTIVE BEHAVIOUR OF RUMINANTS (CHI/5/012) SAFETY REVIEW OF THE LA REINA RESEARCH REACTOR (CHI/9/008)	CROSS, WILLIAM G. SRIVASTAVA, SURESH C. BELLUCO, ALBERTO ESTEBAN BELLUCO, ALBERTO ESTEBAN KANDA, KEIJI GANCEDO, JOSE RAMON REIMERS, THOMAS JOHN MERKEL, ALFRED ADOLF	IAEA-RU-0213 IAEA-RU-0317 IAEA-RU-0204 IAEA-RU-0205 IAEA-RU-0144 IAEA-RU-0169 IAEA-RU-0276 IAEA-RU-0146	F F U U F F F F U
CHINA	INSTALLATION OF PIXE CHAMBER (CPR/1/002) TRAINING COURSE ON NUCLEAR POWER PLANT SAFETY ANALYSIS REVIEW (CPR/9/002)	KOLTAY, EDE ROGERS, LESTER R.	IAEA-RU-0222 IAEA-RU-0300	F F



RECIPIENT	SUBJECT AND PROJECT CODE	AUTHOR(S)	REFERENCE NO.	STATUS <sup>a/</sup>
COLOMBIA	NITROGEN BALANCE IN RICE CROPS (COL/5/007)	VICTORIA, REYNALDO LUIZ	IAEA RU-0161	F
	STUDIES OF NITROGEN FERTILIZER USE EFFICIENCY IN POTATO (COL/5/007)	URQUIAGA, SEGUNDO URQUIAGA	IAEA RU-0208	F
	STUDIES ON NITROGEN FERTILIZER USE EFFICIENCY (COL/5/007)	SEBASTIANELLI, JOSE ALDO	IAEA RU-0215	F
	ISOTOPES IN HYDROLOGY (COL/8/010)	PLATA BEDMAR, ANTONIO	IAEA RU-0251	F
	ESTABLISHMENT OF A GAMMA FACILITY (COL/8/011)	WIESNER, LOTHAR ALFRED ERWIN	IAEA RU-0289	F
COSTA RICA	HORMONE PROFILES IN CATTLE (COS/5/007)	GALINA HIDALGO, CARLOS SALVADO	IAEA RU-0218	F
COTE D'IVOIRE	INTRODUCTION OF X-RAY ANALYSIS METHODS (IVC/0/003)	DZIUNIKOWSKI, BOHDAN	IAEA RU-0292	F
	INTRODUCTION OF X-RAY FLUORESCENCE ANALYSIS (IVC/0/003)	DZIUNIKOWSKI, BOHDAN	IAEA RU-0295	F
	PHYSIOLOGICAL AND BIOCHEMICAL ASPECTS OF HEVEA PRODUCTION (IVC/5/013)	TUPY, JAROSLAV	IAEA RU-0248	F
CUBA	TRAINING IN NUCLEAR ELECTRONICS (CUB/0/003)	PAHOR, JOZE	IAEA RU-0202	F
	NUCLEAR MAGNETIC RESONANCE STUDIES AT ININ (CUB/D/003)	BLINC, ROBERT	IAEA RU-0269	F
	FOOD IRRADIATION (CUB/5/004)	KISS, ISTVAN FERENC	IAEA RU-0195	F
	RADIOISOTOPES IN BIOLOGY (CUB/7/002)	BELCHER, ERNEST HUGH	IAEA RU-0185	U
	TRITIUM LABORATORY (CUB/8/007)	FLORKOWSKI, TADEUSZ	IAEA RU-0328	F
	RADIOACTIVE CONTAMINATION IN MAN (CUB/9/006)	ANDRASI, ANDOR	IAEA RU-0160	U
DOMINICAN REPUBLIC	POSITRON ANNIHILATION EXPERIMENTS AT THE AUTONOMOUS UNIVERSITY OF SANTO DOMINGO (DOM/0/002)	ABBE, JEAN-CHARLES	IAEA RU-0162	F
	NUCLEAR ANALYTICAL TECHNIQUES - X-RAY FLUORESCENCE ANALYSIS (DOM/1/004)	LABRECQUE, JOHN J.	IAEA RU-0145	F
ECUADOR	RADIOPHARMACEUTICAL PRODUCTION (ECU/2/007)	BEYER, GERD-JUERGEN	IAEA RU-0230	F
	NUCLEAR TECHNIQUES IN ANIMAL HEALTH AND PRODUCTION (ECU/5/007)	MARQUES, ROBERTO OSCAR	IAEA RU-0250	F
	AGRICULTURAL CHEMICALS AND RESIDUES (ECU/5/008)	NACHREINER, RAYMOND FRANCIS	IAEA RU-0240	F
	APPRAISAL OF LINEAR ACCELERATOR PROJECT (ECU/8/005)	GRAY, GEORGE DOUGLAS	IAEA RU-0219	F
	RADIATION PROCESSING OF POLYMERS AT THE EPN (ECU/8/005)	MCKEOWN, JOSEPH	IAEA RU-0335	F
EL SALVADOR	ENVIRONMENTAL ISOTOPE SURVEY IN AHUACHAPAN AND CHIPI LAPA GEOTHERMAL FIELDS (ELS/8/002)	CZVIKOWSKY, TIBOR	IAEA RU-0174	F
	USE OF ISOTOPES IN GEOTHERMAL STUDIES (ELS/8/002)	NUTI, SERGIO	IAEA RU-0252	F
ETHIOPIA	RADIATION PROTECTION (ETH/9/004)	PLATA BEDMAR, ANTONIO	IAEA RU-0233	F
GABON	TECHNICAL CO-OPERATION PROGRAMMING MISSION (GAB/0/002)	TROUSIL, JAROSLAV	IAEA TA-PM-016	R
	NUCLEAR SPECTROMETRY LABORATORY (GAB/1/002)	ABU BAKR, ABDEL RAHMAN AHMED, JASIMUDDIN BARRADA, YEHIA ABDEL HAMID AND OTHERS PIANAROSA, PIERO	IAEA RU-0196	F
GHANA	TRAINING IN NUCLEAR INSTRUMENTATION (GHA/4/008)	AKDURAK, SALIH SERDAR	IAEA RU-0186	F
	INSECT DISINFESTATION OF COCOA BEANS AND CEREALS (GHA/5/008)	PELLIONISZ, PETER	IAEA RU-0159	F
	NUCLEAR AGRICULTURE CENTRE (GHA/5/008)	AHMED, MAINUDDIN	IAEA RU-0188	F
	IMPROVEMENT OF TSETSE FLY REARING OPERATIONS AT THE NATIONAL NUCLEAR RESEARCH CENTRE (GHA/5/011)	DONINI, BASILIO	IAEA RU-0210	F
	NUCLEAR MEDICINE (GHA/6/007)	PIMLEY, ROGER WILLIAM	IAEA RU-0187	F
	PROPOSAL FOR THE INSTALLATION OF A MULTI-PURPOSE PILOT-SCALE GAMMA IRRADIATOR (GHA/8/004)	GANATRA, RAMANIK D. MARKOVIC, VITOMIR M.	IAEA RU-0272	U
GREECE	CYCLOTRON-PRODUCED RADIOPHARMACEUTICALS FOR MEDICAL USE (GRE/2/018)	JONES, TERENCE REBA, RICHARD C. SCHWEICKERT, HERMANN AND OTHERS	IAEA TA-2342	R
GUATEMALA	X-RAY FLUORESCENCE IN MINERAL ANALYSIS (GUA/1/003)	LABRECQUE, JOHN J.	IAEA RU-0207	F
	RADIOISOTOPES IN AGRICULTURE (GUA/5/005)	TULMANN NETO, AUGUSTO	IAEA RU-0206	F
	FOOD PRESERVATION BY IRRADIATION (GUA/5/005)	BARALDI, DELIO	IAEA RU-0283	F
	PREPARATION AND QUALITY CONTROL OF RADIOPHARMACEUTICALS AND ESTABLISHMENT OF A RADIOPHARMACEUTICAL LABORATORY (GUA/6/006)	ALVAREZ-CERVERA, JORGE	IAEA RU-0192	U
INDIA	IMMUNOLOGY (IND/5/012)	DAFFUS, WILLIAM PHILIP HOLWELL	IAEA/IDA IND/5/012-16	D

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INDONESIA	ENERGY AND NUCLEAR POWER PLANNING (INS/0/003)	PORTO CARREIRO FILHO, JAYME MOLINA, PABLO	IAEA-RU-0306	F
	DIFFRACROMETER INSTRUMENTATION (INS/1/012)	ZEYEN, CLAUDE MATHIAS EMILE	IAEA-RU-0308	F
	ANALYSIS OF AGRICULTURAL AND GEOLOGICAL SAMPLES (INS/1/013)	CHAUGHULE, REMESH SHANTARAM VIJAYARAGHAVAN, RAMANUJA	IAEA-RU-0337	F
	LONG-TERM STRATEGY FOR RESEARCH AND DEVELOPMENT (INS/1/014)	SPRINGER, TASSO	IAEA-TA-2316	S
	DEVELOPMENT OF URANIUM ORE PROCESSING CAPABILITY (INS/3/007)	JAMIL, MUHAMMAD	IAEA-RU-0262	U
	FUEL ROD DESIGN (INS/4/018)	GROSS, HEINRICH	IAEA-RU-0314	F
	FUEL ASSEMBLY: MODELLING AND DESIGN (INS/4/018)	SCHMUCKER, RAINER KURT	IAEA-RU-0315	F
	REVIEW ON RADIOACTIVE WASTE MANAGEMENT (INS/9/006)	LENNEMANN, WILLIAM L.	IAEA-RU-0326	F
	SAFETY ANALYSIS OF FUEL BEHAVIOUR (INS/9/007)	MICHELSON, CARLYLE	IAEA-RU-0327	F
IRAN, I.R.	REVIEW OF CONCRETE STRUCTURES OF THE REACTOR BUILDING: BUSHEHR NUCLEAR POWER PLANT, UNIT 1 (IRA/9/009)	MORENO-VILLAR, A. HERO, RAINER PETER IANSITI, ENZO AND OTHERS	IAEA-TA-2332	R
IRAQ	SITE SURVEY EVALUATION (IRQ/9/004)	DLOUHY, ZDENEK DAVENPORT, COLIN ANTHONY SERVA, LEONELLO AND OTHERS	IAEA-TA-2348	R
JAMAICA	NEUTRON ACTIVATION ANALYSIS (JAM/2/003)	BUCHTELA, KARL	IAEA-RU-0149	F
JORDAN	PLANNING AND ORGANIZATION OF NUCLEAR ENERGY ACTIVITIES (JOR/0/002)	RADICELLA, RENATO	IAEA-TA-2299	S
KENYA	PRELIMINARY ASSISTANCE FOR TSETSE FLY CONTROL (KEN/5/009)	JAENSON, T.G.T. LEROUX, J.G. OFFORI, EVANS DUNSTAN	IAEA/FAO-TA-001	D
	APPLIED PRODUCTION RESEARCH ON LIVESTOCK (KEN/5/011)	KING, GORDON JAMES	IAEA-RU-0231	F
	NUCLEAR MEDICINE (KEN/6/005)	HOUBA, VACLAV	IAEA-RU-0198	F
KOREA, REPUBLIC OF	EVALUATION OF THE KO-RI NUCLEAR TRAINING CENTRE AND KEPKO TRAINING POLICY (ROK/4/012)	MARTIN, HANS-DIETER RECKER, MANFRED-HEINZ	IAEA-TA-2335	R
	TRACER TECHNIQUES TO STUDY SOIL EROSION AND NUTRIENT LOSSES (ROK/5/019)	MENZEL, RONALD G.	IAEA-RU-0265	F
	PHYSIOLOGICAL ASPECTS OF COLD TOLERANCE (ROK/5/020)	BROWN, DONALD A.	IAEA-RU-0307	F
	ANIMAL NUTRITION (ROK/5/022)	NACHREINER, RAYMOND FRANCIS	IAEA-RU-0304	F
	REGULATIONS AND STANDARDS (ROK/9/014)	NILSON, FRIEDHELM	IAEA-TA-2303	S
	PROCEDURES AND EVALUATION (ROK/9/014)	FRANKE, PETER	IAEA-TA-2304	R
	PWR FUEL DESIGN AND SAFETY ANALYSIS (ROK/9/014)	SIPUSH, PAUL JOSEPH	IAEA-RU-0266	F
	PWR THERMOHYDRAULIC DESIGN AND SAFETY ANALYSIS (ROK/9/014)	CHELEMER, HAROLD	IAEA-RU-0267	F
	PWR NUCLEAR DESIGN AND SAFETY ANALYSIS (ROK/9/014)	CASADEI, ALBERTO LUIZ	IAEA-RU-0268	F
	SAFETY ANALYSIS REVIEW OF FRENCH REACTORS (ROK/9/015)	NGUYEN, CLAUDE	IAEA-RU-0280	F
	RADIATION MONITORING SYSTEM (ROK/9/015)	LEE, JAY YOUNG	IAEA-RU-0305	F
	ULTRASONIC TESTING OF WELDS (TRAINING AND CONSULTATION ON ASME SECTION XI; NON-DESTRUCTIVE EXAMINATION REQUIREMENTS FOR NUCLEAR POWER PLANT EXAMINATIONS) (ROK/9/016)	SATTLER, FRANK JOSEPH	IAEA-RU-0264	F
	RADIATION PROTECTION INSPECTION AND ENFORCEMENT (ROK/9/018)	JANG, JASON CHANGSUPP	IAEA-TA-2321	R
	EFFECTS OF IRRADIATION ON THE SAFETY OF REACTOR PRESSURE VESSELS OF LIGHT-WATER REACTORS (ROK/9/023)	FOEHL, JUERGEN	IAEA-RU-0229	F
	CANDU OPERATIONAL TESTING (ROK/9/025)	LEE, IAIN COLQUHOUN	IAEA-RU-0281	F
MADAGASCAR	SOLID-STATE NUCLEAR TRACK DETECTORS: APPLICATIONS IN MADAGASCAR (MAG/1/004)	MONNIN, MICHEL JEAN-MARIE	IAEA-RU-0234	F
	NUCLEAR RAW MATERIALS: TREATMENT OF MINERALS (MAG/3/004)	STERGARSEK, ANDREJ	IAEA-RU-0154	F
	URANIUM PROSPECTING IN THE FORT DAUPHIN AREA: SELECTION OF FAVOURABLE AREAS AND PREPARATION OF WORK PLAN (MAG/3/004)	RAMIREZ, ENRIQUE	IAEA-TA-2312	S
MALAWI	NEGOTIATIONS ON URANIUM EXPLORATION: PROJECT FINDINGS AND RECOMMENDATIONS (MLW/3/003)	MUELLER-KAHLE, EBERHARD	IAEA/UNDP-MLW/84/001-TR	R
MALAYSIA	NEUTRON AND BETA-DOSIMETRY (MAL/1/003)	DREXLER, GUENTER G.	IAEA-RU-0279	F
	NEUTRON AND BETA-DOSIMETRY (MAL/1/003)	DAVID, JOSEF	IAEA-RU-0278	F
	LOW SPECIFIC ACTIVITY TECHNETIUM-99M (MAL/2/002)	KRONRAD, LEO	IAEA-TA-2334	R
	ENVIRONMENTAL PHYSIOLOGY OF CATTLE (MAL/5/005)	JOHNSON, HAROLD DAVID ROBERTSHAW, DAVID	IAEA-TA-2294	S
	RADIATION-INDUCED MUTATION PLANT BREEDING (MAL/5/008)	TAKAGI, YUTAKA	IAEA-TA-2301	S
	REVIEW AND INTERPRETATION OF RESULTS (MAL/9/003)	SEKINE, KEIICHI	IAEA-RU-0286	F

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MALI	TECHNICAL ASSISTANCE FOR THE DIRECTORATE OF GEOLOGY AND MINES (ML1/3/004)	MONSECOUR, MARCEL RICHARD	IAEA-TA-2320	S
	URANIUM EXPLORATION (ML1/3/005)	KISSLING, DANIEL ANDRE	IAEA-RU-0177	F
	USE OF NUCLEAR TECHNIQUES IN THE ASSESSMENT OF WATER RESOURCES FOR AGRICULTURAL APPLICATIONS (ML1/5/004)	COUCHAT, PHILIPPE	IAEA-RU-0191	F
	SOIL MOISTURE STUDIES (ML1/5/004)	BARRADA, YEHIA ABDEL HAMID	IAEA-RU-0298	F
	MUTATION BREEDING OF RICE AND FONIO (ML1/5/008)	FOSSATI, ALDO	IAEA-RU-0290	F
	HYDROLOGY (ML1/8/002)	LAUNAY, MICHEL JEAN	IAEA-RU-0152	F
MEXICO	MANPOWER TRAINING (MEX/0/007)	ROGERS, LESTER R.	IAEA-RU-0175	F
	MANPOWER TRAINING (MEX/0/007)	ROGERS, LESTER R.	IAEA-RU-0197	U
	THERMOLUMINESCENCE DOSIMETRY (MEX/1/011)	NIEWIADOMSKI, TADEUSZ	IAEA-RU-0238	F
	RADIOPHARMACEUTICAL PRODUCTION (MEX/2/010)	SVOBODA, KRISTIAN	IAEA-RU-0224	F
	FUEL ELEMENTS (MEX/4/031)	BRODT, FRIEDRICH OTTO	IAEA-RU-0171	F
	FUEL ELEMENTS (MEX/4/031)	MUEHLING, GUENTER	IAEA-RU-0173	F
	IN-CORE FUEL MANAGEMENT (MEX/4/034)	GAILAR, OWEN HARMON	IAEA-RU-0297	F
	ECONOMIC FEASIBILITY STUDY OF FOOD IRRADIATION (MEX/5/011)	MOY, JAMES H.	IAEA-RU-0165	F
	PLANT MUTATION BREEDING (MEX/5/013)	MURTY, BHIRAVABHOTLA RADHAKRIS	IAEA-RU-0296	F
	LOW-LEVEL COUNTING SYSTEM (MEX/8/009)	FLORKOWSKI, TADEUSZ	IAEA-RU-0316	F
	RADIATION CHEMISTRY OF POLYMERS (MEX/8/011)	CZVIKOWSKY, TIBOR	IAEA-RU-0249	F
	CONTAINMENT INERTIZATION FOR THE BWR MARK II	ELLISSON, KJELL	IAEA-RU-0158	U
	LAGUNA VERDE NUCLEAR POWER PROJECT (MEX/9/020)	PRATTI, TREVOR		
		ROHDE, J.		
		AND OTHERS		
	CONTINUING GEOLOGICAL AND TECTONIC REVIEW OF THE FINAL SAFETY ANALYSIS REPORT: LAGUNA VERDE NUCLEAR POWER PLANT (MEX/9/022)	SCOTT, JOHN DOUGLAS	IAEA-RU-0155	F
	NUCLEAR POWER PROGRAMME (MEX/9/022)	BRINSFIELD, WESLEY ALAN	IAEA-RU-0189	F
	NUCLEAR POWER PROGRAMME (MEX/9/022)	BROWN, ROBERT G.	IAEA-RU-0190	F
	RADIOLOGICAL SAFETY IN URANIUM MINING AND MILLING (MEX/9/022)	AHMED, JASIMUDDIN	IAEA-RU-0193	F
	ESTABLISHMENT OF A MOBILE LABORATORY WITH IN-SITU ENVIRONMENTAL RADIATION MONITORING CAPABILITY (MEX/9/025)	ULLMANN, WERNER HELMUT	IAEA-RU-0168	F
	ACCELERATED AGEING (MEX/9/027)	SIEGLER, WILLI	IAEA-RU-0179	F
	QUALITY CERTIFICATION (MEX/9/027)	NINK, AXEL	IAEA-RU-0180	F
MONGOLIA	ATOMIC ABSORPTION SPECTROMETRY (MON/0/002)	WEGSCHEIDER, WOLFHARD	IAEA-RU-0309	F
	X-RAY FLUORESCENCE IN CHEMICAL ANALYSIS (MON/0/002)	KUMP, PETER	IAEA-RU-0310	F
MOROCCO	STRENGTHENING NUCLEAR MEDICINE SERVICES (MOR/6/008)	ESPINASSE, PIERRE	IAEA-TA-2317	S
NICARAGUA	ISOTOPES IN HYDROLOGY (NIC/0/002)	PLATA BEDMAR, ANTONIO	IAEA-RU-0287	F
	REVIEW OF RADIOACTIVE MINERAL EXPLORATION (NIC/0/003)	TAUCHID, MOHAMAD	IAEA-RU-0324	F
	FEASIBILITY OF APPLYING ISOTOPIC TECHNIQUES IN THE STUDY OF ASOSOSCA LAKE AND THE SEBACO VALLEY (NIC/8/002)	PLATA BEDMAR, ANTONIO	IAEA-RU-0137	U
	FEASIBILITY OF APPLYING ISOTOPIC TECHNIQUES IN THE STUDY OF ASOSOSCA LAKE AND THE SABACO VALLEY (NIC/8/002)	PLATA BEDMAR, ANTONIO	IAEA-RU-0253	F
	CONTAMINATION OF ASOSOSCA LAKE (NIC/8/002)	PLATA BEDMAR, ANTONIO	IAEA-RU-0323	F
NIGER	RADIOISOTOPE LABORATORY AT THE UNIVERSITY OF NIAMEY (NER/0/003)	TOMEK, FIKREI SEVKI	IAEA-RU-0299	F
	MONITORING OF RADON AND RADON DAUGHTER PRODUCTS (NER/9/005)	VILJOEN, JACQUES	IAEA-RU-0257	U
NIGERIA	NUCLEAR PHYSICS AT THE CENTRE FOR ENERGY RESEARCH AND DEVELOPMENT (NIR/1/003)	WACKS, MORTON EDWARD	IAEA-RU-0282	F
PAKISTAN	URANIUM EXPLORATION IN METAMORPHIC AND IGNEOUS TERRAIN (PAK/3/005)	FOEHSE, HANNS	IAEA-TA-2338	R
	PLANNING AND PROGRAMMING OF EXPERIMENTS (PAK/5/017)	AYOUB, ALI TAHA	IAEA-TA-2314	D
	TRAINING IN NUCLEAR RADIOLOGY (PAK/6/009)	ALEXANDER, MICHAEL SHEPARD	IAEA-RU-0318	F
	GAMMA CAMERA INTERFACING (PAK/6/009)	ZIMMERMAN, ROBERT EDWARD	IAEA-RU-0319	F
PANAMA	RADIOPHARMACEUTICALS: PREPARATION TECHNIQUES AND QUALITY CONTROL (PAN/2/003)	SRIVASTAVA, SURESH C.	IAEA-RU-0157	F
	RADIOPHARMACEUTICALS (PAN/2/003)	CANELLAS, CARLOS OSCAR	IAEA-RU-0242	F
	ISOTOPE-AIDED SOIL FERTILITY STUDIES (PAN/5/003)	VALENCIA, ILUMINADO GANA	IAEA-RU-0143	F
	RADIOISOTOPES IN AGRICULTURE (PAN/5/003)	SEBASTIANELLI, JOSE ALDO	IAEA-RU-0216	F
	NUCLEAR MEDICINE (PAN/6/005)	BELCHER, ERNEST HUGH	IAEA-RU-0184	U
PARAGUAY	NUCLEAR SCIENCE (PAR/1/002)	RODRIGUEZ PASQUES, RAFAEL HECT	IAEA-RU-0147	F
	NUCLEAR SCIENCE (PAR/1/002)	SANTOS, DINIS GOMES MAGALHAES	IAEA-RU-0148	F
	DEVELOPMENT OF THE X-RAY ANALYSIS PROGRAMME (PAR/1/002)	HEITZ, CHARLES PHILIPPE	IAEA-RU-0181	F
	RADIOCHEMISTRY LABORATORY (PAR/2/002)	BARO, GREGORIO BONIFACIO	IAEA-RU-0201	F

RECIPIENT	SUBJECT AND PROJECT CODE	AUTHOR(S)	REFERENCE NO.	STATUS <sup>a/</sup>
PERU	REPORT OF A CONSULTANCY MISSION (PER/0/013)	ALEGRIA, JOSE LUIS	IAEA/UNDP-PER/81/004-12	R
	OPERATION OF A 14-MEV NEUTRON GENERATOR FOR ACTIVATION ANALYSIS AND CROSS-SECTION MEASUREMENTS (PER/1/004)	ROBERTSON, JAMES CRAIG	IAEA-RU-0194	F
	PROSPECTION FOR AND EVALUATION OF NUCLEAR RAW MATERIALS (PER/3/011)	BELLUCO, ALBERTO ESTEBAN	IAEA/UNDP-PER/81/004-11	R
	NUCLEAR TECHNIQUES IN AGRICULTURE (PER/5/014)	CERVellini, ADMAR	IAEA-RU-0284	F
	NUCLEAR MEDICINE COURSE (PER/6/007)	TOUYA, JUAN JOSE JR.	IAEA-RU-0150	F
	BASIC NUCLEAR MEDICINE COURSE (PER/6/007)	FICEK, MARK A.	IAEA-RU-0255	U
	LOCAL INFRASTRUCTURE FOR DEMONSTRATION IRRADIATION PLANT (PER/8/004)	LAPIDOT, MORDECAI	IAEA-RU-0273	F
	NUCLEAR SAFETY (PER/9/011)	MENDONCA DE LIMA, JOSE	IAEA RU-0134	F
	REVIEW OF PRE-FEASIBILITY (PHASE I) SITE SURVEY AND RECOMMENDATIONS FOR FUTURE (PHASES II AND III) INVESTIGATIONS (PER/9/012)	GURPINAR, AYBARS DAVENPORT, COLIN ANTHONY	IAEA-RU-0151	U
PHILIPPINES	DEVELOPMENT OF A STATE SYSTEM OF ACCOUNTING FOR AND CONTROL OF NUCLEAR MATERIALS (PHI/0/006)	ICHIHASHI, YOSHINORI FURUKAWA	IAEA-RU-0239	F
	DEVELOPMENT OF COMPUTER CODES FOR A STATE SYSTEM OF ACCOUNTING FOR AND CONTROL OF NUCLEAR MATERIALS (PHI/0/006)	HORINO, KOICHI	IAEA-RU-0258	U
	THERMOLUMINESCENCE DOSIMETRY (PHI/1/012)	GHOOS, LEO HENRI	IAEA-RU-0228	U
	URANIUM ORE PROCESSING AND REFINING (PHI/3/006)	MCGINLEY, FRANK EMMETT	IAEA-TA-2322	S
	REVIEW OF LABORATORY PROCEDURES (PHI/9/007)	DEHMEL, JEAN-CLAUDE FRANCOIS	IAEA-TA-2324	R
	TRITIUM MONITORING (PHI/9/007)	INOUE, YOSHIKAZU	IAEA-RU-0256	U
	MONITORING RADIATION BACKGROUND LEVELS (PHI/9/007)	PILLAI, KRISHNAPILLAI C.	IAEA-RU-0325	F
	TRANSPORT REGULATIONS FOR RADIOACTIVE MATERIAL (PHI/9/010)	BARKER, ROBERT FRANCIS	IAEA-TA-2300	S
	NUCLEAR POWER SAFETY: PRE-OPERATIONAL SAFETY REVIEW OF THE PHILIPPINE NUCLEAR POWER PLANT NO.1 (PHI/9/013)	ANG, WILLIAM IGNATIUS	IAEA-TA-2295	S
		BALLIAUW, ANDRE EMMERSON, BRUCE W. AND OTHERS		
	NUCLEAR POWER SAFETY: PRE-OPERATIONAL SAFETY REVIEW OF THE PHILIPPINE NUCLEAR POWER PLANT NO.1 (PHI/9/013)	ANG, WILLIAM IGNATIUS BALLIAUW, ANDRE EMMERSON, BRUCE W. AND OTHERS	IAEA-TA-2296	S
	NUCLEAR POWER SAFETY: PRE-OPERATIONAL SAFETY REVIEW OF THE PHILIPPINE NUCLEAR POWER PLANT NO.1 (PHI/9/013)	ANG, WILLIAM IGNATIUS BALLIAUW, ANDRE EMMERSON, BRUCE W. AND OTHERS	IAEA-TA-2297	S
	TECHNICAL SPECIFICATIONS (PHI/9/013)	BRINKMAN, DONALD STANLEY	IAEA-TA-2333	R
	ENERGY PLAN REVIEW (PHI/9/014)	MICHELWICZ, DAVID	IAEA-TA-2325	R
	RADIOLOGICAL SAFETY (PHI/9/015)	LAMBERT, JOHN PIERCE	IAEA-RU-0225	F
PORTUGAL	REVIEW OF MINING AND MILLING SERVICES (POR/9/006)	AHMED, JASIMUDDIN	IAEA-TA-2351	R
SENEGAL	ESTABLISHMENT OF A THERMOLUMINESCENCE DOSIMETRY SYSTEM AND REVIEW OF RADIATION PROTECTION PROBLEMS (SEN/0/003)	BOULVEN, JEAN	IAEA/UNDP-SEN/77/005-06	D
SIERRA LEONE	REQUIREMENTS FOR A RADIOISOTOPE UNIT AND A RADIOCHEMICAL LABORATORY (SIL/0/004)	RANDLE, KEITH	IAEA-RU-0176	F
SINGAPORE	DOSE CALIBRATION AND DISTRIBUTION (SIN/1/003)	TSIEN, KIA-CHI	IAEA-RU-0237	F
	X-RAY ANALYSIS (SIN/1/004)	KUMP, PETER	IAEA-RU-0227	F
	INSTALLATION AND CALIBRATION OF A GAMMA DENSITOMETER (SIN/8/008)	MEYER, GERARD	IAEA-RU-0221	F
SRI LANKA	RESEARCH REACTOR FEASIBILITY STUDY (SRL/0/002)	BOECK, HELMUTH MURANAKA, RICHARD GEORGE WILSON, DAVID J.	IAEA-TA-2288	R
	ESTABLISHMENT OF AN ISOTOPE LABORATORY (SRL/5/019)	TUPY, JAROSLAV	IAEA-TA-2308	S
	FEASIBILITY STUDY (SRL/7/002)	PHILLIPS, GLYN OWEN MUKHERJEE, RAMENDRA	IAEA-TA-2327	R
SUDAN	NUCLEAR SCIENCE LABORATORY (SUD/0/006)	WAGNER, HANS-GEORG	IAEA-RU-0178	F
SYRIAN ARAB REPUBLIC	INSTALLATION OF A SPARK SOURCE MASS SPECTROMETER (SYR/1/002)	NYARY, ISTVAN	IAEA-TA-2313	S
	FAVOURABILITY OF SURFICIAL URANIUM DEPOSITS (SYR/3/002)	CARLISLE, DONALD	IAEA-TA-2318	R
	PROJECT SITE REVIEW (SYR/4/002)	DAVENPORT, COLIN ANTHONY	IAEA-TA-2354	R
THAILAND	X RAY FLUORESCENCE ANALYSIS (THA/1/005)	KUMP, PETER	IAEA RU-0329	F
	NATIONAL PROGRAMMING AND FOLLOW-UP WORK IN THE KHORAI PLATEAU (THA/3/003)	TAYLOR, JAMES	IAEA RU-0259	U
	DESIGN OF HOT CELLS (THA/4/008)	BEYER, GERD-JUERGEN	IAEA RU-0263	U
	FOOD IRRADIATION (THA/5/027)	DOLLAR, ALEXANDER MELVILLE LOHARANU, PAISAN	IAEA-TA-2306	D
	ISOTOPE AIDED STUDIES ON BUFFALO REPRODUCTION (THA/5/028)	PERERA, BUTHGAMU M.A.O.	IAEA RU-0330	F

RECIPIENT	SUBJECT AND PROJECT CODE	AUTHOR(S)	REFERENCE NO.	STATUS <sup>a/</sup>
TURKEY	LICENSING CONSIDERATIONS RELATED TO SEISMIC SAFETY FOR THE AKKUYU NUCLEAR POWER PLANT (TUR/9/005)	GURPINAR, AYBARS	IAEA-TA-2305	D
	SAFETY REVIEW AND SYSTEMS ANALYSIS (TUR/9/005)	KUZAY, TUNCER M.	IAEA-TA-2307	D
	REVIEW OF GEOPHYSICAL DATA OFF-SHORE SINOP (TUR/9/005)	HARTEVELT, JACOBUS JAN ABRAHAM	IAEA-TA-2329	R
	LOW-LEVEL WASTE MANAGEMENT SYSTEM (TUR/9/007)	BAEHR, WERNER WILHELM	IAEA-TA-2349	R
	WASTE MANAGEMENT AND STORAGE FACILITY REVIEW (TUR/9/007)	SIMS, JOHN	IAEA-TA-2350	R
U R. TANZANIA	MOESSBAUER SPECTROMETRY (URT/1/003)	WAGNER, HANS-GEORG	IAEA-RU-0293	F
	ESTABLISHMENT OF LABORATORY FOR RADIONUCLIDE-AIDED STUDIES OF ACARICIDE RESIDUES IN CATTLE (URT/5/006)	LORD, KENNETH ALAN	IAEA-RU-0245	F
URUGUAY	EPIDEMIOLOGY AND PATHOGENESIS OF RUMINANT PARASITES (URU/5/013)	DUNCAN, JAMES LINDSAY	IAEA-RU-0199	F
	NUCLEAR MEDICINE (URU/6/010)	ERICKSON, JON JAY	IAEA RU-0203	F
	AUTORADIOGRAPHIC TECHNIQUES (URU/6/013)	WOLF, WALTER	IAEA-RU-0312	F
VENEZUELA	URANIUM RECOVERY FROM PHOSPHORIC ACID (VEN/3/004)	GASOS, PABLO	IAEA-RU-0301	F
	PREPARATION OF PLANTS FOR A LARGE-SCALE PROJECT (VEN/5/009)	CERVELLINI, ADMAR	IAEA-RU-0322	F
	PERSONNEL TRAINING IN NUCLEAR TECHNIQUES (VEN/5/009)	LAMM, CARL GOERAN	IAEA-RU-0331	F
	APPLICATION OF NUCLEAR TECHNIQUES IN STUDIES ON SUSPENDED SEDIMENT DYNAMICS (VEN/8/006)	TAYLOR RIEGER, RICHARD	IAEA-RU-0156	F
	REPOSITORY FOR RADIOACTIVE WASTE (VEN/9/002)	TAZIOLI, GIULIO SERGIO	IAEA-RU-0156	F
VIET NAM	THOMAS, KARYANIL THOMAS	IAEA-RU-0220	F	
	REACTOR OPERATIONAL SAFETY REVIEW (VIE/0/002)	BYSZEWSKI, WITOLD	IAEA-RU-0223	F
	USE OF SOLID-STATE TRACK DETECTORS (VIE/0/002)	UTTING, RODERICK	IAEA-TA-2339	R
	PRODUCTION OF PRIMARY RADIOISOTOPES (VIE/0/002)	SOMOGYI, GYOERGY	IAEA-RU-0260	U
	PRODUCTION OF RADIOPHARMACEUTICALS (VIE/6/011)	JANTSCH, KARL	IAEA-TA-2337	R
YUGOSLAVIA	KIMLOVA, IRENA	IAEA-TA-2337	R	
	SITE QUALIFICATION (YUG/4/021)	EGGENBERGER, ANDREW JON	IAEA-TA-2353	R
ZAIRE	REVIEW OF EMERGENCY OPERATION PROCEDURES (YUG/9/018)	CLAYTON, HOWARD BRENT	IAEA-TA-2340	R
	NITROGEN-15 AIDED STUDIES ON SYMBIOTIC NITROGEN FIXATION (ZAI/5/006)	BERLIER, YVES MARIUS	IAEA-RU-0153	F
	FOOD PRESERVATION (ZAI/5/007)	LACROIX, JEAN-PIERRE-ARTHUR	IAEA-RU-0166	F
ZAMBIA	RADIATION PROTECTION MONITORING (ZAI/9/003)	ANDRASI, ANDOR	IAEA-RU-0274	F
	NUCLEAR EQUIPMENT MAINTENANCE (ZAM/4/002)	GARDOS, MIKLOS	IAEA-RU-0232	F
	MASS-REARING OF TSETSE FLIES (ZAM/5/009)	KABAYO, JOHN	IAEA-RU-0288	F
	MONITORING REPRODUCTIVE PERFORMANCE OF INDIGENOUS BREEDS OF CATTLE (ZAM/5/010)	OSCHMANN, STEFAN JOACHIM	IAEA-RU-0236	U
	DOSIMETRIC STUDY OF X-RAY IRRADIATOR (ZAM/5/014)	SCARPA, GIORGIO	IAEA-RU-0254	U
REGIONAL AFRICA	MOSCATI, MARCO	IAEA-RU-0254	U	
	WATER RESOURCES IN NORTH AFRICA (RAF/8/007)	CAILLOT, ALAIN ROGER PIERRE	IAEA-RU-0226	F
REGIONAL LATIN AMERICA	CONTRIBUTION OF NUCLEAR TECHNIQUES IN THE STUDY OF SOUTHERN TUNISIAN AQUIFERS (RAF/8/007)	ARANYOSSY, JEAN FRANCOIS	IAEA-TA-2336	R
	MAMOU, A.	IAEA-TA-2336	R	
	NUCLEAR INSTRUMENTATION (RLA/0/006)	BAERS, LEO BRUNO	IAEA-RU-0241	F
	QUALITY CONTROL OF NUCLEAR MEDICINE PROCEDURES IN VIVO (RLA/6/006)	CROFI, BARBARA YODER	IAEA-RU-0170	F
	QUALITY CONTROL OF NUCLEAR MEDICINE EQUIPMENT (RLA/6/006)	ERICKSON, JON JAY	IAEA RU-0271	F
INTERREGIONAL	QUALITY CONTROL OF NUCLEAR MEDICINE (RLA/6/006)	ERICKSON, JON JAY	IAEA-RU-0270	F
	ESTABLISHMENT OF RADIOIMMUNOASSAY LABORATORIES (INT/0/038)	RADICELLA, RENATO	IAEA RU-0291	F
	RAPAT MISSION (INT/9/055)	BENINSON, DAN J.	IAEA-TA-2343	R
		KINNEMAN, JOHN		
		WAIGHT, P.J.		
INTERREGIONAL	OPERATIONAL SAFETY REVIEW OF THE KARACHI NUCLEAR POWER PLANT (INT/9/065)	AND OTHERS		
		FRANZEN, FERDINAND L.	IAEA TA-2331	R
		PALABRICA, RICARDO		
		THOMAS, BRUCE ROBLRI		
		AND OTHERS		

<sup>a/</sup> D = De-restricted distribution; F = Conclusions and recommendations contained in unpublished report forwarded to recipient Member State;  
R = Restricted distribution; S = Restricted pending notification from Government; U = Unpublished report forwarded to recipient Member State.

# A N N E X I V

## VOLUNTARY CONTRIBUTIONS PLEDGED AND PAID TO THE TECHNICAL ASSISTANCE AND CO-OPERATION FUND FOR 1985 as at 31 December 1985

Member State	Base rate %	Share of \$26.0 million target for voluntary contributions for 1985 using base rate <u>a/</u>	Pledged	Paid
Afghanistan	0.01	2 600	-	-
Albania	0.01	2 600	2 600	-
Algeria	0.13	33 800	-	-
Argentina	0.70	182 000	120 000	-
Australia	1.55	403 000	402 977	402 977
Austria	0.74	192 400	192 400	192 400
Bangladesh	0.03	7 800	7 800	-
Belgium	1.27	330 200	78 431	78 431
Bolivia	0.01	2 600	-	-
Brazil	1.37	356 200	243 200	-
Bulgaria	0.18	46 800	46 800	46 800
Burma	0.01	2 600	-	-
Byelorussian SSR	0.36	93 600	94 221	94 221
Cameroon	0.01	2 600	-	-
Canada	3.05	793 000	793 000	793 000
Chile	0.07	18 200	18 200	18 200
China	0.87	226 200	228 302	228 302
Colombia	0.11	28 600	-	-
Costa Rica	0.02	5 200	-	-
Côte d'Ivoire	0.03	7 800	-	-
Cuba	0.09	23 400	23 400	23 400
Cyprus	0.01	2 600	2 600	2 600
Czechoslovakia	0.75	195 000	195 000	195 000
Dem. Kampuchea	0.01	2 600	-	-
Dem. P.R. Korea	0.05	13 000	13 000	13 000
Denmark	0.74	192 400	192 400	192 400
Dominican Republic	0.03	7 800	-	-
Ecuador	0.02	5 200	5 200	5 200
Egypt	0.07	18 200	18 200	18 200
El Salvador	0.01	2 600	-	-
Ethiopia	0.01	2 600	-	-
Finland	0.47	122 200	122 200	122 200
France	6.44	1 674 400	1 674 400	1 674 400
Gabon	0.02	5 200	-	-
German D.R.	1.37	356 200	356 200	356 200

Member State	Base rate %	Share of \$26.0 million target for voluntary contributions for 1985 using base rate <u>a/</u>	Pledged	Paid
Germany, F.R.	8.45	2 197 000	2 197 000	2 197 000
Ghana	0.02	5 200	-	-
Greece	0.39	101 400	101 400	101 400
Guatemala	0.02	5 200	5 000	-
Haiti	0.01	2 600	-	-
Holy See	0.01	2 600	-	-
Hungary	0.23	59 800	56 785	56 785
Iceland	0.03	7 800	7 800	7 800
India	0.36	93 600	93 600	93 600
Indonesia	0.13	33 800	33 800	-
Iran, I.R.	0.57	148 200	-	-
Iraq	0.12	31 200	31 200	-
Ireland	0.18	46 800	20 000	20 000
Israel	0.23	59 800	-	-
Italy	3.70	962 000	466 472	-
Jamaica	0.02	5 200	-	-
Japan	10.21	2 654 600	2 654 600	2 654 600
Jordan	0.01	2 600	2 600	2 600
Kenya	0.01	2 600	-	-
Korea, R.	0.18	46 800	46 800	46 800
Kuwait	0.25	65 000	-	-
Lebanon	0.02	5 200	-	-
Liberia	0.01	2 600	-	-
Libyan A.J.	0.26	67 600	-	-
Liechtenstein	0.01	2 600	2 600	2 600
Luxembourg	0.06	15 600	-	-
Madagascar	0.01	2 600	1 068	1 068
Malaysia	0.09	23 400	23 400	23 400
Mali	0.01	2 600	-	-
Mauritius	0.01	2 600	-	-
Mexico	0.87	226 200	107 113	107 113
Monaco	0.01	2 600	-	-
Mongolia	0.01	2 600	2 600	2 600
Morocco	0.05	13 000	13 000	-
Namibia	-	-	-	-
Netherlands	1.76	457 600	457 600	457 600
New Zealand	0.26	67 600	-	-
Nicaragua	0.01	2 600	-	-
Niger	0.01	2 600	-	-
Nigeria	0.19	49 400	49 400	-

Member State	Base rate %	Share of \$26.0 million target for voluntary contributions for 1985 using base rate a/	Pledged	Paid
Norway	0.50	130 000	130 000	130 000
Pakistan	0.06	15 600	15 600	15 600
Panama	0.02	5 200	5 200	-
Paraguay	0.01	2 600	-	-
Peru	0.07	18 200	-	-
Philippines	0.09	23 400	7 928	7 928
Poland	0.71	184 600	191 121	191 121
Portugal	0.18	46 800	46 800	46 800
Qatar	0.03	7 800	-	-
Romania	0.19	49 400	-	-
Saudi Arabia	0.85	721 000	721 000	221 000
Senegal	0.01	2 600	-	-
Sierra Leone	0.01	2 600	-	-
Singapore	0.09	23 400	1 800	1 800
South Africa	0.40	104 000	-	-
Spain	1.91	496 600	30 000	30 000
Sri Lanka	0.01	2 600	2 600	-
Sudan	0.01	2 600	-	-
Sweden	1.30	338 000	338 000	338 000
Switzerland	1.09	283 400	283 400	283 400
Syrian A.R.	0.03	7 800	-	-
Thailand	0.08	20 800	20 800	20 800
Tunisia	0.03	7 800	-	-
Turkey	0.32	83 200	83 200	9 749
Uganda	0.01	2 600	-	-
Ukrainian SSR	1.30	338 000	322 581	322 581
USSR	10.43	2 711 800	2 445 652	2 445 652
U.A. Emirates	0.16	41 600	41 600	41 600
UK	4.62	1 201 200	1 201 200	1 201 200
U.R. Tanzania	0.01	2 600	2 600	-
USA	25.00	6 500 000	6 500 000	-
Uruguay	0.04	10 400	-	-
Venezuela	0.54	140 400	40 000	40 000
Viet Nam	0.02	5 200	-	-
Yugoslavia	0.45	117 000	117 000	117 000
Zaire	0.01	2 600	-	-
Zambia	0.01	2 600	2 600	-
<b>TOTAL</b>	<b>100.00</b>	<b>26 000 000</b>	<b>23 255 051</b>	<b>15 696 128</b>

a/ As recommended in General Conference resolution GC(V)/RES/100 and GC(XV)/RES/286.



# A N N E X V

## COST-FREE FELLOWSHIPS OFFERED AND AWARDED: 1985

Donor	Offered		Awarded <sup>a/</sup>	
	Number	Man-months	Number	Man-months
Argentina	6	72	4	30
Austria	1	12	1	12
Belgium	9	54	6	60
Brazil	10	120	5	54
Bulgaria	2	12	-	-
Czechoslovakia	9 <sup>c/</sup>	-	3	36
Denmark	5	60	1	12
France	-	50	4	33
Germany, F.R.	-	105	10	63
Hungary	4	48	-	-
India	10	-	8	68
Israel	-	45	2	18
Italy	-	100	10	90
Japan	5	45	-	-
Mexico	2	-	-	-
Netherlands	8	-	5	46
Pakistan	6	-	-	-
Philippines	2	-	-	-
Poland	10	-	-	-
Spain	5	60	5	27
Thailand	2	-	-	-
United Kingdom	- <sup>b/</sup>	-	4	42
United States of America	- <sup>b/</sup>	-	50	414
Yugoslavia	-	22	-	-

<sup>a/</sup> Awards less rejections and withdrawals as at 31 December 1985.

<sup>b/</sup> A specific amount of money was made available rather than a given number of fellowships.

<sup>c/</sup> Includes five long-term fellowships of up to 60 man-months each.

ANNEX VI

PROJECTS UNDER IMPLEMENTATION FOR UNDP  
(in thousands of dollars)

Recipient	Project title and code	Total amount approved	Approved budgets					
			Prior to 1985	1985	1986	1987	1988	1989-1990
Argentina	Nuclear engineering, ARG/78/020	3474	2228	203	519	371	153	-
Chile	Uranium prospection - Phase II, CHI/79/001	459	446	(28)	41	-	-	-
Costa Rica	Strengthening national capacity for mineral prospection, COS/83/T02 (UNFSSTD)	617	95	396	126	-	-	-
Cuba	Introduction of nuclear techniques into the national economy, CUB/77/001	1579	1399	176	4	-	-	-
Ecuador	Uranium prospection in Ecuador, ECU/80/002	507	523	(16)	-	-	-	-
Egypt	National Centre for Radiation Technology - Phase II, EGY/78/011	1090	555	1	453	81	-	-
Ghana	Teaching applied nuclear physics, GHA/85/015	79	-	60	19	-	-	-
Hungary	Establishment of an automated radiation laboratory, HUN/82/002	73	53	10	10	-	-	-
Indonesia	Application of isotopes and radiation to increasing agricultural production, INS/78/074	1639	871	325	296	147	-	-
Iran, I.R.	Pilot demonstration plant for radio-sterilization and other applications of radiation technology, IRA/82/003	1559	1106	200	253	-	-	-
Korea, R.	Isotopes and radiation in agricultural research, ROK/84/003	17	-	17	-	-	-	-
Madagascar	Uranium prospection and evaluation, MAG/77/012	1451	1446	5	-	-	-	-
Malawi	Negotiations on uranium exploration, MLW/84/001	8	6	2	-	-	-	-
Peru	Nuclear energy, PER/81/004	1283	1141	142	-	-	-	-
Philippines	Philippine nuclear power manpower development programme, PHI/80/007	1131	674	216	241	-	-	-
Romania	Assistance for nuclear power stations, ROM/82/001	706	529	54	123	-	-	-
Thailand	Improving food and agricultural production, THA/85/004	1331	-	368	352	314	146	151
Yugoslavia	Establishment of a uranium analysis laboratory at Zirovski Vrh Mine, Slovenia, YUG/78/008	80	79	1	-	-	-	-
	Establishment of radiation polymer laboratory, Vinca, YUG/82/007	147	105	42	-	-	-	-
	Ljubljana Nuclear Training Centre, YUG/83/007	105	76	29	-	-	-	-
Asia and the Pacific	Support for regional co-operation in the industrial application of isotopes and radiation technology, RAS/79/061	4699	3348	456	895	-	-	-
Latin America	Regional non-destructive testing (NDT) project for Latin America and the Caribbean, RLA/84/T01 (UNFSSTD)	1585	167	855	563	-	-	-

A N N E X VII

PROJECTS COMPLETED OR CANCELLED DURING 1985

A. Completed projects

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
ALGERIA	RADIATION PROTECTION AND NUCLEAR SAFETY ALG/9/003	1981	4.5	-	-
BANGLADESH	NUCLEAR ELECTRONICS BGD/4/005	1980, 1981	4.0	41,500	-
	DEVELOPMENT OF THE INSTITUTE OF NUCLEAR AGRICULTURE, BGD/5/003	1974	91.5	466,200	296,600
	RADIOISOTOPES IN MEDICINE BGD/6/003	1976	7.0	23,700	-
BRAZIL	EQUILIBRIUM U-ORES AND GEOLOGICAL MATERIALS, BRA/3/008	1980	-	25,300	-
	AGRICULTURAL RESEARCH AND DEVELOPMENT BRA/5/009	1979, 1980 1981, 1982 1983	72.5	116,600	-
	RADIOISOTOPES IN AGRICULTURE BRA/5/012	1982	1.0	10,000	-
	RADIOISOTOPES IN MEDICINE BRA/6/009	1982	6.0	92,100	-
	INCORPORATION OF RADIOACTIVE SUBSTANCES BRA/9/020	1982	3.5	-	-
	RADIOACTIVE WASTE SOLIDIFICATION BRA/9/024	1984	1.0	-	-
	EMERGENCY PREPAREDNESS (ANGRA I) BRA/9/025	1984	-	53,400	-
CAMEROON	NUCLEAR ANALYTICAL LABORATORY CMR/3/006	1983	6.0	5,200	-
CHILE	URANIUM PROSPECTION CHI/3/005	1979, 1980 1981, 1982	25.0	98,200	-
	FOOD IRRADIATION CHI/5/009	1980, 1981	3.0	-	-
COLOMBIA	ASSESSMENT OF MICRONUTRIENT STATUS OF CROP PLANTS AND SOILS, COL/5/006	1983 1981	4.0	12,400	-
COSTA RICA	RADIATION PROTECTION COS/9/003	1983	1.5	-	-
COTE D'IVOIRE	NUCLEAR TECHNIQUES IN AGRICULTURE IVC/5/011	1982, 1985	0.5	10,200	-
CYPRUS	USE OF RADIOISOTOPES IN INSECT TOXICOLOGY, CYP/5/012	1983 1985	-	82,000	-

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
ECUADOR	INDUSTRIAL RADIOGRAPHY ECU/8/007	1983	3.0	47,300	-
	NUCLEAR SAFETY MISSION ECU/9/006	1982	1.5	-	-
EGYPT	ACCELERATOR MODERNIZATION AND USE EGY/0/005	1980	0.5	47,600	-
	ACTIVATION ANALYSIS EGY/1/012	1981, 1983	-	117,900	-
	MOESSBAUER SPECTROMETRY EGY/1/014	1982	1.0	-	-
	MANPOWER DEVELOPMENT: PROJECT MANAGEMENT EGY/4/020	1983	4.0	700	-
	MANPOWER DEVELOPMENT: TECHNICIAN TRAINING, EGY/4/021	1983	1.0	-	-
	MANPOWER DEVELOPMENT: QUALITY ASSURANCE AND QUALITY CONTROL, EGY/4/022	1983	1.0	-	-
	RESEARCH REACTOR PLANNING EGY/4/025	1985	0.5	-	-
	NITROGEN FERTILIZER STUDY EGY/5/010	1981	3.0	122,800	-
EL SALVADOR	SITE EVALUATION EGY/9/011	1981	1.0	-	-
	RADIATION PROTECTION ELS/9/003	1980, 1983	6.0	53,200	-
GABON	NUCLEAR ENERGY PLANNING GAB/0/002	1985 1983	1.5	-	-
GREECE	NEUTRON ACTIVATION IN MULTI-ELEMENT ANALYSIS, GRE/1/031	1983	-	30,800	-
	PRODUCTION OF LABELLED ORGANIC COMPOUNDS GRE/2/016	1983	1.0	28,700	-
	CYCLOTRON FACILITY GRE/2/018	1985	1.0	-	-
INDONESIA	SECONDARY STANDARDS DOSIMETRY LABORATORY INS/1/009	1979	6.0	-	-
	NUCLEAR MAGNETIC RESONANCE (NMR) INS/1/013	1981	6.5	-	-
	URANIUM ORE PROCESSING INS/3/007	1980, 1984	9.0	111,500	-
	NUCLEAR ELECTRONICS INS/4/019	1982	2.0	22,500	-

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man months)	Equipment (\$)	Fellows (\$)
INDONESIA	RADIOIMMUNOASSAY SERVICES INS/6/003	1983	4.0	37,900	-
IRAN, ISLAMIC REPUBLIC OF	QUALITY ASSURANCE IRA/4/014	1984	-	94,000	-
	NUCLEAR TECHNIQUES IN HYDROLOGY IRA/8/007	1983	2.5	-	-
	BUSHEHR NUCLEAR POWER PLANT (BNPP) IRA/9/009	1985	1.0	200	-
IRAQ	REACTOR SAFETY STUDIES IRQ/4/006	1978, 1979	0.5	18,800	-
	RESEARCH REACTOR UTILIZATION IRQ/4/008	1982, 1983 1984	-	151,000	-
JORDAN	NUCLEAR ENERGY PLANNING JOR/0/002	1982	1.0	-	-
KENYA	NUCLEAR INSTRUMENTATION KEN/4/003	1984	6.0	28,700	-
	NUCLEAR MEDICINE KEN/6/005	1985	0.5	-	-
KOREA, REPUBLIC OF	NUCLEAR POWER PLANT SAFETY ROK/9/013	1979	15.0	29,200	-
	QUALITY ASSURANCE ROK/9/014	1979, 1980	12.5	-	-
	NUCLEAR POWER PLANT SAFETY ROK/9/015	1980, 1981 1982	33.5	-	-
	NUCLEAR POWER PLANT SAFETY (KAERI) ROK/9/016	1980	7.0	47,200	-
	NUCLEAR POWER PLANT SAFETY ROK/9/017	1981	1.0	33,600	-
	NUCLEAR WASTE MANAGEMENT (AEB) ROK/9/022	1982	5.5	-	-
	POSTGRADUATE TRAINING IN RADIATION SAFETY, ROK/9/024	1983	-	44,200	-
LIBERIA	NUCLEAR MEDICINE LIR/6/002	1985	0.5	-	-
LIBYAN ARAB JAMAHIRIYA	RADIATION PROTECTION LIB/9/004	1982	15.0	25,300	-
	SITING OF NUCLEAR POWER PLANT LIB/9/005	1983	0.5	-	-

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
MALAYSIA	NEUTRON ACTIVATION ANALYSIS FOR TIN MAL/1/007	1983	-	28,300	-
	RESEARCH REACTOR CENTRE MAL/4/003	1976	14.5	-	-
	FOOD PRESERVATION MAL/5/011	1981	2.5	-	-
	RADIOISOTOPES IN MICROBIOLOGY MAL/7/002	1979	6.5	-	-
MALI	URANIUM ANALYSIS LABORATORY MLI/3/004	1981, 1983	1.5	20,200	-
	RADIOISOTOPES IN AGROMETEOROLOGY MLI/5/007	1983	-	13,900	-
MEXICO	MANPOWER TRAINING MEX/0/007	1984	0.5	-	-
	USE OF RADIATION IN FOOD PRESERVATION MEX/5/011	1983	2.5	-	-
	INDUSTRIAL IRRADIATION MEX/8/011	1981	3.0	-	-
	APPLICATION OF RADIATION MEX/8/012	1982	8.5	-	-
	MOBILE LABORATORY FOR ENVIRONMENTAL RADIOACTIVITY MONITORING, MEX/9/025	1983	1.0	73,400	-
	TRAINING IN RADIOLOGICAL EMERGENCY PLANNING AND PREVENTION, MEX/9/030	1984	1.5	-	-
MOROCCO	NUCLEAR PHYSICS MOR/1/005	1980, 1981 1982	17.0	36,700	-
	NUCLEAR RAW MATERIALS MOR/3/005	1978, 1979 1980, 1981 1982, 1983	55.0	100,500	-
	NUCLEAR ELECTRONICS MOR/4/005	1979, 1980	4.5	21,200	-
	RADIOISOTOPES IN ANIMAL SCIENCE MOR/5/014	1981	3.0	61,700	-
NICARAGUA	NATURAL RESOURCES NIC/0/003	1985	0.5	-	-
NIGERIA	RADIOCHEMICAL LABORATORY NIR/2/003	1983	0.5	-	-
	RADIATION BIOLOGY NIR/7/002	1978	10.5	-	-

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
PAKISTAN	GAMMA SPECTROSCOPY TRAINING PAK/9/006	1984	-	11,300	-
PANAMA	RADIOACTIVE MINERALS PROSPECTION PAN/3/002	1982, 1983 1984	18.5	56,300	-
PARAGUAY	RADIOIMMUNOASSAY PAR/6/004	1980, 1981 1985	8.5	49,900	-
PERU	REACTOR PHYSICS PER/1/005	1983	6.0	41,500	-
	NUCLEAR ELECTRONICS PER/4/005	1979	6.0	41,700	-
	NUCLEAR MEDICINE PER/6/004	1979	4.0	36,000	-
	NUCLEAR MEDICINE TRAINING PER/6/007	1981	6.0	22,000	-
PHILIPPINES	ENVIRONMENTAL RADIOACTIVITY PHI/9/007	1979, 1980 1981, 1982 1983	18.0	166,200	-
	RADIATION PROTECTION PHI/9/015	1984	2.0	56,900	-
POLAND	RADIOCHEMICAL LABORATORY POL/2/009	1979	1.5	19,100	-
ROMANIA	NUCLEAR MEDICINE ROM/6/008	1983	-	12,900	-
	GAMMA IRRADIATION FACILITY ROM/8/010	1984	0.5	-	-
SENEGAL	RADIOCARBON LABORATORY SEN/0/004	1982	-	22,500	-
	RADIOISOTOPES IN AGRICULTURE SEN/5/011	1977, 1978	8.5	111,500	-
	RADIOISOTOPES IN AGRICULTURE SEN/5/015	1981, 1983	2.0	39,500	-
	RADIOISOTOPES IN MEDICINE SEN/6/007	1978	7.0	27,800	-
	ISOTOPES IN HYDROLOGY SEN/8/002	1982	1.0	4,000	-
SINGAPORE	ELECTRON BEAM CALIBRATION SIN/1/003	1984	2.0	-	-
	PERSONNEL DOSIMETRY SIN/9/012	1982	-	76,900	-

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
SRI LANKA	STERILIZATION OF MEDICAL SUPPLIES SRL/8/013	1984	1.0	-	-
SUDAN	ELECTRONICS WORKSHOP SUD/4/002	1982	-	34,400	-
	RADIOISOTOPES IN PLANT PRODUCTION SUD/5/008	1975	3.0	26,500	-
	INTRACAVITARY RADIATION THERAPY FOR CANCER, SUD/6/011	1984	-	21,900	-
THAILAND	RADIOIMMUNOASSAY THA/6/013	1980	3.0	47,900	-
	ENVIRONMENTAL RADIOACTIVITY MONITORING THA/9/008	1982	-	40,300	-
TUNISIA	NEUTRON GENERATOR LABORATORY TUN/1/006	1983	0.5	-	-
	RADIOISOTOPES IN INDUSTRY TUN/8/008	1982	-	40,900	-
UGANDA	RADIOISOTOPES IN MEDICINE UGA/6/005	1983	0.5	-	-
UNITED ARAB EMIRATES	ATOMIC ENERGY PLANNING UAE/3/002	1984	1.0	-	-
UNITED REPUBLIC OF TANZANIA	RADIOISOTOPES IN AGRICULTURE URT/5/004	1981, 1983	13.0	110,500	-
URUGUAY	NUCLEAR MEDICINE URU/6/015	1983	-	61,900	-
VENEZUELA	RADIOISOTOPES IN AGRICULTURE VEN/5/007	1980	-	13,300	-
	REPOSITORY FOR RADIOACTIVE WASTE VEN/9/002	1985	0.5	-	-
VIET NAM	PLANT MUTATION BREEDING VIE/5/008	1979	1.0	151,900	-
	ISOTOPE TECHNIQUES IN SOIL-PLANT STUDIES VIE/5/010	1985	0.5	-	-
	NUCLEAR TECHNIQUES IN METALLURGY VIE/8/002	1980, 1982 1983	2.0	127,900	-
YUGOSLAVIA	TANDEM ACCELERATOR FACILITY YUG/1/009	1984	-	20,400	-



Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
YUGOSLAVIA	GEOLOGICAL SAMPLE ANALYSIS YUG/3/007	1984	-	59,900	-
	REACTOR METALLURGY YUG/4/020	1983	1.0	53,300	-
ZAIRE	STRENGTHENING OF TECHNICAL-SCIENTIFIC INFRASTRUCTURE, ZAI/0/003	1979, 1983 1984, 1985	8.0	434,700	72,100
ZAMBIA	NUCLEAR RAW MATERIALS ZAM/3/003	1978, 1979 1980, 1982 1984, 1985	34.0	52,800	-
	NUCLEAR MEDICINE ZAM/6/004	1985	0.5	-	-
REGIONAL LATIN AMERICA	NUCLEAR SCIENCE DEVELOPMENT RLA/1/004	1983	0.5	-	13,800
INTERREGIONAL	METROLOGY INT/1/027	1984	-	33,000	-
	AIR POLLUTION CONTROL INT/9/047	1983	-	55,000	-

#### B. CANCELLED PROJECTS

Recipient	Project title and code	Year of approval	Assistance provided		
			Experts (man-months)	Equipment (\$)	Fellows (\$)
KENYA	NUCLEAR SCIENCE AND TECHNOLOGY DOCUMENTATION, KEN/0/006	1985	-	30,000	-
PAKISTAN	NON-DESTRUCTIVE TESTING (KANUPP) PAK/4/026 <sup>a/</sup>	1982, 1984 1985	2.0	48,000	28,100
ROMANIA	GAMMA IRRADIATION FACILITY ROM/8/009 <sup>a/</sup>	1984, 1985	11.0	530,000	54,700
UGANDA	RAW MATERIALS PROSPECTION UGA/3/003	1983	3.0	28,000	-

<sup>a/</sup> Total included future years beyond 1985.

A N N E X V I I I

FOOTNOTE-a/ PROJECTS MADE OPERATIONAL OR EXTENDED DURING 1985

Recipient	Project title and code	Experts	Equipment	Fellows	Source
		Man-months	(\$)	(\$)	
BANGLADESH	RESEARCH REACTOR UTILIZATION BGD/4/009	1	85,000	—	USA
BRAZIL	REACTOR SAFETY RESEARCH PROGRAMME BRA/9/019	2	125,000	—	GFR
BULGARIA	CONSTRUCTION OF A NEUTRON GENERATOR BUL/4/003	—	20,000	—	TACF
		—	200,000	—	USSR
ECUADOR	ADVANCED MEDICAL PHYSICS TRAINING ECU/6/008	2	50,000	—	USA
	NUCLEAR MEDICINE SERVICES ECU/6/009	6	88,000	—	USA
EGYPT	MOESSBAUER SPECTROMETRY (AL-AZHAR) EGY/1/018	—	55,000	—	UK
	INTRACAVITARY RADIATION THERAPY FOR CANCER, EGY/6/004	10	212,000	—	ITA
	NUCLEAR SAFETY EGY/9/014	5	50,000	—	USA
	ENVIRONMENTAL RADIOACTIVITY SURVEY (INSHAS), EGY/9/017	3	85,000	12,000	TACF
EL SALVADOR	ANIMAL DISEASES AND REPRODUCTION ELS/5/002	4	40,000	—	USA
GHANA	ERADICATION OF RIVERINE TSETSE FLY GHA/5/011	3	3,000	—	USA
GREECE	RADIOPHARMACEUTICALS GRE/2/015	—	28,000	—	USA
HUNGARY	FOOD IRRADIATION TECHNOLOGY HUN/8/006	—	388,900	—	USSR
INDONESIA	UTILIZATION OF MULTI-PURPOSE RESEARCH REACTOR, INS/1/015	4	15,000	—	USA
		4	15,000	6,000	GFR
	RADIOCARBON DATING INS/8/013	4	56,000	—	USA
KOREA, REPUBLIC OF	NUCLEAR FUEL CYCLE TECHNOLOGY ROK/4/014	—	50,000	—	GFR
	ENVIRONMENTAL RADIATION PROTECTION ROK/9/026	3	52,000	—	USA

Recipient	Project title and code	Experts	Equipment	Fellows	Source
		Man-months	(\$)	(\$)	
MALAYSIA	LATEX MATURATION STUDIES MAL/2/003	—	72,000	—	USA
	RADIOACTIVE MINERALS SURVEY MAL/3/006	24	62,000	—	TACF
	NUCLEAR APPLICATIONS IN INDUSTRY MAL/8/003	2	130,000	—	USA
MALI	URANIUM EXPLORATION MLI/3/005	12	25,000	22,500	TACF
MEXICO	IN-CORE FUEL MANAGEMENT MEX/4/034	—	100,000	—	USA
PANAMA	GENETIC IMPROVEMENT OF BANANAS, PLANTAINS AND SUGAR-CANE, PAN/5/004	—	45,000	—	USA
PERU	DEVELOPMENT OF NUCLEAR RESEARCH CENTRE PER/0/011	—	30,000	—	USA
	MEDFLY CONTROL PER/5/012	16	180,000	—	ITA
	NUCLEAR TECHNIQUES IN AGRICULTURE PER/5/014	8	60,000	—	USA
PHILIPPINES	QUALITY ASSURANCE/QUALITY CONTROL TRAINING CENTRE, PHI/4/016	6	25,000	—	USA
POLAND	MASS SPECTROMETRY POL/1/006 <sup>b/</sup>	—	122,200	—	USSR
PORTUGAL	RADIOPHARMACEUTICAL DEVELOPMENT POR/2/010	—	72,500	—	USA
	IRRADIATION FACILITY POR/8/002	—	34,000	—	USA
	NUCLEAR POWER PLANT SITING (EDP) POR/9/005	3	—	—	GFR
ROMANIA	APPLIED ACTINIDE RESEARCH ROM/1/005	2	15,000	—	TACF
	HEAVY ION PHYSICS ROM/1/009	2	15,000	3,000	TACF
SRI LANKA	CROP WATER AND SOIL MANAGEMENT SRL/5/016	—	45,000	—	UK
	RADIATION THERAPY SRL/6/014 <sup>b/</sup>	3	58,000	—	TACF

Recipient	Project title and code	Experts	Equipment	Fellows	Source
		Man-months	(£)	(£)	
SUDAN	NUCLEAR SCIENCE LABORATORY SUD/0/006	1	40,000	—	UK
	URANIUM GEOLOGY AND EXPLORATION METHODS SUD/3/003	8	46,000	6,000	TACF
SYRIAN ARAB REPUBLIC	NUCLEAR TRAINING LABORATORY SYR/0/004	7	36,000	9,000	TACF
	NUCLEAR ANALYTICAL LABORATORY SYR/1/002	1	35,000	—	UK
	RADIATION PROTECTION SYR/9/003	—	40,000	18,000	TACF
THAILAND	NUCLEAR CHEMISTRY TRAINING THA/2/008	2	52,000	—	USA
	MEDICAL PHYSICS (SSDL) THA/6/017	1	49,000	—	USA
UNITED REPUBLIC OF TANZANIA	EPIDEMIOLOGY OF MALARIA URT/6/003	2	—	18,000	TACF
URUGUAY	RADIOCHEMISTRY URU/2/006	1	30,000	—	TACF
		—	20,000	—	USA
	ASSESSMENT OF SOIL EROSION LOSSES URU/5/015	5	—	—	TACF
	RADIOPHARMACOLOGY (DR) URU/6/013	1	35,000	—	USA
VIENTIANE	NON-DESTRUCTIVE TESTING VIE/8/005 <sup>b/</sup>	3	100,000	—	TACF
YUGOSLAVIA	GEOCHEMICAL FLUORIMETRIC LABORATORY YUG/3/008	2	40,000	—	GFR
	REACTOR SAFETY STUDIES YUG/9/018	3	—	—	USA
ZAIRE	RADIOACTIVITY MONITORING ZAI/9/003	—	—	9,000	TACF
		—	24,000	—	USA
REGIONAL LATIN AMERICA	NUCLEAR SCIENCE AND TECHNOLOGY DEVELOPMENT (ARCAL), RLA/0/006	—	42,000	—	GFR

<sup>a/</sup> Explanation of abbreviations: GFR = Federal Republic of Germany; ITA = Italy; TACF = Technical Assistance and Co-operation Fund; UK = United Kingdom; USA = United States of America; USSR = Union of Soviet Socialist Republics.

<sup>b/</sup> Project approved prior to 1985 and not included in the 1985 programme.

A N N E X I X  
APPROVALS AGAINST THE RESERVE FUND IN 1985

Recipient	Project title and number	Experts m/m	Equipment \$	Other \$	Total \$
<b>A. <u>New projects</u></b>					
Chile	Neutron dosimetry, CHI/1/013	-	25 000	-	25 000
China	Nuclear power plant engineering, CPR/4/002	4/00	-	-	25 000
	Radiation protection, CPR/9/003	4/00	-	-	25 000
Costa Rica	Food irradiation, COS/5/008	1/00	-	-	6 900
Ecuador	Nuclear research centre, ECU/4/003	1/00	-	-	6 900
Egypt	Research reactor planning, EGY/4/025	1/00	-	-	6 900
Gabon	Nuclear energy planning, GAB/0/002	3/00	-	-	20 700
Indonesia	Nuclear manpower development, INS/0/005	4/00	-	-	25 000
	Reorganization of BATAN's management and administration, INS/0/006	2/00	-	-	12 000
Liberia	Nuclear medicine, LIR/6/002	1/00	-	-	6 900
Malaysia	Radiation therapy, MAL/6/012	-	25 000	-	25 000
	Nuclear licensing and regulations, MAL/9/006	3/00	-	-	20 700
Mexico	Ecological modelling, MEX/9/028	2/00	11 200	-	25 000
Nicaragua	Natural resources, NIC/0/003	0/07	-	-	1 610
Pakistan	Radiation protection, PAK/9/007	2/00	-	-	13 800
Sudan	Liquid nitrogen plant, SUD/1/004	-	-	8 000 <sup>a/</sup>	8 000
U.A. Emirates	Isotopes in hydrology, UAE/8/002	0/15	16 550	-	20 000
Regional Africa	Reproduction, nutrition and health of livestock, RAF/5/006	5/00	-	-	25 000
	Isotopes in hydrology, RAF/8/009	2/00	-	-	13 800
Regional Asia and the Pacific	National training course on nuclear law, RAS/0/011	-	-	25 000 <sup>b/</sup>	25 000
Interregional	Nitrogen fixation studies, INT/5/099	-	25 000	-	25 000
Sub-total		35/22	102 750	33 000	363 210
<b>B. <u>Supplementary assistance to existing projects</u></b>					
Bolivia	Radioisotopes in agriculture, BOL/5/004	1/00	18 000	-	24 900
Chile	Nuclear cardiology, CHI/6/008	-	15 000	-	15 000
Iran, I.R.	Bushehr Nuclear Power Plant, IRA/9/009	1/00	-	-	6 900
Sub-total		2/00	33 000	-	46 800
TOTAL		37/22	135 750	33 000	410 010

a/ Approval for sub-contract.

b/ Approval for group-training.

A N N E X X  
CHANGES TO APPROVED PROJECTS

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Albania	Mossbauer spectroscopy, ALB/1/004	Experts Equipment (CC)	1/00 105 000	- 5 000
	Nuclear analytical laboratory, ALB/2/005	Experts Equipment (CC) Equipment (NCC)	4/02 205 000 -	- (18 500) 18 500
	Isotopes in agriculture, ALB/5/003	Equipment (CC)	25 000	3 500
Algeria	Activation analysis, ALG/0/006	Experts Equipment (CC)	9/00 241 000	(2/27) -
	Secondary standards dosimetry laboratory, ALG/1/005	Experts Equipment (CC) Equipment (NCC)	3/00 30 400 4 600	(1/23) - -
	Uranium prospection, ALG/3/003	Equipment (CC) Fellowships	20 000 9 000	- (9 000)
	Food irradiation, ALG/5/005	Experts Equipment (CC)	10/15 135 000	(3/00) 6 200
	Radiopharmaceutical quality control, ALG/6/003	Experts Equipment (CC)	2/00 96 000	- 6 000
Bangladesh	Secondary standards dosimetry laboratory, BGD/1/008	Experts Equipment (CC)	3/00 60 000	(1/00) 6 900
	Nuclear materials prospection, BGD/3/005	Experts Equipment (CC)	10/00 72 000	(0/21) 4 500
	Research reactor utilization, BGD/4/009	Experts Equipment (CC) Equipment (NCC)	6/00 70 000 60 000	- (21 000) 23 000
	Isotopes in agriculture, BGD/5/009	Experts Equipment (CC)	6/00 10 000	(6/00) 8 100
	Nitrogen fixation in grain legumes, BGD/5/012	Experts Equipment (CC) Equipment (NCC)	6/00 100 000 -	- 9 500 4 500
	Nuclear medicine, BGD/6/007	Experts Equipment (CC) Equipment (NCC)	12/00 79 500 94 000	- 20 000 (12 000)
	Radiation protection, BGD/9/004	Experts Equipment (CC) Equipment (NCC)	4/00 106 000 10 000	- (10 000) -
Bolivia	Quality control of radiopharmaceuticals, BOL/2/009	Experts Equipment (CC)	3/03 35 400	(1/00) 6 900
	Radioisotopes in agriculture, BOL/5/004	Experts Equipment (CC) Equipment (NCC)	6/15 <sup>a/</sup> 110 000 40 000	2/05 5 000 -
	Radiation protection, BOL/9/005	Experts Equipment (CC) Fellowships	7/00 90 000 24 000	- - (15 000)

<sup>a/</sup> Approvals as of 85-05-24.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Brazil	Technician training, BRA/0/009	Experts	16/00	(1/24)
	Isotope-aided studies of the Brazilian Amazon, BRA/0/010	Experts Equipment (CC)	20/00 —	(1/00) 240 000
	Equilibrium U-ores and geological materials, BRA/3/008	Equipment (CC)	24 000	2 900
	Uranium resources, BRA/3/010	Experts Equipment (CC) Fellowships	7/00 106 200 1 500	(2/15) 10 350 —
	Fuel elements design and engineering, BRA/4/028	Experts	5/06	(2/00)
	Quality assurance for nuclear power plants (CNEN), BRA/4/030	Experts	12/00	(2/00)
	Nuclear power plant simulator training, BRA/4/035	Experts Fellowships	13/00 6 000	— 6 000
	Nuclear power plant component testing, BRA/4/036	Experts Fellowships	6/00 38 160	(2/00) 18 000
	Agricultural research and development, BRA/5/009	Experts Equipment (CC) Equipment (NCC)	73/00 103 000 8 000	— — —
	Plant mutation breeding, BRA/5/013	Experts Equipment (CC)	4/00 18 000	— 4 000
	Animal science, BRA/5/015	Experts Equipment (CC) Fellowships	7/00 26 000 19 080	(1/20) — —
	Medfly eradication, BRA/5/016	Experts Equipment (CC) Equipment (NCC)	2/00 8 000 8 000	(2/00) — —
	Foliar fertilizer studies, BRA/5/017	Experts Equipment (CC) Equipment (NCC)	3/00 10 000 5 000	(1/00) — —
	Nitrogen-15 utilization, BRA/5/018	Experts Equipment (CC) Equipment (NCC)	6/00 60 000 29 000	(1/00) 15 000 13 000
	Radioisotopes in clinical medicine, BRA/6/008	Experts Equipment (CC)	6/00 71 696	1/00 —
	Radioisotopes in medicine, BRA/6/010	Experts Equipment (CC)	6/00 140 800	— 4 065
	Nuclear power programme, BRA/9/016	Experts	5/00	(1/00)
	Safety analysis: Angra units 2 and 3, BRA/9/017	Experts Fellowships	12/00 4 500	(2/00) 4 500
	Nuclear power plant siting, BRA/9/022	Experts Equipment (CC)	1/00 103 000	1/00 —
	Radiation protection (CDTN), BRA/9/026	Experts Equipment (CC) Fellowships	7/00 35 000 13 500	(2/00) — (4 500)
	Nuclear fuel cycle installation safety, BRA/9/027	Experts Fellowships	7/00 30 000	(1/00) (3 000)
Bulgaria	Radiation technology, BUL/8/009	Experts	1/00	1/00
		Equipment (CC)	100 000	45 000
		Equipment (NCC)	800 000	50 000

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Burma	Nuclear medicine services, BUR/6/014	Experts	12/00	-
		Equipment (CC)	107 000	-
		Equipment (NCC)	64 000	-
		Fellowships	54 000	(54 000)
	Tissue sterilization, BUR/7/004	Experts	4/00	-
		Equipment (CC)	49 000	3 000
		Equipment (NCC)	15 000	-
		Fellowships	12 000	-
Chile	Reactor materials corrosion studies, CHI/4/012	Experts	2/00	-
		Equipment (CC)	25 000	14 000
	Reproductive physiology of the vicuna, CHI/5/013	Experts	2/00	(0/09)
		Equipment	15 000	-
		Fellowships	4 500	(4 500)
	Isotopes in hydrology, CHI/8/013	Experts	2/00	-
		Equipment (CC)	6 000	1 000
	Pollution dispersion, CHI/8/015	Experts	2/00	-
		Equipment (CC)	2 000	(2 000)
	Evaluation of research reactor safety report, CHI/9/008	Experts	9/00	(1/17)
		Equipment (CC)	44 000	-
		Fellowships	51 600	(18 000)
	Waste management, CHI/9/010	Experts	6/00	(1/19)
		Equipment (CC)	22 000	-
		Fellowships	24 120	-
	Seismic telemetry network, CHI/9/011	Experts	3/00	(0/14)
		Equipment (CC)	95 000	-
	Accelerator utilization, CPR/1/002	Experts	-	1/00
		Equipment (CC)	23 000	-
	Nuclear safety course, CPR/9/002	Experts	5/00	4/15
		Miscellaneous	-	4 000
Colombia	X-ray fluorescence, COL/2/009	Experts	2/00	-
		Equipment (CC)	50 000	3 000
	Research reactor conversion, COL/4/006	Experts	5/00	1/00
		Equipment (CC)	33 000	-
	Irradiated vaccines against parasites, COL/5/005	Experts	8/20	(1/22)
		Equipment (CC)	93 000	-
	Studies on nitrogen fertilizer use efficiency, COL/5/007	Experts	13/00	(2/00)
		Equipment (CC)	108 000	22 700
		Equipment (NCC)	21 000	(4 900)
Costa Rica		Fellowships	38 160	(9 000)
	Applied nuclear physics, COS/1/005	Experts	8/00	(1/00)
		Equipment (CC)	204 000	-
		Equipment (NCC)	12 000	-
	Cryogenic services, COS/1/006	Equipment (CC)	9 000	-
		Equipment (NCC)	77 000	2 000
	Pesticide residues, COS/5/006	Experts	3/00	-
		Equipment (CC)	73 000	(5 000)
	Hormone profiles in cattle, COS/5/007	Experts	3/00	-
		Equipment (CC)	22 000	10 000
		Equipment (NCC)	5 000	-
	Nuclear medicine, COS/6/008	Experts	4/00	(2/00)
		Equipment (CC)	15 000	-



Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Cote d'Ivoire	Physiology of hevea, IVC/5/013	Experts Equipment (CC)	6/00 56 000	- 6 000
Cuba	Nuclear training, CUB/0/003	Experts Equipment (CC) Equipment (NCC)	18/00 80 000 67 000	- - 16 000
	Food irradiation, CUB/5/004	Experts Equipment (CC) Equipment (NCC)	1/00 1 000 927 000	- 7 000 (7 000)
	Nuclear cardiology, CUB/6/007	Experts Equipment (CC) Equipment (NCC) Fellowships	4/00 100 000 120 000 4 500	- - - 1 500
	Radioisotopes in biology, CUB/7/002	Experts Equipment (CC) Equipment (NCC)	3/00 45 000 20 000	0/15 4 000 -
	Environmental contamination, CUB/9/005	Equipment (CC) Equipment (NCC)	138 700 16 300	(5 000) -
	Radiation protection, CUB/9/006	Experts Equipment (CC)	1/00 77 000	(0/08) -
Cyprus	Nuclear techniques in animal production, CYP/5/013	Experts Equipment (CC)	5/00 100 000	(2/00) 13 800
Dem. P.R. Korea	Uranium ore and concentrate analysis, DRK/3/002	Experts Equipment (CC) Equipment (NCC)	2/00 121 000 20 000	(1/12) 10 000 -
	Cyclotron facility, DRK/4/002	Experts Equipment (CC) Equipment (NCC)	5/00 90 000 1 500 000	- - 185 000
	Fertilizer use efficiency studies, DRK/5/002	Experts Equipment (CC) Equipment (NCC)	4/00 65 000 20 000	- - 4 000
Dominican Rep.	Nuclear science laboratory, DOM/0/002	Experts Equipment (CC) Equipment (NCC)	9/00 205 000 30 000	2/00 2 000 (2 000)
	Nuclear analytical techniques, DOM/1/004	Experts Equipment (CC) Equipment (NCC)	4/00 70 000 80 000	(1/17) 2 300 -
Ecuador	Applied nuclear physics, ECU/1/004	Experts Equipment (CC)	8/00 262 000	(0/26) -
	Radiopharmaceutical production, ECU/2/007	Experts Equipment (CC) Equipment (NCC) Fellowships	6/00 130 000 100 000 71 640	- - - (6 000)
	Uranium prospection, ECU/3/005	Experts Equipment (CC)	19/00 10 000	(0/25) -
	Nuclear techniques in animal health and production, ECU/5/007	Experts Equipment (CC)	6/00 20 000	(2/00) 15 600
	Agricultural chemicals and residues, ECU/5/008	Experts Equipment (CC) Fellowships	15/00 39 000 48 240	(1/15) - (18 000)
	Nuclear techniques in agriculture, ECU/5/009	Experts Equipment (CC) Equipment (NCC) Fellowships	16/00 51 000 15 000 34 290	- - - (13 500)

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Ecuador (cont'd)	Radiation technology, ECU/8/005	Experts	7/06	-
		Equipment (CC)	31 000	20 000
		Equipment (NCC)	910 000	55 000
	Radiological safety inspection, ECU/9/007	Experts	2/00	-
		Equipment (CC)	77 000	20 000
Egypt	Activation analysis, EGY/1/012	Equipment (CC)	74 600	(1 500)
		Equipment (NCC)	45 000	-
	Neutron spectrometry, EGY/1/013	Experts	1/00	0/15
		Equipment (CC)	46 600	-
		Equipment (NCC)	50 000	-
	Manpower development: safety analysis review and evaluation, EGY/4/018	Experts	28/00	12/00
	Radioisotopes in agriculture, EGY/5/006	Experts	9/00	(2/00)
		Equipment (NCC)	41 000	-
	Radioisotopes in animal science, EGY/5/009	Experts	7/00	(2/16)
		Equipment (CC)	86 000	-
	Medfly control, EGY/5/012	Experts	14/00	7/15
		Equipment (CC)	70 000	-
	Medfly eradication (TCDC), EGY/5/014	Experts	17/00	(9/26)
		Fellowships	190 000	(91 520)
	Animal science (Pyramid Research Institute), EGY/5/015	Experts	4/00	(1/00)
		Equipment (CC)	52 000	7 000
	Waste management (liquid), EGY/9/007	Experts	10/00	(3/04)
		Equipment (CC)	285 000	-
		Equipment (NCC)	2 915 000	104 000
	Nuclear safety, EGY/9/014	Experts	21/00	-
		Equipment (CC)	30 000	3 000
	Radiation monitoring system, EGY/9/015	Equipment (CC)	100 000	-
		Equipment (NCC)	245 000	12 500
	Radiation protection, EGY/9/016	Experts	3/00	(1/00)
		Equipment (CC)	60 000	-
	Environmental radioactivity survey (INSHAS), EGY/9/017	Experts	3/00 <sup>b/</sup>	-
		Equipment (CC)	85 000	-
		Fellowships	12 000	(12 000)
El Salvador	Maintenance of nuclear instruments, ELS/4/002	Experts	3/00	(1/00)
		Equipment (CC)	50 000	-
		Fellowships	12 000	-
Ethiopia	Animal science, ETH/5/007	Experts	7/00	-
		Equipment (CC)	75 000	-
		Fellowships	38 160	(18 000)
	Isotopes in agriculture, ETH/5/008	Experts	5/00	-
		Equipment (CC)	47 000	14 500
		Equipment (NCC)	10 000	26 200
		Fellowships	28 080	(18 000)
	Radioisotopes in medicine, ETH/6/003	Experts	6/00	3/00
		Equipment (CC)	46 000	22 500
		Equipment (NCC)	37 000	-
	Radiation protection, ETH/9/004	Experts	7/00	(0/22)
		Equipment (CC)	80 000	-

<sup>b/</sup> Approvals as of 85-07-25.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Ghana	Secondary standards dosimetry laboratory, GHA/1/007	Experts	7/00	(3/00)
		Equipment (CC)	200 000	19 200
		Fellowships	36 000	(36 000)
	Training in nuclear instrumentation, GHA/4/008	Experts	3/00	-
		Equipment (CC)	48 000	3 500
	Nuclear agriculture centre, GHA/5/008	Experts	9/00	(2/00)
		Equipment (CC)	152 000	-
		Equipment (NCC)	10 000	-
Greece	Nuclear medicine, GHA/6/007	Experts	7/00	(6/13)
		Equipment (CC)	55 000	-
		Equipment (NCC)	42 000	(7 000)
	Neutron activation analysis, GRE/1/032	Equipment (CC)	25 000	2 100
		Experts	2/00	-
		Equipment (CC)	12 000	-
	Nuclear techniques in agriculture, GRE/5/015	Fellowships	1 500	(1 500)
Guatemala	X-ray fluorescence in mineral analysis, GUA/1/003	Experts	12/00	(0/23)
		Equipment (CC)	185 000	54 000
		Equipment (NCC)	30 000	-
	Uranium prospection, GUA/3/003	Experts	7/00	(2/00)
		Equipment (CC)	75 000	-
	Radioisotopes in agriculture, GUA/5/005	Experts	7/00	(1/12)
		Equipment (CC)	118 000	-
		Equipment (NCC)	5 000	-
		Fellowships	9 000	(3 000)
	Medfly eradication programme, GUA/5/006	Experts	2/00	(1/00)
		Equipment (CC)	60 000	-
		Fellowships	11 000	-
Hungary	Preparation and control of radiopharmaceuticals, GUA/6/006	Experts	4/00	(1/00)
		Equipment (CC)	99 500	-
		Equipment (NCC)	35 000	-
	Cyclotron laboratory, HUN/4/004	Experts	4/10	-
		Equipment (CC)	70 000	8 850
		Equipment (NCC)	1 937 254	(8 850)
	Thermohydraulic loop experiments, HUN/4/005	Experts	1/00	-
		Equipment (CC)	65 000	10 000
		Fellowships	4 500	-
Iceland	Food irradiation technology, HUN/8/006	Equipment (NCC)	388 908 <u>c/</u>	68 000
Indonesia	Radioisotopes in animal science, ICE/5/004	Experts	2/00	(1/00)
		Equipment (CC)	46 500	10 000
Indonesia	Nuclear magnetic resonance (NMR), INS/1/013	Experts	6/00	0/20
	Use of neutron beam in materials research, INS/1/014	Experts	14/00	(9/00)
		Equipment (CC)	-	61 200
	Utilization of multi-purpose research reactor, INS/1/015	Experts	8/00 <u>d/</u>	(8/00)
		Equipment (CC)	30 000	68 000
		Fellowships	6 000	(6 000)

c/ Approvals as of 85-01-30.

d/ Approvals as of 85-06-14.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Indonesia (cont'd)	Uranium prospection, INS/3/008	Experts	16/00	-
		Equipment (CC)	103 000	-
		Fellowships	15 000	(15 000)
	Reactor physics, INS/4/018	Experts	15/00	(2/00)
		Equipment (CC)	15 000	-
	Radioimmunoassay services, INS/6/003	Experts	4/00	-
		Equipment (CC)	35 000	3 400
	Radioactive waste management, INS/9/006	Experts	6/00	-
		Equipment (CC)	90 000	2 500
Iran, I.R.	Radioisotope production, IRA/2/004	Experts	4/00	-
		Equipment (CC)	34 163	25 000
	Bushehr nuclear power plant (BNPP), IRA/9/009	Experts	1/00 <sup>e/</sup>	-
		Equipment (CC)	-	500
Jamaica	Applied radiochemistry, JAM/2/003	Experts	13/06	(4/00)
		Equipment (CC)	145 400	27 600
	Research reactor centre, JAM/4/002	Experts	25/09	(4/00)
		Equipment (CC)	291 700	-
		Equipment (NCC)	15 000	-
	Hormone receptors in tissue, JAM/6/005	Equipment (CC)	12 000	2 200
Jordan	Energy and electricity planning, JOR/0/003	Experts	7/00	(2/27)
Kenya	Nuclear science laboratory, KEN/0/003	Experts	68/00	(8/00)
		Equipment (CC)	274 000	-
		Equipment (NCC)	15 000	-
	Nuclear techniques (accelerator study), KEN/1/003	Experts	5/00 <sup>f/</sup>	(1/16)
		Equipment (CC)	62 000	-
	Animal reproductive behaviour studies, KEN/5/011	Experts	5/00	-
		Equipment (CC)	44 000	-
		Fellowships	9 000	(9 000)
	Non-destructive testing, KEN/8/004	Experts	6/00	-
		Equipment (CC)	59 000	18 000
Korea, R.	Nuclear power plant quality assurance and start-up testing, ROK/4/013	Experts	21/00	-
		Equipment (CC)	55 000	-
		Fellowships	1 500	(1 500)
	Soi-water relationship studies, ROK/5/019	Experts	9/06	-
		Equipment (CC)	38 000	-
		Fellowships	9 000	(9 000)
	Radioisotopes in fertilizer studies, ROK/5/023	Experts	1/00	-
		Equipment (CC)	25 000	-
		Fellowships	10 500	(10 500)
	Nuclear power plant safety, ROK/9/013	Experts	22/15	(7/15)
		Equipment (CC)	30 000	-
	Radiation safety of nuclear power plants, ROK/9/018	Experts	6/00	(2/00)

<sup>e/</sup> Approvals as of 85-05-14.

<sup>f/</sup> Approvals as of 85-06-14.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985		
Korea, R. (cont'd)	Environmental radiation protection, ROK/9/026	Experts Equipment (CC)	2/00 66 000	3/00 -		
	Commissioning and start-up testing of nuclear power plants, ROK/9/027	Experts	55/00	7/00		
Libyan A.J.	Nuclear raw materials, LIB/3/004	Experts Equipment (CC)	9/15 57 000	(2/29) -		
		Fluoride chemistry, LIB/4/006	Experts Equipment (CC)	2/00 25 000	(1/25) -	
	Eradication of Mediterranean fruit fly, LIB/5/003	Experts Equipment (CC) Fellowships	12/00 84 000 54 960	(4/00) - 18 000		
		Fertilizer studies, LIB/5/004	Experts Equipment (CC) Equipment (NCC) Fellowships	7/00 40 000 10 000 19 080	- - - (9 000)	
			Siting of nuclear power plant, LIB/9/005	Experts Equipment (CC)	2/00 1 000	- (1 000)
	Madagascar		Nuclear physics, MAG/1/004	Experts Equipment (CC) Equipment (NCC)	19/00 233 800 -	(4/00) (25 800) 3 400
				Nuclear raw materials, MAG/3/004	Experts Equipment (CC) Fellowships	27/00 210 600 6 000
		Malaysia			Secondary standards dosimetry laboratory, MAL/1/003	Experts Equipment (CC) Equipment (NCC) Fellowships
	Radioisotopes in animal science, MAL/5/005		Experts Equipment (NCC)			2/11 56 500
			Pesticide residues, MAL/5/014	Experts Equipment (CC)		1/00 40 000
Nitrogen-15 fertilizer studies, MAL/5/018	Experts Equipment (CC) Equipment (NCC) Fellowships			7/00 10 000 30 000 34 260		- 11 600 (9 000) -
	Nuclear applications in industry, MAL/8/003		Experts Equipment (CC)	6/07 127 540	- 10 000	
Radiation processing facility, MAL/8/004			Experts Equipment (CC)	2/00 70 000	- (10 000)	
	Environmental monitoring, MAL/9/003		Experts Equipment (CC)	4/00 105 000	1/00 16 000	
Mali			Uranium exploration, MLI/3/005	Experts Equipment (CC) Fellowships	15/00 g/ 50 000 22 500	- - 9 000
	Radioisotopes in agriculture, MLI/5/004	Experts Equipment (CC) Fellowships		12/00 113 800 9 000	(1/20) (20 900) (9 000)	
		Radioisotopes in agrometeorology, MLI/5/007		Equipment (CC)	10 000	3 500

g/ Approvals as of 85-07-25.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Mali (cont'd)	Mutation breeding of rice and fonio, MLI/5/008	Experts	6/00	(2/00)
		Equipment (CC)	45 000	-
	Nuclear medicine, MLI/6/002	Experts	19/20	(3/00)
		Equipment (CC)	128 500	-
		Equipment (NCC)	60 000	-
	Radioisotopes in hydrology, MLI/8/002	Experts	13/00	-
		Equipment (CC)	203 400	-
		Fellowships	4 500	(4 500)
Mauritius	Sedimentology, MLI/8/003	Experts	6/00	(2/27)
		Equipment (CC)	150 000	-
	Studies on soil moisture and fertilizer use efficiency, MAR/5/004	Experts	6/00	-
		Equipment (CC)	87 500	-
		Equipment (NCC)	25 000	(25 000)
	Nuclear medicine, MAR/6/002	Experts	9/00	-
		Equipment (CC)	49 000	-
		Equipment (NCC)	40 000	-
		Fellowships	28 080	(18 000)
Mexico	Nuclear applications, MEX/0/008	Experts	10/00	-
		Equipment (CC)	28 000	3 500
		Fellowships	13 080	(3 000)
	Secondary standards dosimetry laboratory, MEX/1/013	Experts	1/00	(0/15)
		Equipment (CC)	20 000	3 000
	Fuel elements, MEX/4/031	Experts	7/00	(3/00)
		Equipment (CC)	130 000	29 900
	Research reactor instrumentation and control, MEX/4/033	Experts	2/00	1/00
		Equipment (CC)	12 000	-
	Mediterranean fruit fly control, MEX/5/007	Experts	3/00	-
		Equipment (CC)	40 000	(2 010)
	Ruminant reproduction studies, MEX/5/012	Experts	4/00	(1/00)
		Equipment (CC)	65 000	6 900
		Equipment (NCC)	8 000	-
	Plant mutation breeding, MEX/5/013	Experts	1/00	-
		Equipment (CC)	16 000	3 859
	Isotopes in hydrology, MEX/8/009	Experts	2/15	-
		Equipment (CC)	2 400	3 000
	Industrial irradiation, MEX/8/011	Experts	3/00	(0/07)
	Application of radiation, MEX/8/012	Experts	12/00	(2/22)
	Nuclear power plant safety evaluation, MEX/9/020	Experts	31/00	1/00
		Equipment (CC)	21 600	-
	Nuclear power programme, MEX/9/022	Experts	25/00	(1/00)
	Quality certification, MEX/9/027	Experts	28/00	(2/10)
	Ecological modelling, MEX/9/028	Experts	3/00 <sup>h/</sup>	(0/23)
		Equipment (CC)	27 000	5 000
	Probabilistic risk analysis, MEX/9/031	Experts	6/00	-
		Fellowships	21 000	(9 000)

<sup>h/</sup> Approvals as of 85-02-15.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Mongolia	Application of nuclear technology, MON/0/002	Experts	12/00	-
		Equipment (CC)	309 000	28 000
		Equipment (NCC)	51 000	5 700
		Fellowships	9 000	(9 000)
Morocco	Nuclear legislation and regulatory activities, MOR/0/002	Experts	3/00	-
		Fellowships	36 000	(9 000)
	Training and research in nuclear science, MOR/1/006	Experts	2/00	-
		Equipment (CC)	25 000	2 500
	Raw materials, MOR/3/007	Experts	6/00	(5/00)
		Equipment (CC)	39 000	-
		Fellowships	9 000	(9 000)
	Radioisotopes in agriculture, MOR/5/013	Experts	18/00	(2/01)
		Equipment (CC)	66 000	-
		Equipment (NCC)	83 000	-
		Fellowships	19 080	(9 000)
	Radiation protection, MOR/9/005	Experts	1/00	(0/24)
		Equipment (CC)	40 000	5 600
		Fellowships	9 000	(7 500)
Nicaragua	Nuclear medicine services, NIC/6/002	Experts	7/00	-
		Equipment (CC)	20 000	19 000
		Equipment (NCC)	80 000	-
		Fellowships	27 000	(9 000)
Niger	Radiosotope laboratory, NER/0/003	Experts	36/00	(1/00)
		Equipment (CC)	217 300	(27 500)
		Equipment (NCC)	20 000	-
		Fellowships	36 000	-
	Nuclear techniques in animal production, NER/5/005	Experts	4/00	(2/00)
		Equipment (CC)	80 000	13 800
	Radioisotopes in hydrology, NER/8/003	Experts	9/01	(3/28)
		Equipment (CC)	118 820	-
Nigeria	Radiation protection in uranium mining and milling, NER/9/005	Experts	9 000	-
		Equipment (CC)	75 000	(2/00)
	Nuclear physics (ILORIN), NIR/1/005	Experts	4/00	-
		Equipment (CC)	18 000	(6 600)
	Nuclear medicine, NIR/6/003	Experts	1/00	-
		Equipment (CC)	40 000	700
		Fellowships	18 000	-
	Nuclear physics (ILORIN), NIR/1/005	Equipment (CC)	18 000	(6 600)
Pakistan	Secondary standards dosimetry laboratory, PAK/1/019	Experts	6/00	-
		Equipment (CC)	245 000	3 300
	KANUPP electronic systems development, PAK/4/023	Experts	1/00	-
		Equipment (CC)	151 000	(20 500)
	Nuclear power plant electronics and computer maintenance, PAK/4/024	Experts	15 000	3 000
		Equipment (CC)	15 000	3 000
	Radioisotopes in agriculture, PAK/5/017	Experts	4/00	-
		Equipment (CC)	71 600	(10 000)
		Equipment (NCC)	25 000	-
	Radiation preservation of dried fruit, PAK/5/019	Experts	3/00	-
		Equipment (CC)	37 000	(10 000)
	Radioimmunoassay, PAK/6/007	Experts	4/00	-
		Equipment (CC)	47 000	-
		Fellowships	7 500	(7 500)
	Gamma radiography, PAK/8/006	Equipment (NCC)	27 000	(4 000)
	Gamma spectroscopy training, PAK/9/006	Equipment (CC)	8 000	4 000

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Panama	Radiopharmaceuticals, PAN/2/003	Experts	9/00	(2/00)
		Equipment (CC)	184 100	-
		Equipment (NCC)	5 900	-
	Radioisotopes in agriculture, PAN/5/003	Experts	9/00	(1/00)
		Equipment (CC)	82 000	20 700
	Nuclear medicine, PAN/6/005	Experts	2/00	(0/25)
		Equipment (CC)	32 000	-
		Equipment (NCC)	56 000	-
Paraguay	Nuclear science, PAR/1/002	Experts	18/00	-
		Equipment (CC)	358 000	-
		Fellowships	28 620	(13 500)
	Radioimmunoassay, PAR/6/004	Experts	8/00	-
		Equipment (CC)	49 000	-
		Fellowships	18 000	(18 000)
Peru	Nuclear medicine, PAR/6/006	Equipment (CC)	100 500	9 000
		Equipment (NCC)	57 500	-
	Development of nuclear research centre, PER/0/011	Experts	3/00 <sup>i/</sup>	-
		Equipment (CC)	180 000	13 000
	Nuclear power planning, PER/4/008	Experts	23/15	(1/15)
		Equipment (CC)		
	Radioisotopes in agriculture, PER/5/009	Experts	7/00	-
		Equipment (CC)	20 100	229
	Medfly control, PER/5/012	Experts	126/00	18/00
		Equipment (CC)	910 600	120 000
	Nuclear techniques in agriculture, PER/5/014	Experts	8/00	(0/15)
		Equipment (CC)	57 000	8 200
	Nuclear medicine, PER/6/004	Experts	5/00	(0/24)
		Equipment (CC)	34 000	300
	Nuclear safety, PER/9/011	Experts	9/00	(0/20)
		Equipment (CC)	60 000	-
		Equipment (NCC)	15 000	-
Philippines	Nuclear power plant siting, PER/9/012	Experts	9/00	(0/14)
		Equipment (CC)		
	Radiation protection, PER/9/014	Experts	3/00	(1/00)
		Equipment (CC)	10 000	-
		Equipment (NCC)	13 000	-
		Fellowships	9 000	-
	Environmental radioactivity, PER/9/015	Experts	4/00	(2/00)
		Equipment (CC)	52 000	-
		Fellowships	3 000	(3 000)
	Nuclear physics research, PHI/1/013	Experts	1/00	(0/20)
		Equipment (CC)	-	4 600
Philippines	Radioimmunoassay, PHI/2/007	Experts	6/00	-
		Equipment (CC)	37 000	(4 500)
	Quality assurance/quality control training centre, PHI/4/016	Experts	19/00	0/15
		Equipment (CC)	50 000	-
		Subcontracts	72 600	-
	Pesticide residues, PHI/5/017	Experts	4/00	-
		Equipment (CC)	55 000	6 500
	Medical physics training, PHI/6/010	Experts	15/00	6/00
		Equipment (CC)	107 000	(41 400)

<sup>i/</sup> Approvals as of 85-06-14.



Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Philippines (cont'd)	Sterilization of medical products, PHI/8/009	Experts Equipment (CC)	1/00 212 000	- 9 000
	Nuclear licensing and regulation, PHI/9/013	Experts	14/00	0/15
	Radioactive waste management, PHI/9/016	Experts Equipment (CC) Fellowships	4/00 30 000 39 240	- - (9 000)
Poland	Mass spectrometry, POL/1/006	Experts Equipment (NCC)	1/00 <sup>i/</sup> 200 000	- 79 000
	Radiochemical laboratory, POL/2/009	Experts Equipment (CC)	1/15 16 900	- 2 000
	Electron beam radiation processing, POL/4/003	Experts Equipment (CC) Equipment (NCC)	2/04 161 000 950 000	- (61 000) 83 000
	Use of linear accelerator, POL/4/004	Experts Equipment (CC)	0/20 70 000	0/15 -
Portugal	Accelerator utilization, POR/1/003	Experts Equipment (CC) Equipment (NCC)	1/00 91 000 10 000	- 4 000 -
	Irradiation facility, POR/8/002	Experts Equipment (CC) Equipment (NCC) Fellowships	3/00 <sup>k/</sup> 124 500 678 500 7 500	- 500 20 000 (7 500)
	Low-level radioactivity measurements, POR/8/003	Experts Equipment (CC)	- 45 000	0/15 -
Romania	Applied actinide research, ROM/1/005	Experts Equipment (CC) Fellowships	4/05 <sup>l/</sup> 601 000 27 000	(1/00) 6 900 -
	Dosimetry instrumentation, ROM/1/007	Experts Equipment (CC) Equipment (NCC) Fellowships	6/00 280 000 200 000 9 000	- - - (9 000)
	Heavy ion physics, ROM/1/009	Experts Equipment (CC) Fellowships	2/00 <sup>m/</sup> 15 000 3 000	- 4 000 (3 000)
	Radiation polymerization, ROM/8/008	Equipment (CC)	15 000	5 000
Sierra Leone	Nuclear science laboratory, SIL/0/004	Experts Equipment (CC)	12/00 60 000	(4/18) 10 000
Singapore	Nuclear analytical techniques, SIN/1/004	Experts Equipment (CC)	15/00 121 500	- 5 000
	Industrial applications, SIN/8/009	Experts Equipment (CC)	4/00 95 000	- (20 000)

<sup>i/</sup> Approvals as of 85-01-30.

<sup>k/</sup> Approvals as of 85-07-25.

<sup>l/</sup> Approvals as of 85-05-16.

<sup>m/</sup> Approvals as of 85-05-16.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Spain	Environmental radioactivity monitoring, monitoring, SPA/9/005	Experts	6/00	2/00
Sri Lanka	Prospection and extraction of radioactive materials, SRL/3/005	Experts	1/00	-
		Fellowships	12 000	(12 000)
	Crop water and soil management, SRL/5/016	Experts	8/00 <u>n/</u>	-
		Equipment (CC)	160 000	(10 000)
		Fellowships	19 500	-
	Radioisotopes in animal science, SRL/5/018	Experts	3/00	-
		Equipment (CC)	75 000	-
		Fellowships	9 540	(4 500)
	Mutation breeding, SRL/5/020	Experts	3/00	-
		Equipment (CC)	35 000	-
		Fellowships	30 000	(30 000)
	Nuclear medicine, SRL/6/009	Experts	5/00	2/00
		Equipment (CC)	35 400	-
		Equipment (NCC)	12 000	-
Sudan	Radioimmunoassay in blood sample analysis, SRL/6/012	Experts	1/00	-
		Equipment (CC)	48 000	(3 000)
	Organ imaging, SRL/6/013	Experts	4/00	-
		Equipment (CC)	28 000	5 600
		Equipment (NCC)	20 000	(2 200)
	Radiation sterilization for tissue bank, SRL/7/002	Experts	1/00	-
		Fellowships	1 500	(1 500)
	X-ray fluorescence analysis, SRL/8/012	Equipment (CC)	50 000	(5 000)
Syrian A. R.	Nuclear science laboratory, SUD/0/006	Experts	20/00 <u>o/</u>	-
		Equipment (CC)	394 900	35 000
		Equipment (NCC)	52 100	-
	Mutation breeding, SUD/5/017	Experts	12/00	-
		Equipment (CC)	30 000	-
		Equipment (NCC)	17 000	-
		Fellowships	25 920	(4 500)
	Nuclear training laboratory, SYR/0/004	Equipment (CC)	30 000	17 300
	Nuclear analytical laboratory, SYR/1/002	Experts	13/00 <u>p/</u>	-
		Equipment (CC)	315 500	2 600
		Fellowships	9 000	(9 000)
	Uranium exploration, SYR/3/002	Experts	19/00	-
		Equipment (CC)	56 000	22 000
	Research reactor, SYR/4/002	Experts	9/00	(5/00)
		Subcontracts	-	35 950
	Soil nitrogen studies, SYR/5/009	Experts	3/00	-
		Equipment (CC)	40 000	10 000
		Fellowships	16 080	-
	Radiation protection, SYR/9/003	Experts	2/00	-
		Equipment (CC)	175 000 <u>q/</u>	-
		Fellowships	18 000	6 000

n/ Approvals as of 85-05-10.

o/ Approvals as of 85-05-10.

p/ Approvals as of 85-05-10

q/ Approvals as of 85-07-25.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Thailand	Nuclear physics, THA/1/005	Experts	15/00	1/00
		Equipment (CC)	215 000	15 000
		Equipment (NCC)	60 000	10 000
		Fellowships	7 500	-
	Nuclear electronics training laboratory, THA/4/009	Experts	6/00	-
		Equipment (CC)	51 000	(10 000)
Tunisia	Nuclear cardiology, THA/6/018	Experts	4/00	-
		Equipment (CC)	126 000	(35 000)
	Nuclear techniques in agriculture, TUN/5/007	Experts	-	1/00
		Equipment (CC)	26 000	(7 500)
	Nuclear medicine, TUN/6/002	Experts	8/00	(3/15)
		Equipment (CC)	65 000	9 500
	Hydrology, TUN/8/009	Experts	8/00	(1/21)
		Equipment (CC)	75 000	-
		Fellowships	3 000	-
	National radiation protection centre, TUN/9/005	Experts	8/00	(1/25)
		Equipment (CC)	176 000	-
		Fellowships	27 480	-
Turkey	Nuclear power programme, TUR/9/005	Experts	139/15	(4/09)
		Equipment (CC)	50 000	69 090
		Fellowships	127 200	8 000
		Subcontracts	60 000	(22 150)
	Radioactive waste disposal, TUR/9/007	Experts	5/00	-
		Equipment (CC)	60 000	-
Uganda	Animal science, UGA/5/009	Fellowships	4 500	(4 500)
		Experts	5/00	-
		Equipment (CC)	45 000	11 000
		Equipment (NCC)	50 000	(7 000)
		Fellowships	6 000	(6 000)
U.R. Tanzania	Nuclear physics, URT/1/003	Experts	16/11	-
		Equipment (CC)	195 600	41 500
		Equipment (NCC)	97 000	-
	Acaricide residues in meat and milk, URT/5/006	Experts	11/00	-
		Equipment (CC)	112 000	5 000
	Epidemiology of malaria, URT/6/003	Experts	3/00 r/	-
		Fellowships	18 000	(18 000)
	Sediment dynamics, URT/8/005	Experts	2/00	-
		Equipment (CC)	31 000	2 500
	Radiation protection, URT/9/002	Experts	5/15	-
		Equipment (CC)	50 000	10 000
		Fellowships	9 000	18 000
Uruguay	Nuclear technology centre, URU/0/007	Experts	8/00	(2/00)
		Equipment (CC)	100 000	24 600
	Secondary standards dosimetry laboratory, URU/1/004	Experts	2/00	(1/00)
		Equipment (CC)	45 000	8 900
	Isotopes in agriculture, URU/5/012	Experts	2/00	-
		Equipment (CC)	46 400	13 500
		Equipment (NCC)	30 000	200

r/ Approvals as of 85-07-25.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Uruguay (cont'd)	Radioisotopes in animal science, URU/5/013	Experts Equipment (CC)	7/15 92 000	(0/20) -
	Nitrogen fertilizer use efficiency, URU/5/014	Experts Equipment (CC)	3/00 23 000	- 9 000
	Assessment of soil erosion losses, URU/5/015	Experts	5/00 <u>s/</u>	(2/00)
	Radiopharmacology (DR), URU/6/013	Experts Equipment (CC)	4/00 <u>t/</u> 90 000	- 5 200
	Radiological protection, URU/9/003	Experts Equipment (CC)	2/00 25 000	(1/00) -
Venezuela	Thermoluminescence dosimetry, VEN/1/005	Experts Equipment (CC)	4/00 -	(3/00) 19 800
	Uranium recovery, VEN/3/004	Experts	2/00	(1/00)
	Moessbauer spectrometry, VEN/4/007	Experts Equipment (CC)	3/15 80 200	- 8 700
	Improvement of leguminous and oil seed crops, VEN/5/008	Experts Equipment (CC) Equipment (NCC)	20/00 58 000 28 000	6/15 3 000 -
	Centre for nuclear agriculture, VEN/5/009	Experts Equipment (CC) Fellowships	9/00 50 000 27 000	- (3 000) -
	Sedimentological studies, VEN/8/007	Experts Equipment (CC) Fellowships	4/00 65 000 12 000	- 2 000 -
	Repository for radioactive waste, VEN/9/002	Experts	1/00	(0/15)
Viet Nam	Nuclear institute development, VIE/0/002	Experts Equipment (CC) Equipment (NCC)	10/00 205 000 10 000	(2/00) 33 200 -
	Non-destructive testing, VIE/8/005	Experts Equipment (CC) Equipment (NCC)	3/00 <u>u/</u> 100 000 -	- (17 000) 17 000
Yugoslavia	Prevlaka nuclear power plant, YUG/4/021	Experts Equipment (CC) Subcontracts	27/00 35 000 6 600	- 12 500 -
	Heat exchanger corrosion studies, YUG/4/023	Equipment (CC)	148 525	37 000
	Reactor safety studies, YUG/9/018	Experts Equipment (CC) Fellowships	13/00 161 000 9 000	- - 2 000
	Computer-aided safety analysis, YUG/9/019	Experts Equipment (CC)	2/00 25 000	0/10 -

s/ Approvals as of 85-07-25.

t/ Approvals as of 85-07-25.

u/ Approvals as of 85-06-14.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Zaire	Neutron activation, ZAI/2/007	Experts Equipment (CC)	9/01 60 240	(2/08) -
	Radioisotopes in agriculture, ZAI/5/003	Experts Equipment (CC)	7/00 5 000	(0/17) 17 500
	Radioisotopes in agriculture, ZAI/5/006	Experts Equipment (CC) Equipment (NCC)	8/00 89 200 40 000	(3/16) - -
	Food preservation, ZAI/5/007	Experts Equipment (CC)	1/25 10 000	(0/11) 2 000
	Nuclear medicine, ZAI/6/005	Equipment (CC)	7 000	3 000
	Industrial application of nuclear techniques, ZAI/8/007	Experts Equipment (CC)	- 32 000	3/00 -
	Radioactivity monitoring, ZAI/9/003	Experts Equipment (CC)	1/00 52 000	- 5 000
Zambia	Nuclear raw materials, ZAM/3/003	Experts Equipment (CC) Fellowships	33/20 49 500 18 000	- 6 000 -
	Tsetse fly control, ZAM/5/009	Experts Equipment (CC) Equipment (NCC) Fellowships	11/00 165 500 15 000 13 500	(3/12) - - -
	Radioisotopes in animal science, ZAM/5/010	Experts Equipment (CC) Fellowships	5/00 72 000 4 500	- 2 000 -
	Isotopes in agriculture (soil moisture studies), ZAM/5/012	Experts Equipment (CC) Equipment (NCC) Fellowships	3/00 87 000 12 000 18 000	- - - (18 000)
	Multi-purpose gamma irradiation facility, ZAM/8/003	Experts Equipment (CC) Equipment (NCC)	4/00 450 000 100 000	- (16 000) 16 000
	Radiation protection services, ZAM/9/004	Experts Equipment (CC)	8/00 35 000	(3/10) 10 000
Regional Africa	Microcomputers, RAF/0/002	Experts Equipment (CC)	19/00 169 700	(1/00) 6 900
	Nuclear techniques in insect physiology and biochemistry, RAF/5/004	Experts Equipment (CC)	6/00 108 000	1/00 -
	Water resources in North Africa, RAF/8/007	Experts Equipment (CC)	8/00 160 000	3/00 -
Regional Asia and Pacific	Quality control of nuclear medicine procedures in vivo, RAS/6/004	Experts Equipment (CC)	8/00 55 000	2/00 (13 800)
	Radioisotopes in industry, RAS/8/011	Experts Equipment (CC)	116/15 <u>v/</u> 49 572	6/00 -
Regional Europe	Computer-aided safety analysis, RER/9/002	Experts Equipment (CC) Subcontracts	36/20 121 600 180 000	23/00 (170 000) 240 000

v/ Approvals as of 85-05-20.

Recipient	Project title and code	Component	Existing approval 1 January 1985	Project changes in 1985
Regional Latin America	Nuclear science and technology development (ARCAL), RLA/0/006	Experts	47/00	5/00
		Equipment (CC)	150 000	19 200
		Fellowships	36 000	46 300
	Nuclear information, RLA/0/009	Experts	6/00	—
		Subcontracts	—	25 000
	Ecological studies of the Amazon basin, RLA/5/016	Experts	27/00	(8/07)
	Non-destructive testing in Latin America, RLA/8/005	Experts	90/10	25/00
		Equipment (CC)	236 300	(104 500)
		Group Training	—	70 000
Interregional	Energy and nuclear power planning, INT/0/037	Experts	52/00	—
		Equipment (CC)	—	1 000
	Pre-project assistance, INT/0/038	Experts	27/00	3/00
		Equipment (CC)	10 000	—
	Equipment maintenance training, INT/1/028	Experts	2/00	—
		Equipment (NCC)	72 226	4 774
	Nuclear power programme implementation, INT/4/079	Experts	8/00	2/00
		Equipment (CC)	10 000	—
	Radiation protection services, INT/9/064	Experts	36/00	(1/00)
		Equipment (CC)	55 000	13 400
	Operational safety of nuclear installations, INT/9/065	Experts	48/00	7/00
Totals		Experts	3 001/18	(92/10)
		Equipment (CC)	23 703 956	1 105 933
		Equipment (NCC)	10 220 388	733 985
		Fellowships	1 909 650	(533 220)
		Subcontracts	319 200	278 800
		Group Training	—	70 000
		Miscellaneous	—	4 000

ANNEX XI  
PROJECTS REPHASED DURING 1985

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Algeria	Activation analysis, ALG/0/006	Experts	Approved Rephased	9/00 (3/00)	- 3/00	- -	- -
		Equipment (CC)	Approved Rephased	241 000 (30 000)	- 30 000	- -	- -
	Radiopharmaceutical quality control, ALG/6/003	Equipment (CC)	Approved Rephased	96 000 (30 000)	- 30 000	- -	- -
Bangladesh	Nuclear materials prospection, BGD/3/005	Experts	Approved Rephased	10/00 (3/00)	- 3/00	- -	- -
	Reactor utilization (isotope production), BGD/4/006	Equipment (CC)	Approved Rephased	251 000 54 000	150 000 (4 000)	60 000 (50 000)	- -
	Research reactor commissioning, BGD/4/008	Experts	Approved Rephased	4/00 (3/00)	- 3/00	- -	- -
	Research reactor utilization, BGD/4/009	Experts	Approved Rephased	6/00 (3/00)	- 3/00	- -	- -
	Nuclear medicine, (BGD/6/007)	Experts	Approved Rephased	9/00 (3/00)	3/00 3/00	- -	- -
	Tracers in sedimentology, (BGD/8/004)	Experts	Approved Rephased	6/00 (4/00)	- 4/00	- -	- -
Bolivia	X-ray fluorescence, BOL/2/008	Experts	Approved Rephased	2/00 (2/00)	2/00 2/00	- -	- -
		Equipment (CC)	Approved Rephased	114 000 (20 000)	- 20 000	- -	- -
		Fellowships	Approved Rephased	6 000 (6 000)	- 6 000	- -	- -
	Radiation protection, BOL/9/005	Experts	Approved Rephased	5/00 (1/00)	2/00 -	- 1/00	- -
		Equipment (CC)	Approved Rephased	80 000 (20 000)	10 000 20 000	- -	- -
		Fellowships	Approved Rephased	24 000 (9 000)	- 9 000	- -	- -
Brazil	Animal science, BRA/5/015	Equipment (CC)	Approved Rephased	21 000 3 000	5 000 (3 000)	- -	- -
	Radiation protection (CDTN), BRA/9/026	Equipment (CC)	Approved Rephased	35 000 (35 000)	- 35 000	- -	- -
Bulgaria	Research reactor modernization, BUL/4/002	Equipment (CC)	Approved Rephased	90 000 (20 000)	- -	- 20 000	- -
	Sterilization of medical supplies, BUL/8/008	Experts	Approved Rephased	3/00 (1/00)	1/00 -	- 1/00	- -
	Radiation technology, BUL/8/009	Equipment (NCC)	Approved Rephased	50 000 200 000	200 000 -	300 000 (100 000)	300 000 (100 000)

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Burma	Nuclear instrumentation, BUR/4/005	Experts	Approved Rephased	6/00 (6/00)	- 3/00	- 3/00	- -
	Radioisotopes in agriculture, BUR/5/005	Experts	Approved Rephased	6/00 (2/00)	- 2/00	- -	- -
	Nuclear medicine services, BUR/6/014	Experts	Approved Rephased	12/00 (12/00)	- 6/00	- 6/00	- -
	Environmental radiation monitoring, BUR/9/002	Experts	Approved Rephased	3/00 (3/00)	3/00 3/00	- -	- -
Chile	Neutron dosimetry, CHI/1/013	Experts	Approved Rephased	4/00 (2/00)	- 2/00	- -	- -
	Development of radiopharmaceuticals, CHI/2/008	Equipment (CC)	Approved Rephased	18 000 4 000	35 000 (4 000)	25 000 -	- -
	Irradiation and testing of reactor materials, CHI/4/010	Experts	Approved Rephased	4/00 (2/00)	- 2/00	- -	- -
Colombia	Nuclear instrumentation, COL/4/007	Equipment (CC)	Approved Rephased	25 000 (25 000)	25 000 10 000	35 000 15 000	- -
	Studies on nitrogen fertilizer use efficiency, COL/5/007	Equipment (CC)	Approved Rephased	93 000 15 000	15 000 (15 000)	- -	- -
Costa Rica	Isotopes in hydrology, COS/8/002	Experts	Approved Rephased	2/00 (1/00)	- 1/00	- -	- -
Cote d'Ivoire	Nuclear science laboratory, IVC/0/003	Equipment (CC)	Approved Rephased	210 000 (20 000)	- -	- 20 000	- -
Cuba	Nuclear training, CUB/0/003	Experts	Approved Rephased	15/00 (6/00)	3/00 3/00	- 3/00	- -
	Nuclear cardiology, CUB/6/007	Experts	Approved Rephased	4/00 (4/00)	- 3/00	- 1/00	- -
Dem. P.R. Korea	Cyclotron facility, DRK/4/002	Equipment (CC)	Approved Rephased	- 70 000	- -	70 000 (50 000)	20 000 (20 000)
	Fertilizer use efficiency studies, DRK/5/002	Experts	Approved Rephased	4/00 (2/00)	- 2/00	- -	- -
	Radiation therapy, DRK/6/002	Experts	Approved Rephased	1/00 (1/00)	- 1/00	- -	- -
Ecuador	Uranium prospection, ECU/3/005	Experts	Approved Rephased	19/00 (4/00)	- 4/00	- -	- -
	Nuclear techniques in animal health and production, ECU/5/006	Experts	Approved Rephased	13/08 (1/00)	1/00 1/00	- -	- -
	Nuclear techniques in agriculture, ECU/5/009	Experts	Approved Rephased	3/00 (2/00)	12/00 -	1/00 2/00	- -
	Radiological safety inspection, ECU/9/007	Experts	Approved Rephased	2/00 (1/00)	- 1/00	- -	- -



Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Egypt	Neutron scattering, EGY/1/016	Experts	Approved Rephased	4/00 (4/00)	- 4/00	- -	- -
		Equipment (NCC)	Approved Rephased	20 000 (20 000)	- 20 000	- -	- -
	Production of radioisotopes, EGY/4/023	Experts	Approved Rephased	2/00 (2/00)	- 2/00	- -	- -
		Equipment (CC)	Approved Rephased	40 000 (40 000)	- 40 000	- -	- -
	Waste management (liquid), EGY/9/007	Equipment (CC)	Approved Rephased	195 000 10 000	90 000 (10 000)	- -	- -
	Management of solid waste, EGY/9/012	Experts	Approved Rephased	1/15 (1/00)	- -	- -	- 1/00
		Equipment (NCC)	Approved Rephased	75 000 (75 000)	- -	- -	- 75 000
El Salvador	Maintenance of nuclear instruments, ELS/4/002	Fellowships	Approved Rephased	12 000 (12 000)	- 12 000	- -	- -
Ethiopia	Radiation protection, ETH/9/004	Experts	Approved Rephased	7/00 (3/00)	- 3/00	- -	- -
Ghana	Gamma irradiation facility, GHA/8/004	Experts	Approved Rephased	2/18 (1/00)	- 1/00	- -	- -
		Equipment (CC)	Approved Rephased	72 248 (66 000)	- 66 000	- -	- -
Greece	Research reactor modernization, GRE/4/008	Equipment (CC)	Approved Rephased	100 000 (40 000)	29 500 -	- 40 000	- -
Guatemala	X-ray fluorescence in mineral analysis, GUA/1/003	Experts	Approved Rephased	9/00 (2/00)	2/00 1/00	1/00 1/00	- -
		Equipment (CC)	Approved Rephased	115 000 11 000	30 000 (11 000)	40 000 -	- -
	Uranium prospection, GUA/3/003	Experts	Approved Rephased	6/00 (3/00)	- 3/00	- -	- -
	Radioisotopes in agriculture, GUA/5/005	Experts	Approved Rephased	7/00 (3/00)	- 3/00	- -	- -
Hungary	Cyclotron laboratory, HUN/4/004	Experts	Approved Rephased	3/10 (1/00)	1/00 -	- 1/00	- -
Indonesia	Uranium prospection, INS/3/008	Experts	Approved Rephased	14/00 (3/00)	2/00 3/00	- -	- -
	Fuel element technology, INS/4/017	Experts	Approved Rephased	7/00 (6/00)	- 3/00	- 3/00	- -
	Reactor physics, INS/4/018	Experts	Approved Rephased	15/00 (7/00)	- 5/00	- 2/00	- -
	Nuclear instrument maintenance, INS/4/020	Experts	Approved Rephased	7/00 (3/00)	- 3/00	- -	- -

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Iran, I.R.	Radioisotope production, IRA/2/004	Experts	Approved Rephased	2/00 (2/00)	2/00 -	- 2/00	- -
	Uranium exploration, IRA/3/002	Experts	Approved Rephased	6/00 (5/00)	- 3/00	- 2/00	- -
	Nuclear reactor design, IRA/4/016	Fellowships	Approved Rephased	15 000 (10 000)	- -	- 10 000	- -
Iraq	Dosimetry and nuclear instrumentation laboratory, IRQ/9/005	Fellowships	Approved Rephased	12 000 (12 000)	- -	- 12 000	- -
Jamaica	Research reactor centre, JAM/4/002	Equipment (CC)	Approved Rephased	201 700 8 000	50 000 (8 000)	40 000 -	- -
Jordan	Radiation and radioisotope laboratory, JOR/0/004	Equipment (CC)	Approved Rephased	50 000 37 000	150 000 (37 000)	- -	- -
	Radiochemical laboratory, JOR/2/002	Equipment (CC)	Approved Rephased	10 000 15 000	90 000 (15 000)	50 000 -	- -
	Isotopes in hydrology, JOR/8/003	Equipment (CC)	Approved Rephased	135 000 (80 000)	100 000 -	- 80 000	- -
Korea, R.	Nuclear manpower development, ROK/4/012	Experts	Approved Rephased	11/00 (3/00)	- 3/00	- -	- -
	Radioactive waste disposal (KAERI), ROK/9/021	Experts	Approved Rephased	6/00 (2/00)	- -	- 2/00	- -
	Nuclear power plant safety, ROK/9/025	Experts	Approved Rephased	7/00 (2/00)	- -	- 2/00	- -
Lebanon	Nuclear analytical centre, LEB/0/003	Equipment (CC)	Approved Rephased	55 000 (10 000)	60 000 -	165 000 10 000	100 000 -
	Pesticide analysis, LEB/5/011	Experts	Approved Rephased	2/00 (2/00)	1/00 -	- 2/00	- -
		Equipment (CC)	Approved Rephased	5 000 24 000	75 000 (24 000)	40 000 -	- -
Libyan A.J.	Radiation shielding materials, LIB/4/004	Experts	Approved Rephased	3/00 (2/00)	- 2/00	- -	- -
		Equipment (CC)	Approved Rephased	40 000 (14 000)	- 14 000	- -	- -
	Nuclear power plant, LIB/4/005	Experts	Approved Rephased	3/00 (3/00)	- 3/00	- -	- -
	Fluoride chemistry, LIB/4/006	Equipment (CC)	Approved Rephased	25 000 (25 000)	- 25 000	- -	- -
	Eradication of Mediterranean fruit fly, LIB/5/003	Equipment (CC)	Approved Rephased	21 000 (21 000)	21 000 -	21 000 21 000	21 000 -
Malaysia	Secondary standards dosimetry laboratory, MAL/1/003	Experts	Approved Rephased	7/00 (2/00)	- -	- 2/00	- -
	Tracers in sedimentology, MAL/8/005	Experts	Approved Rephased	3/00 (1/00)	2/00 1/00	- -	- -

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Mali	Radioisotopes in agriculture, MLI/5/004	Experts	Approved Rephased	12/00 (5/00)	- 5/00	- -	- -
		Equipment (CC)	Approved Rephased	113 800 (15 000)	- 15 000	- -	- -
	Nuclear medicine, MLI/6/002	Experts	Approved Rephased	19/20 (4/00)	- 4/00	- -	- -
Mexico	Nuclear applications, MEX/0/008	Equipment (CC)	Approved Rephased	7 000 3 000	21 000 (3 000)	- -	- -
		Experts	Approved Rephased	5/00 (1/00)	- 1/00	- -	- -
	Quality certification, MEX/9/027	Experts	Approved Rephased	10/00 (5/00)	12/00 -	6/00 3/00	- -
	Commissioning of Laguna Verde nuclear power plant, MEX/9/032	Experts	Approved Rephased	9/00 4/00	10/00 (4/00)	- -	- -
		Fellowships	Approved Rephased	9 000 (9 000)	- 9 000	- -	- -
Morocco	Nuclear legislation and regulatory activities, MOR/0/002	Fellowships	Approved Rephased	36 000 (27 000)	- 18 000	- 9 000	- -
	Nuclear medicine, MOR/6/008	Experts	Approved Rephased	7/00 (2/00)	4/00 2/00	4/00 -	- -
Nicaragua	Nuclear medicine services, NIC/6/002	Experts	Approved Rephased	7/00 (4/00)	- 4/00	- -	- -
		Fellowships	Approved Rephased	27 000 (18 000)	- 18 000	- -	- -
Nigeria	Nuclear medicine, NIR/6/003	Equipment (CC)	Approved Rephased	40 000 (40 000)	- 40 000	- -	- -
		Fellowships	Approved Rephased	18 000 (18 000)	- 18 000	- -	- -
Pakistan	INIS data base, PAK/0/003	Experts	Approved Rephased	3/00 (3/00)	- 3/00	- -	- -
	Uranium prospection, PAK/3/005	Experts	Approved Rephased	27/00 (6/00)	6/00 6/00	- -	- -
	Sterile-insect technique, PAK/5/018	Experts	Approved Rephased	5/00 (3/00)	- -	- 3/00	- -
Panama	Nuclear analytical techniques, PAN/2/004	Equipment (CC)	Approved Rephased	20 000 15 000	55 000 (15 000)	40 000 -	50 000 -
Paraguay	Nuclear science, PAR/1/002	Experts	Approved Rephased	16/00 (3/00)	2/00 3/00	- -	- -
Peru	Radiochemistry teaching, PER/2/011	Experts	Approved Rephased	4/00 (3/00)	- 3/00	- -	- -
	Nuclear power planning, PER/4/008	Experts	Approved Rephased	12/15 (10/00)	7/00 3/00	- 7/00	- -
	Medfly control, PER/5/012	Equipment Italy	Approved Rephased	730 600 130 000	180 000 (130 000)	- -	- -
	Medical application of radioisotopes, PER/6/009	Experts	Approved Rephased	6/00 (3/00)	- 3/00	- -	- -

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Peru (cont'd)	Nuclear safety, PER/9/011	Experts	Approved Rephased	9/00 (2/00)	- 2/00	- -	- -
	Nuclear power plant siting, PER/9/012	Experts	Approved Rephased	9/00 (4/00)	- 4/00	- -	- -
Philippines	Spent fuel management, PHI/9/011	Experts	Approved Rephased	5/00 (2/00)	- 2/00	- -	- -
	Nuclear emergency planning, PHI/9/014	Equipment (CC)	Approved Rephased	80 000 20 000	60 000 (20 000)	- -	- -
Poland	Computerized tomography, POL/6/002	Equipment (CC)	Approved Rephased	27 000 (10 000)	2 000 -	2 000 10 000	2 000 -
Portugal	Secondard standards dosimetry laboratory, POR/1/002	Equipment (CC)	Approved Rephased	90 000 50 000	100 000 -	70 000 (50 000)	- -
	Uranium exploration (DGGM), POR/3/007	Equipment (CC)	Approved Rephased	40 000 20 000	20 000 (20 000)	- -	- -
	Reactor pneumatic transfer system, POR/4/010	Equipment (CC)	Approved Rephased	50 000 -	100 000 (100 000)	- 100 000	- -
Romania	Dosimetry instrumentation, ROM/1/007	Experts	Approved Rephased	3/00 (2/00)	3/00 -	- 2/00	- -
Saudi Arabia	Application of nuclear techniques, SAU/8/002	Experts	Approved Rephased	8/00 (5/00)	- 5/00	- -	- -
Senegal	Nuclear analytical laboratory, SEN/1/003	Experts	Approved Rephased	10/00 (7/00)	- 7/00	- -	- -
		Equipment (CC)	Approved Rephased	120 000 (30 000)	- 30 000	- -	- -
Singapore	Radioisotopes in hydrology, SIN/8/008	Experts	Approved Rephased	11/00 (2/00)	- 2/00	- -	- -
Sri Lanka	Nuclear science training, SRL/0/002	Experts	Approved Rephased	14/00 (4/00)	7/00 2/00	3/00 2/00	- -
	Nuclear raw materials, SRL/3/004	Experts	Approved Rephased	3/00 (1/00)	- -	- 1/00	- -
	Isotopes in hydrology, SRL/8/009	Experts	Approved Rephased	4/00 (2/00)	1/00 1/00	1/00 1/00	- -
Sudan	Secondary standards dosimetry laboratory, SUD/1/002	Experts	Approved Rephased	3/00 (2/00)	- 2/00	- -	- -
	Animal science, SUD/5/016	Experts	Approved Rephased	6/00 (6/00)	- 6/00	- -	- -
		Equipment (CC)	Approved Rephased	25 000 (25 000)	- 25 000	- -	- -
	Mutation breeding, SUD/5/017	Experts	Approved Rephased	4/00 (4/00)	4/00 -	4/00 -	- 4/00
		Equipment (CC)	Approved Rephased	10 000 (10 000)	10 000 -	10 000 -	- 10 000
		Equipment (NCC)	Approved Rephased	17 000 (17 000)	- -	- -	- 17 000

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Sudan (cont'd)	Isotopes in hydrology, SUD/8/004	Experts	Approved Rephased	5/15 (3/00)	3/00 3/00	- -	- -
		Equipment (CC)	Approved Rephased	96 700 (39 000)	- 39 000	- -	- -
Syrian A.R.	Nuclear analytical laboratory, SYR/1/002	Equipment (CC)	Approved Rephased	175 500 6 000	105 000 (6 000)	- -	- -
	Soil nitrogen studies, SYR/5/009	Experts	Approved Rephased	3/00 (2/00)	- -	- 2/00	- -
Thailand	Nuclear physics, THA/1/005	Equipment (CC)	Approved Rephased	185 000 23 000	30 000 (23 000)	- -	- -
	Nuclear raw material prospection, THA/3/003	Experts	Approved Rephased	12/00 (2/00)	6/00 -	- 2/00	- -
Turkey	Exploitation of uranium resources, TUR/3/006	Equipment (CC)	Approved Rephased	50 000 (10 000)	12 000 -	- 10 000	- -
	Trace elements in foodstuffs, TUR/5/011	Equipment (CC)	Approved Rephased	40 000 6 000	40 000 (6 000)	- -	- -
	Nuclear power programme, TUR/9/005	Fellowships	Approved Rephased	30 000 10 000	50 400 (10 000)	34 020 -	12 780 -
	Radioactive waste disposal, TUR/9/007	Experts	Approved Rephased	5/00 (2/00)	- -	- 2/00	- -
U.R. Tanzania	Radiation protection, URT/9/002	Experts	Approved Rephased	5/00 (4/00)	- 4/00	- -	- -
Uruguay	Nuclear technology centre, URU/0/007	Experts	Approved Rephased	8/00 (2/00)	- 2/00	- -	- -
	Uranium prospection, URU/3/007	Experts	Approved Rephased	8/00 (4/00)	- 2/00	- 2/00	- -
		Fellowships	Approved Rephased	6 000 (3 000)	- 3 000	- -	- -
	Nuclear medicine, URU/6/010	Experts	Approved Rephased	9/00 (4/00)	2/00 4/00	- -	- -
Venezuela	Secondary standards dosimetry laboratory, VEN/1/004	Experts	Approved Rephased	7/00 (4/00)	- 4/00	- -	- -
	Centre for nuclear agriculture, VEN/5/009	Fellowships	Approved Rephased	27 000 (27 000)	- 27 000	- -	- -
	Sedimentological studies, VEN/8/007	Equipment (CC)	Approved Rephased	35 000 20 000	30 000 (20 000)	- -	- -
Viet Nam	Nuclear institute development, VIE/0/002	Equipment (CC)	Approved Rephased	185 000 20 000	20 000 (20 000)	- -	- -
Yugoslavia	Research reactor modernization, YUG/4/014	Experts	Approved Rephased	4/07 (2/00)	- -	- 2/00	- -
	Nuclear power plant in-service inspection, YUG/4/024	Fellowships	Approved Rephased	9 000 (9 000)	- -	- 9 000	- -
	Reactor safety studies, YUG/9/018	Experts	Approved Rephased	13/00 (3/00)	- -	- 3/00	- -

Recipient	Project title and code	Component	Approved/ rephased	Programme year			
				Current	1986	1987	1988
Zambia	Nuclear analytical laboratory, ZAM/0/005	Experts	Approved Rephased	14/00 (5/00)	- 5/00	- -	- -
	Radioisotopes in agriculture (fertilizer studies), ZAM/5/004	Experts	Approved Rephased	22/00 (4/00)	- 4/00	- -	- -
		Equipment (CC)	Approved Rephased	129 000 (28 000)	- 28 000	- -	- -
		Equipment (NCC)	Approved Rephased	10 000 (7 000)	- 7 000	- -	- -
	Isotopes in agriculture (soil moisture studies), ZAM/5/012	Experts	Approved Rephased	3/00 (1/00)	- 1/00	- -	- -
	Multi-purpose gamma irradiation facility, ZAM/8/003	Equipment (CC)	Approved Rephased	50 000 79 000	134 000 (79 000)	250 000 -	- -
	Radiation protection services, ZAM/9/004	Experts	Approved Rephased	4/20 (4/00)	- 4/00	- -	- -
Regional Asia and Pacific	Mutation breeding of food legumes, RAS/5/015	Experts	Approved Rephased	3/00 (2/00)	4/00 -	2/00 2/00	- -
Interregional	Energy and nuclear power planning, INT/0/037	Experts	Approved Rephased	40/00 (2/00)	12/00 -	- 2/00	- -
	Pre-project assistance, INT/0/038	Equipment (CC)	Approved Rephased	10 000 (3 000)	- -	- 3 000	- -
	Microcomputers in nuclear experiments, INT/0/040	Equipment (CC)	Approved Rephased	66 000 (10 000)	- -	- 10 000	- -
	Nuclear instrument maintenance, INT/4/054	Experts	Approved Rephased	69/00 (18/00)	12/00 -	3/00 18/00	- -
	Nuclear power programme implementation, INT/4/079	Equipment (CC)	Approved Rephased	10 000 (10 000)	- -	- 10 000	- -
	Basic safety standards, INT/9/055	Experts	Approved Rephased	40/15 12/00	18/00 (12/00)	- -	- -
	Probabilistic safety analysis, INT/9/063	Equipment (CC)	Approved Rephased	30 000 (15 000)	- -	- 15 000	- -
	Radiation protection services, INT/9/064	Experts	Approved Rephased	18/00 (4/00)	18/00 -	- 4/00	- -
Total		Experts (m/m)	Approved Rephased	813/23 (284/00)	168/00 185/00	25/00 94/00	- 5/00
		Experts (US\$)	Approved Rephased	5 614 990 (1 959 600)	1 260 000 1 387 500	202 500 761 400	- 43 500
		Equipment (CC)	Approved Rephased	4 534 548 (98 000)	1 854 500 (106 000)	918 000 214 000	193 000 (10 000)
		Equipment (NCC)	Approved Rephased	172 000 81 000	200 000 27 000	300 000 (100 000)	300 000 (8 000)
		Fellowships	Approved Rephased	231 000 (150 000)	50 400 110 000	34 020 40 000	12 780 -
GRAND TOTAL			Approved	10 772 538	3 364 900	1 454 520	505 780
			Rephased	(2 126 600)	1 418 500	915 400	25 500



