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PUBLIC FINANCING OF RESEARCH AND DEVELOPMENT IN THE COMMUNITY COUNTRIES 1967 - 1971

Analysis by objectives

D. 3 - MAY 1972

MEDIUM-TERM ECONOMIC POLICY COMMITTEE

research and development

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NOTES

The English version of the nomenclature which appears in Annex I of this document is an OECD translation of the CEC French language original.

The figures in the tables in this document follow the Continental system, i.e., numbers from one thousand upwards written with full stops, decimal points denoted by commas. etc. e.g., 1.234,567 Continental = 1,234.567 Anglo-Amer.

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Preface

The present study constitutes the second report of the Statistical Experts Study Group to the Working Group on Scientific and Technical Research Policy of the Medium-Term Economic Policy Committee. Like the first report, of which it is an updated version, this study analyses the R&D appropriations in the central government budgets, broken down according to the objectives specified in a functional Community nomenclature. This nomenclature, in which the R&D activities financed are classified not by the institutions responsible for them but on the basis of homogeneous categories of socio-economic objectives, facilitates international comparisons by reducing, without completely eliminating, the distortion resulting from structural differences between countries considered.

Knowledge of the public appropriations for research at the time the budgets are drawn up makes it possible as a general rule to obtain a better idea of the governments' political intentions. At that stage, however, it is sometimes necessary, especially for the purpose of assigning the data to the various headings in the nomenclature, to employ estimates based on the results of surveys carried out subsequently or on other information. Although appreciable progress has been achieved in this field, these methods of evaluation are still liable to differ from country to country. It must accordingly be emphasized that some of the figures are not entirely reliable, so that caution is necessary in interpreting them.

As was the case last year, the present report has also been published, after being approved by the Medium-Term Economic Policy Committee, in the series "Statistical Studies and Surveys" and "Research and Development", issued by the Commission of the European Communities.

Part I: **REPORT**

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I. Introduction

At its meeting on 14 April 1970 the Working Group on Scientific and Technical Research Policy (PREST Group) appointed by the Medium-Term Economic Policy Committee approved a first report drawn up at its request by the Statistical Experts Study Group; it instructed this Group in future to present to it annually an updated analysis prepared on a similar basis.

The present report, which meets this request by the PREST Group, has been prepared by the Statistical Experts Study Group on the basis of the data available at the beginning of 1971. The advantage of this period, which goes a little further back than that chosen for the first report, is that it enabled the national experts to collect the latest available data at the same stage of processing, namely that of the budget. The general comparability of the data for the last year is thus appreciably improved.

The difficulty of establishing comparable figures has prevented the Statistical Experts Study Group from complying with the PREST Group's request it should extend its investigations to countries outside the Community. Initial contacts have, however, been made with the United Kingdom, which encourage the hope that it will soon be possible to present a set of data comparing the situation in that country with that of the Community on the basis of uniform criteria. This work will in due course be the subject of a supplement to the Study Group's report.

Under its terms of reference the Study Group has also considered whether to adapt or extend its nomenclature. Without closing the door to subsequent changes, it has decided that it would be inappropriate to make premature and needless modifications to a system which has just been tested out and whose value largely depends on the continuity in time of the series. The Study Group intends, however, to consider how far it will be able to supplement its forthcoming reports with more exact information on the scope and the lines of direct State financial aid to industrial research.

To measure and then compare the efforts of several countries in the field of scientific and technical research and development may at first sight appear an audacious venture. The notion of R&D itself covers highly complex realities whose outlines are still rather hazy despite the efforts made in recent years, particularly by the OECD, to define them more precisely. Even where he could in theory make a satisfactory distinction between R&D work and, for example, related activities not of an R&D character, the statistician is often thwarted by the insufficiency or inaccuracy of his sources, or by differences between the statistical and budgetary practices of the countries concerned. However, in all these instances, which are legion, it is possible, by analysing the results for previous financial years, by making estimates based on the systematic exploitation of an entire store of data, or again by critically examining different systems, to obtain results which, while not conforming absolutely with scientific rules on the subject, nonetheless afford a highly satisfactory approximation to reality. Moreover, the fact that the Group possesses a specialized and independent secretariat, whose main task is to discuss with each country its contribution in terms of uniform criteria, is a guarantee of consistent and impartial treatment of the data.

Even so, the reader must be warned to treat R&D statistics with circumspection—perhaps more so than data in other fields. Their aim is

not to proclaim absolute truths, but to reveal tendencies and establish orders of magnitude. The Study Group believes that, in presenting its report it has created a useful working tool for this purpose, despite the imperfections inherent in all such work.

II. Summary presentation of data

In 1970, according to the results for the last statistical year, the Community countries allotted about 4 400 millions u.a. of public money to R & D activities. In 1971, this total rose to about 5 000 million u.a., i.e., by 13,5% per annum at current prices. But this mean figure covers widely differing rates of progress, ranging from 2,8% for military research to 39,9% for computer science. In the case of four other objectives —space, earth and its atmosphere, health and industrial productivity—the advance was more than 20%, while expenditure on the general promotion of knowledge ran parallel to the total appropriations.

These general data, which approximate adequately to the true state of affairs, are nonetheless provisional. In order to comply with the desire of the PREST Group to obtain speedy access to recent figures, the Study Group had in many cases to take as its basis estimates which cannot be verified until a later stage of the work. Furthermore, the figures for the last financial year (1971) have in all countries been taken from the draft budgets established by the Governments; these drafts may, of course, be modified when under discussion in the national parliaments, or by the subsequent application of revision procedures (voting of supplementary budgets, blocking or cancellation of appropriations, etc.).

By comparison with the figures published in the previous report, appreciable improvements have been made to the series (1). With minor adjustments, these improvements have served to confirm the overall figures previously published for the years 1967, 1968 and 1970, but not for 1969, where the total given in the first report proved to be an overestimate; a more sophisticated analysis of the data and the replacement of estimates by more accurate items (special enquiries, updating of coefficients) showed that the overall figure must be reduced from 4 200 million to 4 000 million u.a. The trend of public R & D appropriations during the period under review is now seen to be as follows :

TABLE 1

Central government expenditure on R&D

Budget year	Total R & D appropriations in 10^9 (u.a.)	Increase on previous year (as %) (*)
1967	3,6	—
1968	3,8	4,9
1969	4,0	6,8
1970 (provisional)	4,4	9,9
1971 (provisional)	5,0	13,5

(*) Weighted arithmetic means of the increases per country calculated from data expressed in national currencies. The weighting coefficients are the shares of the countries in the Community's R & D expenditure during the initial periods (Laspeyres formula).

(1) A detailed statement of these improvements will be found in Sections 8, 9 and 10 of the "Notes on Methodology" in Annex I to the present report.

III. Overall trend of public R&D appropriations in the Community (1967-1971)

On the basis of the figures in units of account at present available, public R&D appropriations in the Community have increased, at current prices and rates of exchange, by 39% during the five-year period 1967-1971 at the end of which their overall volume was about 5 000 million u.a. For the Community was a whole, the annual rate of increase averaged 8,6%. However, this was in respect of a trend varying from period to period; the average increase was only 5,9% between 1967 and 1969, but almost double this amount—11,3% —between 1969 and 1971.

In real terms (after deduction of the effect of price increases) the overall trend appears to have been static or even downward during the period 1967-1969, and to have experienced only a moderate recovery since. Between 1967 and 1971 the private consumer price indices have or will have increased by 3-7% per annum in the Community countries; and the countries with high degrees of R&D are often among those in which this growth is greatest. If it is further considered that during the period under review the Community population increased by 0,6% per annum and that in addition the rate of increase in the cost of R&D is no doubt higher than that of prices to the private consumer, it may be concluded that between 1967 and 1971 the real increase per capita in the research effort was on the whole

TABLE 2

Central government appropriations to R&D 1967-1971

	G	B	F	I	N	EEC
1. *Total* appropriations						
— 1967, in 10^6 u.a.(1)	1.220	103	1.790	286	209	3.608
— 1971, in 10^6 u.a.(1)	2.139	165	1.819	498	349	4.970
— rate of variation 1967-71, as % (2)	+ 60,4	+ 60,3	+ 14,3	+ 73,9	+ 67,4	+ 39,0
2. Appropriations to *civil* R & D						
— 1967, in 10^6 u.a.(1)	959	102	1.183	272	199	2.715
— 1971, in 10^6 u.a. (1)	1.819	163	1.296	480	334	4.092
— rate of variation 1967-71, as % (2)	+ 73,5	+ 59,7	+ 23,2	+ 76,6	+ 67,8	+ 50,9
3. Contributions to *multilateral and bilateral projects*						
— 1967, in 10^6 u.a.(1)	139	21	237	60	14	471
— 1971, in 10^6 u.a.(1)	196	18	178	49	15	456
— rate of variation 1967-71, as % (2)	+ 29,4	— 12,8	— 15,3	— 18,2	+ 1,4	— 1,9
4. Average annual rates of variation in appropriations, as % (2)						
— period 1967-71 (3)	+ 12,6	+ 12,5	+ 3,4	+ 14,9	+ 13,8	+ 8,6
— period 1967-69 (3)	+ 8,0	+ 7,6	+ 3,1	+ 7,9	+ 13,7	+ 5,9
— period 1969-71 (3)	+ 17,3	+ 17,7	+ 3,7	+ 22,2	+ 13,8	+ 11,3

(1) At current exchange rates.
(2) The rates of variation in appropriations per country are calculated from data expressed in national currencies, i.e., without taking account of parity changes introduced in 1969. The rates shown for the Community are averages of these rates, weighted by the expenditures for the initial years expressed in units of account and calculated at the exchange rates in force during these years (Laspeyres formula).

modest. It is seen, however, that this overall observation is the result of trends which vary greatly from country to country and does not apply to all R&D objectives alike.

In the same context, it is important to note that the ratio of public R&D expenditure to the GDP, which was 1% in the Community in 1967, had fallen to 0,9% in 1970 and does not appear to have recovered its original value in 1971, despite a reversal of trends.

While the overall increase in public R&D appropriations (and in the activities for which they are employed) has therefore been very modest, the figures for civil research alone provide a rather brighter picture. During the period under review, appropriations for military R&D steadily decreased in terms of both absolute and relative value. Their share in the total decline from 24,7% in 1967 to 17,7% in 1971, while over the same period the relevant amount was reduced from 892 to only 878 million u.a. Conversely, civil appropriations showed a higher than average increase, namely 50,9% during the period under review, or 10,8% per annum. The reduction, at least relatively, of military appropriations is a phenomenon which is to be observed in all the EEC countries and which followed a more or less uniform pattern over the period under review.

Owing to Euratom's difficulties and to a stabilization of the appropriations to civil aviation R&D (notably a reduction of the research part of the "Concorde" programme), the national contributions to multilateral or bilateral projects again diminished in relative value, namely, from 13,1% in 1967 to 9,2% in 1971, whereas at current prices the relevant amounts stabilized at or about 450 million u.a. per annum for the Community as a whole. The space and defence programmes were the sole exceptions to this general contraction, which is reflected in the statistics of all the countries concerned.

TABLE 3

Some indicators of public financing of R&D (1967-1970)

	G	B	F	I	N	EEC
1. *Total* per capita appropriations (in u.a.)						
— 1967	20,4	10,8	35,9	5,3	16.6	19,5
— 1970	28,9	14,8	34,2	7,8	23,6	23,2
2. *Civil* appropriations per capita (in u.a.)						
— 1967	16,0	10,6	23,6	5,1	15,8	14,6
— 1970	23,8	14,5	24,1	7,4	22,4	18,6
3. *Total* appropriations (as % of GDP)						
— 1967	1,0	0,5	1,5	0,4	0,9	1,0
— 1970	1,0	0,6	1,2	0,5	1,0	0,9
4. *Civil* appropriations (as % of GDP)						
— 1967	0,8	0,5	1,0	0,4	0,9	0,8
— 1970	0,8	0,6	0,8	0,4	0,9	0,7
5. R & D appropriations, as % of total central government appropriations (1)						
— 1967	4,2	2,4	7,0	2,2	3,7	4,6
— 1970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
— (1969)	(4,3)	(2,2)	(6,2)	(1,9)	(3,7)	(4,3)

(1) "Total appropriations" here means the sum of the central governments' current expenditure, capital transfers and gross fixed capital formation.

Table 2 summarizes these trends, both for the Community and for each country. It uses the EMA unit of account as currency of comparison. By so doing it introduces a distortion owing to the fact that in 1969 France and West Germany adjusted their currency parities. The two adjustments, being in opposite directions, virtually cancel one another out at Community level, but it is a different story when one considers the trend in each country in isolation.

In this connection the Group wishes to reaffirm the view that the expression of national expenditures in terms of a single reference currency does not for the moment make it possible to bring out either the disparities in real purchasing power between the various currencies or the possible differences in the research cost factors between the various countries.

Table 3 contains a number of statistical indicators of public financing of R&D, in most of which the size effects have been eliminated.

IV. Trend of R&D appropriations per country

It has been said above that the meagre increase in public appropriations for R&D is the overall result of trends which vary greatly from country to country. In this respect it is necessary to make a distinction between the situation of France and that of the other countries.

As is shown in Table 2, France has only given a very minor impetus to its public R&D appropriations during the period under review. The increase has been less than 15% for the five-year period, and is thus well below the general rise in prices. It seems clear that the resultant distinction in real terms reflects the French government's intention to secure a more significant contribution from private industry in certain research sectors and to reduce the share of large-scale programmes in favour of a more rational utilization of the existing potential. Despite this reduction, and the impact of devaluation, France continues to make the highest public R&D appropriations in the Community per capita and related to the GDP (see Table 3).

While the country where the level at the outset was higher than that of its partners has greatly slowed down its effort, this is not true of the other countries, which have all stepped up their R&D appropriations quite substantially. At current prices the cumulative rates during the period in question have varied from 60 to 74%; the average annual rates thus greatly exceed the rise in prices and reflect the determination of these countries to make a greater public effort than hitherto in the field of R&D. This determination is manifest in the Netherlands and even more in Italy and Belgium, where the share of R&D appropriations in the GDP has increased between 1967 and 1970.

A slowing-down in France, and a steady increase which even so is, generally speaking, lower than that of overall public expenditure—such are the rather varied elements of a picture which for the Community as a whole is one of a moderate growth in real terms, though with an increase in pace during the last two years. These diverse trends have contributed to bring the relative positions of the various countries closer to one another : whereas in 1967 the per capita expenditure differed in a ratio of 1/6,5, in 1970 the ratio was reduced to 1/4, and in 1971 it is still tending downwards. With the exception of West Germany, which exceeded the Community average as far back as 1967 and has since increased its lead, all the Member States have moved towards the general average, which itself rose from 20 u.a. per capita in 1967 to 23 u.a. in 1970.

Table 4 illustrates this trend.

TABLE 4

Per capita public R&D appropriations (1967-1970)

Community average = 100

	G	B	F	I	N	EEC
— total R&D appropriations						
— 1967	104	55	183	28	85	100
— 1970	125	64	147	33	102	100
— civil R&D appropriations						
— 1967	109	72	161	35	107	100
— 1970	128	78	130	40	120	100

If only civil expenditure per capita is considered, there is seen to be a further appreciable narrowing of gaps between countries: West Germany, France and the Netherlands then have equivalent levels for 1970, while Belgium's rises from 72 to 78% of the Community average and Italy's from 35 to 40%.

Table 5 recapitulates the trend of the proportion of the Community population, GDP and total and civil public R &D appropriations accounted for by each country between 1967 and 1970.

While France's share in public R &D appropriations has fallen from 49 to 39% in four years, partly as a result of parity changes, it is nonetheless still appreciably greater than the same country's share in the GDP and total population of the Community. West Germany, whose expen-

TABLE 5

Breakdown by country of the population, GDP and public R&D appropriations (1967-1970)

in %

Country	Population		GDP (current exchange rates)		Public R &D appropriations (current exchange rates)			
					Total		Civil	
	1967	1970	1967	1970	1967	1970	1967	1970
West Germany	32	32	35	39	34	41	35	41
Belgium	5	5	6	5	3	3	4	4
France	27	27	33	30	49	39	44	35
Italy	29	29	19	19	8	10	10	12
Netherlands	7	7	7	7	6	7	7	8
Community	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

diture in 1967 was more or less proportional to its share in the Community GDP and population, has made a very substantial funding effort which, combined with the impact of the revaluation of the Deutschmark, has raised its share in the Community total from 34 to 41%. Italy has improved its relative position, but has not yet made an effort proportional to its economic and demographic potentialities.

V. Trend of R&D appropriations by main category of objectives

In order to give an idea of the trend of appropriations by main research objectives during the period 1969-71, the 12 NASB major goals have been grouped into the following five main categories :

0. Appropriations for defence
I. Appropriations mainly for improving the environment
II. Appropriations for mainly industrial and technological purposes
III. Agricultural appropriations
IV. Appropriations for the general promotion of knowledge.

In the table below, categories II and IV have been further subdivided into significant groups.

It will be noted that the proposed grouping differs slightly from that used by the Experts Group in their first report. It consolidates all the appropriations to industry and the advanced technology sectors while making the agricultural appropriations a separate item. In addition, the table shows the growth of the appropriations in time, whereas the previous table was more static.

Several points emerge from Table 6 :

— as indicated above, R&D appropriations for defence purposes have fallen in the Community. This movement is general and is spread fairly evenly over the entire period. The Netherlands, where the level of expenditure was very low in 1967, did not join the general movement until 1970.

— the proportion of appropriations for the improvement of the environment (mainly social or public service purposes) has increased in all the Community countries, averaging nearly 10% in 1971. The relatively larger increase in France appears to be due to the need to satisfy a backlog of demand owing to the fact that in this country the appropriations for social purposes which go to higher education (item 12.2.3 and sub-group 12.2 of the NASB) are still appreciably below those in the other countries. For 1971, a grouping of the appropriations in category I and those shown in the penultimate line of the table (general promotion of knowledge, medical science, social sciences and humanities) still gives only 17,5% for France as against 22% for West Germany, 29% for Belgium and 31% for the Netherlands.

— the proportion of appropriations for mainly industrial and technological purposes remains constant in the total, the reductions in some countries (France and the Netherlands) being offset by increases in others (West Germany and Italy). The relative importance of nuclear programmes within this category has greatly diminished. Hence it has become possible to make larger appropriations for other advanced technology programmes and for programmes of more modest scope and/or programmes concerning more conventional sectors. This tendency is especially marked in Italy, which has heavily slashed the proportion allotted to advanced technologies while stepping up its total spending on industrial research. As a consequence of divergent trends in West Germany and France, these two countries

TABLE 6

Central government appropriations by main category of objectives 1967 and 1971

as % of total

No.	Main category	NASB major goal	G		B		F		I		N		EEC	
			1967	1971	1967	1971	1967	1971	1967	1971	1967	1971	1967	1971
0	Defence	3	22	15	1	1	34	29	5	3	4	4	25	18
I	Improvement of the environment (1)	4+5+6+10	6	7	8	8	8	12	6	7	12	13	7	9
II	Industrial or Technological purposes	1+2+8+9	31	32	39	38	34	32	44	49	22	20	33	33
	Including:													
	— nuclear	1	(19)	(16)	(21)	(21)	(17)	(14)	(35)	(21)	(11)	(9)	(19)	(15)
	— aerospace	2+8.2.4	(7)	(9)	(7)	(6)	(13)	(11)	(7)	(n.a.)	(6)	(5)	(10)	(n.a.)
	— computer science (2)	9	(1)	(3)	(—)	(—)	(1)	(3)	(—)	(1)	(—)	(1)	(1)	(3)
III	Agriculture	7	2	2	4	5	4	5	2	3	10	9	4	4
IV	General promotion of knowledge	11+12	39	44	48	48	20	22	43	38	52	54	31	36
	including: medical science, social sciences and humanities	11.1.3+11.2, 12.1.3+12.2	(15)	(15)	(22)	(21)	(5)	(5)	(17)	(n.a.)	(15)	(18)	(10)	(n.a.)
	Total		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

(1) A wider view of the growth of appropriations for mainly social objectives can be obtained by incorporating the information relating to subdivisions 11.1.3, 11.2, 12.1.3 and 12.2 of the NASB, which appear in the penultimate line of the table.
(2) Not including the appropriations for research on computer science training (NASB item 10.1.1).

now allot an equal share of their public R&D budgets to advanced technology.

— appropriations for agricultural research remain constant in relative value. At first sight this is surprising in a geographical entity in which agricultural surpluses are piling up; it no doubt results from a diversification of the research work undertaken, particularly in the field of animal production.

— appropriations for the general promotion of knowledge have appreciably increased in the Community, principally on account of the acceleration of higher education requirements. Italy's relative share is decreasing while at the same time in absolute terms this country is devoting rapidly increasing sums to this category of expenditure.

As is pointed out in the methodological notes set

out in an annex to the report, the figures relating to higher education must be compared and interpreted with caution because they are still largely based on coefficients which are not determined in exactly the same way in all the countries concerned (1).

VI. Trend of appropriations by NASB objectives

As already stated, the overall growth of public R &D appropriations for the Community as a whole between 1967 and 1971 was 39%.

This growth was not uniform for all the objectives in the nomenclature. The appropriations for nuclear and defence R &D have scarcely maintained their volume, and their share in the Community total has thus shrunk from 44 to 33% in five years. With the exception of computer science research, which started from a low level and has quadrupled its funding, all the objectives have had growth rates of 40-80% for the period 1967-1971; the orders of magnitude of these growth rates, which are fairly continuous in time, can be summarized as follows :

— *40-50%*
agricultural research

— *50-60%*
space research

— *60-70%*
general promotion of knowledge in and outside higher education

— *70-80%*
human environment
industrial productivity
health
social sciences and humanities
earth and its atmosphere

The following tables summarize for each objective in the nomenclature the most significant data of the present situation and the growth since 1967 of R &D appropriations in each country and in the Community. For reasons given in the introduction, the data have not been supplemented by cross-comparisons. On the other hand it has been judged necessary in certain cases to add to the various tables commentaries on the most salient features of particular situations or trends. These explanations frequently relate to the mean rate of expenditure variation during the period 1967/1970, and its comparison with the 1971 rate. Calculated over a fairly short period, the first of these rates cannot be considered as the expression of a long-term scientific policy. Furthermore, the appropriations for the first year (1967) are not always representative of the real situation in a particular field. Generally speaking, therefore, and even in the absence of specific comments, the reader is asked not to draw too hasty conclusions from the juxtaposition of the two rates of variation.

(1) This remark applies particularly to the Netherlands, where the first results of a recent enquiry suggest the data were overestimated by about 10%.

Major Goal 1 : **Nuclear Research and Development (civil only)**

TABLE 7

	G	B	F	I	N	EEC
1. Public R & D expenditure 1970, in 10^6 u.a.	283,1	31,4	246,6	94,0	32,4	687,4
of which : international contributions	45,7	12,2	26,5	33,1	8,8	126,2
2. Public R & D expenditure 1970, as % of total public R & D expenditure	15,9	21,9	14,3	22,3	10,5	15,7
3. Average rate of variation in public R & D expend. 1967-70 (%)	+ 3,2	+ 14,2	− 3,9	− 1,7	+ 12,9	+ 0,0
1970-71 (%)	+ 18,1	+ 11,1	− 0,4	+ 10,3	− 7,7	+ 8,9
4. Per capita public R & D expenditure 1970, in u.a.	4,61	3,24	4,87	1,73	2,49	3,63
5. a) Public R & D expenditure 1970 per 10.000 u.a. of GDP	15,20	12,57	16,86	10,13	10,31	14,27
b) Ditto, Community average = 100	107	88	118	71	72	100

Major Goal 2 : **Exploration and Exploitation of Space (civil)**

TABLE 8

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	94,1	7,7	108,8	12,5	8,9	232,1
of which : international contributions	50,8	6,6	24,2	11,1	4,1	96,8
2. Public R&D expenditure 1970, as % of total public R&D expenditure	5,3	5,3	6,3	3,0	2,9	5,3
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 4,5	+ 3,1	+ 8,9	− 16,1	+ 12,1	+ 4,7
1970-71 (%)	+ 49,7	+ 30,8	+ 5,6	+ 130,1	+ 38,4	+ 32,3
4. Per capita public R&D expenditure 1970, in u.a.	1,53	0,79	2,15	0,23	0,69	1,23
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	5,06	3,06	7,44	1,35	2,85	4,82
b) Ditto, Community average = 100	105	64	154	28	59	100

As regards *West Germany*, the first report of the Study Group showed an appropriation of 117,7 million u.a. in the draft budget for 1970. In June 1970 Parliament decided for economic policy reasons to reduce this appropriation by about 20%. The major increase in 1971 is due to the backlog of demand consequent upon this reduction, which was not consistent with programme requirements.

In the case of *Italy*, the figures for 1969 and 1970 do not include the appropriations for national laboratories, the law on the financing of R&D in the space sector for the period 1969/72 not being voted by Parliament until February 1971. The amount earmarked for 1971 is that laid down for this year by the law; pending fuller information on the actual distribution of the appropriations, this figure remains provisional. The considerable gap between the annual rates of variation for 1967/70 and those for 1970/71 is a result of this situation.

Major Goal 3 : **Defence (including military nuclear and space)**

TABLE 9

	G	B	F	I	N	EEC
1. Public R & D expenditure 1970, in 10^6 u.a.	314,5	2,8	504,1	18,1	13,9	853,4
of which : international contributions	84,7	0,1	25,2	0,0	0,1	110,0
2. Public R & D expenditure 1970, as % of total public R & D expenditure	17,7	1,9	29,2	4,3	4,5	19,5
3. Average rate of variation in public R & D expend.						
1967-70 (%)	+ 3,3	+ 36,1	− 2,2	+ 8,0	+ 13,6	− 0,2
1970-71 (%)	+ 1,9	− 11,0	+ 3,5	− 2,5	+ 9,3	+ 2,8
4. Per capita public R & D expenditure 1970, in u.a.	5,12	0,29	9,96	0,33	1,07	4,51
5. a) Public R & D expenditure 1970 per 10.000 u.a. of GDP	16,89	1,11	34,48	1,95	4,44	17,72
b) Ditto, Community average = 100	95	6	195	11	25	100

Major Goal 4 : **Exploration and Exploitation of the Earth and its Atmosphere**

TABLE 10

	G	B	F	I	N	EEC
1. Public R & D expenditure 1970, in 10^6 u.a.	30,3	3,0	32,3	6,2	5,0	76,9
of which : international contributions	0,3	0,1	0,7	0,1	0,0	1,2
2. Public R &D expenditure 1970, as % of total public R &D expenditure	1,7	2,1	1,9	1,5	1,6	1,8
3. Average rate of variation in public R & D expend.						
1967-70 (%)	+ 7,8	+ 8,1	+ 19,2	+ 45,0	+ 6,6	+ 14,0
1970-71 (%)	+ 34,3	+ 20,9	+ 18,4	+ 2,4	+ 0,0	+ 22,3
4. Per capita public R & D expenditure 1970, in u.a.	0,49	0,31	0,64	0,11	0,38	0,41
5. a) Public R & D expenditure 1970 per 10.000 u.a. of GDP	1,63	1,21	2,21	0,67	1,59	1,60
b) Ditto, Community average = 100	102	76	139	42	100	100

The increase of almost 35% in *West Germany's* expenditure for 1971 is due largely to the launching of the national programme of oceanographic research, and to the complementary effort by the Federal Government in this field.

As regards *Italy*, the rate of growth shown for the period 1967/70 is of little significance by reason of the very low level of appropriations during the first year. The CNR (National Research Council) programmes (e.g., oceanography) tripled between 1967 and 1968 and thereafter remained stationary.

Major Goal 5 : **Protection and Promotion of Human Health**

TABLE 11

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	43,4	4,4	48,6	13,5	12,4	122,3
of which : international contributions	0,1	0,1	0,2	2,5	0,0	2,9
2. Public R&D expenditure 1970, as % of total public R &D expenditure	2,4	3,1	2,8	3,2	4,0	2,8
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 16,9	+ 13,9	+ 7,0	+ 47,4	+ 16,9	+ 13,2
1970-71 (%)	+ 31,7	+ 11,6	+ 16,7	+ 8,2	+ 14,2	+ 20,6
4. Per capita public R&D expenditure 1970, in u.a.	0,71	0,46	0,96	0,25	0,95	0,65
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	2,33	1,77	3,32	1,46	3,93	2,54
b) Ditto, Community average = 100	92	70	131	57	155	100

Major Goal 6 : **Planning the Human Environment**

TABLE 12

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	18,2	1,7	83,1	12,8	10,4	126,2
of which : internationaal contributions	0,0	0,0	5,8	0,1	0,0	5,9
2. Public R&D expenditure 1970, as % of total public R &D expenditure	1,0	1,2	4,8	3,0	3,4	2,9
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 19,0	− 4,7	+ 16,5	+ 31,9	+ 21,3	+ 17,8
1970-71 (%)	+ 14,6	+ 50,3	+ 16,5	− 40,4	+ 10,3	+ 10,4
4. Per capita public R&D expenditure 1970, in u.a.	0,30	0,18	1,64	0,24	0,80	0,67
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	0,98	0,69	5,68	1,38	3,31	2,62
b) Ditto, Community average = 100	37	26	217	53	126	100

The strong position of *France* is due partly to the fact that the posts and telecommunications budget is incorporated in its entirety in the State budget. In those countries where the P-T services are run by autonomous public corporations, the corresponding expenditures are not considered here, but are included in those of the enterprise sector.

The difference in the rates of variation for *Italy* results from the fact in 1970 sub-group 6.0 benefited from an exceptional allocation of 5,76 million u.a. for studies on the preservation of the city of Venice.

Major Goal 7 : **Promotion of Agricultural Productivity and Technology**

TABLE 13

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	37,5	7,1	71,0	14,8	29,2	159,7
of which : international contributions	0,0	0,0	9,0	0,2	0,0	9,2
2. Public R &D expenditure 1970, as % of total public R&D expenditure	2,1	5,0	4,1	3,5	9,5	3,6
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 8,0	+ 16,7	+ 6,1	+ 49,5	+ 11,3	+ 9,4
1970-71 (%)	+ 18,2	+ 7,8	+ 14,2	+ 5,7	+ 9,4	+ 13,2
4. Per capita public R&D expenditure 1970, in u.a.	0,61	0,74	1,40	0,27	2,24	0,84
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	2,01	2,86	4,86	1,60	9,30	3,32
b) Ditto, Community average = 100	61	86	147	48	281	100

Italy's level of expenditure, which was very low in 1967, almost tripled in 1968 and then continued its upward trend at a slower pace. The annual rate of increase for the period 1967-70 is the outcome of this situation.

Major Goal 8 : **Promotion of Industrial Productivity and Technology**

TABLE 14

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	98,6	14,4	161,8	77,7	18,4	370,9
of which : international contributions	0,0	0,1	94,0	0,0	0,0	94,0
2. Public R&D expenditure 1970, as % of total public R&D expenditure	5,5	10,0	9,4	18,4	6,0	8,5
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 22,9	+ 7,5	− 0,5	+ 164,6	+ 3,4	+ 7,1
1970-71 (%)	+ 46,4	+ 21,9	− 1,0	+ 40,4	+ 38,3	+ 23,1
4. Per capita public R&D expenditure 1970, in u.a.	1,60	1,48	3,20	1,43	1,41	1,96
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	5,29	5,76	11,07	8,37	5,86	7,70
b) Ditto, Community average = 100	69	75	144	109	76	100

The recent increase in the figures for *West Germany* derives largely from the growth of the R&D appropriations to the aviation industry and from the progressive initiation of a government programme devoted to the new technologies.

In *France*, the stable situation results both from a major decrease as from 1970 in appropriations for the "Concorde" programme and a marked increase in funds allocated to other fields (6,1% per annum in 1967/70 and 22,2% in 1971).

As regards *Italy*, the rate of increase in the periods 1967-70 and 1970-71 reflects not only intensified action by the National Research Council in favour of industrial research, but also, and in particular, the operations of the fund administered by the Istituto Mobiliare Italiano (IMI), whose first efforts in support of applied research date from 1970.

In the *Netherlands*, the marked increase in appropriations in 1971 is attributable to an intensification of R&D on the Airbus and to the increasing state subsidies for the development of new manufacturing processes.

Major Goal 9 : **Promotion of Computer Science and of Automation**

TABLE 15

	G	B	F	I	N	EEC
1. Public R & D expenditure 1970, in 10^6 u.a.	34,4	0,1	54,7	1,2	1,6	92,0
of which : international contributions	0,0	0,0	0,0	0,0	0,0	0,0
2. Public R&D expenditure 1970, as % of total public R&D expenditure	1,9	0,1	3,2	0,3	0,5	2,1
3. Average rate of variation in public R&D expend. 1967-70 (%)	+ 23,0	+ 0,0	+ 53,3	+ 13,9	+ 337,2	+ 38,3
1970-71 (%)	+ 97,3	− 43,3	+ 3,3	+ 104,6	+ 14,5	+ 39,9
4. Per capita public R&D expenditure 1970, in u.a.	0,56	0,01	1,08	0,02	0,12	0,49
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	1,85	0,04	3,74	0,13	0,51	1,91
b) Ditto, Community average = 100	97	2	196	7	27	100

The major increase in 1971 in *German* appropriations is due partly to the backlog of demand following the reductions made by Parliament in the 1970 budget for economic policy reasons. It also reflects the initiation of a second four-year programme on computer science absorbing amounts greater than those used in the previous programme.

In *Italy*, the year 1970 was marked by the expiry of the NRC electronics programme, and hence by a substantial but temporary reduction in appropriations.

The large-scale increase in appropriations in the *Netherlands* during the period 1967-70 results from the low level of expenditure during the first year.

Major Goal 10 : **Promotion of Research in the Social Sciences and Humanities**

TABLE 16

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	31,6	0,9	25,8	3,5	12,0	73,8
of which : international contributions	0,0	0,1	0,0	0,9	0,0	1,0
2. Public R&D expenditure 1970, as % of total public R&D expenditure	1,8	0,6	1,5	0,8	3,9	1,7
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 11,8	+ 8,5	+ 23,2	− 12,5	+ 16,6	+ 13,6
1970-71 (%)	+ 18,7	+ 20,1	+ 15,4	+ 14,4	+ 30,7	+ 19,3
4. Per capita public R&D expenditure 1970, in u.a.	0,51	0,10	0,51	0,06	0,92	0,39
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	1,70	0,37	1,76	0,38	3,81	1,53
b) Ditto, Community average = 100	111	24	115	25	249	100

Owing to the absence of international agreements (e.g., on the precise dividing line between studies and research work), treatment of the figures in this field is not yet entirely uniform. In many cases, therefore, reservations must be made as to the comparability of the data.

Major Goal 11 : **General Promotion of Knowledge (except for Higher Education)**

TABLE 17

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	146,2	14,3	169,1	48,2	14,6	392,4
of which : international contributions	0,4	0,0	0,3	0,0	0,5	1,2
2. Public R&D expenditure 1970, as % of total public R&D expenditure	8,2	10,0	9,8	11,4	4,7	9,0
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 18,0	+ 7,5	+ 10,3	+ 10,0	+ 12,7	+ 12,6
1970-71 (%)	+ 14,4	+ 21,9	+ 17,5	+ 9,2	+ 18,4	+ 15,5
4. Per capita public R&D expenditure 1970, in u.a.	2,38	1,48	3,34	0,89	1,12	2,07
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	7,85	5,73	11,57	5,19	4,65	8,15
b) Ditto, Community average = 100	96	70	142	64	57	100

Major Goal 12 : **General Promotion of Knowledge (Higher Education)**

TABLE 18

	G	B	F	I	N	EEC
1. Public R&D expenditure 1970, in 10^6 u.a.	644,8	55,9	217,0	118,9	147,3	1183,9
of which : international contributions	0,0	0,0	1,6	0,0	0,0	1,6
2. Public R&D expenditure 1970, as % of total public R&D expenditure	36,3	38,8	12,6	28,2	47,9	27,0
3. Average rate of variation in public R&D expend.						
1967-70 (%)	+ 14,2	+ 13,6	+ 3,8	+ 10,3	+ 15,0	+ 11,2
1970-71 (%)	+ 18,3	+ 12,0	− 2,3	+ 13,3	+ 13,2	+ 13,1
4. Per capita public R &D expenditure 1970, in u.a.	10,49	5,75	4,29	2,19	11,32	6,26
5. a) Public R&D expenditure 1970 per 10.000 u.a. of GDP	34,62	22,34	14,84	12,81	46,91	24,58
b) Ditto, Community average = 100	141	91	60	52	191	100

In *France*, the fairly sharp increase in capital appropriations for higher education in 1971 chiefly benefited the university institutes of technology, which do not yet appear among the establishments taken into account in calculating the R &D coefficients in higher education.

In the *Netherlands*, the first results of a direct enquiry conducted among university research workers suggest that the absolute figures are overestimated by about 10%; the data in the column for this country must therefore be treated with caution.

TABLE 19

Central Government R&D Expenditure by Objective

1970

	G	B	F	I	N	Com-munity	
In national currency							
	10^6 DM	10^6 B.Fr.	10^6 F.Fr.	10^9 It.lire	10^6 Fl.	10^6 u.a.	
1. Nuclear	1 036,1	1 571,7	1 369,4	58,7	117,2	687,4	1. Nuclear
2. Space	344,6	382,9	604,1	7,8	32,4	232,1	2. Space
3. Defence	1 151,0	138,6	2 800,0	11,3	50,5	853,4	3. Defence
4. Earth and its atmosphere	110,8	150,9	179,5	3,9	18,1	76,9	4. Earth and its atmosphere
5. Health	158,8	220,9	269,9	8,4	44,7	122,3	5. Health
6. Human environment	66,5	86,7	461,5	8,0	37,6	126,2	6. Human environment
7. Agricultural productivity	137,3	357,1	394,4	9,3	105,7	159,7	7. Agricultural productivity
8. Industrial productivity	360,8	720,6	898,9	48,5	66,7	370,9	8. Industrial productivity
9. Computer science, automation	126,0	5,2	303,9	0,7	5,9	92,0	9. Computer science, automation
10. Social sciences and humanities	115,7	46,6	143,3	2,2	43,3	73,8	10. Social sciences and humanities
Sub-total (1-10)	**3 607,6**	**3 681,3**	**7 424,9**	**159,0**	**522,0**	**2 794,7**	**Sub-total** (1-10)
11. General promotion of knowledge (except Higher Education)	534,9	716,6	939,2	30,1	52,9	392,4	11. General promotion of knowledge (except Higher Education)
12. General promotion of knowledge (Higher Education)	2 359,8	2 793,1	1 205,3	74,3	533,4	1 183,9	12. General promotion of knowledge (Higher Education)
Not itemized	0,0	0,0	30,6	0,0	5,2	7,0	Not itemized
TOTAL	**6 502,3**	**7 191,0**	**9 600,0**	**263,4**	**1 113,5**	**4 377,9**	**TOTAL**
(*of which* : developing countries)	(0,0)	(50,4)	(113,3)	(0,0)	(5,3)	(22,9)	(*of which* : developing countries)
As % of total project expenditure							
1. Nuclear	15,9	21,9	14,3	22,3	10,5	15,7	1. Nuclear
2. Space	5,3	5,3	6,3	3,0	2,9	5,3	2. Space
3. Defence	17,7	1,9	29,2	4,3	4,5	19,5	3. Defence
4. Earth and its atmosphere	1,7	2,1	1,9	1,5	1,6	1,8	4. Earth and its atmosphere
5. Health	2,4	3,1	2,8	3,2	4,0	2,8	5. Health
6. Human environment	1,0	1,2	4,8	3,0	3,4	2,9	6. Human environment
7. Agricultural productivity	2,1	5,0	4,1	3,5	9,5	3,6	7. Agricultural productivity
8. Industrial productivity	5,5	10,0	9,4	18,4	6,0	8,5	8. Industrial productivity
9. Computer science, automation	1,9	0,1	3,2	0,3	0,5	2,1	9. Computer science, automation
10. Social sciences and humanities	1,8	0,6	1,5	0,8	3,9	1,7	10. Social sciences and humanities
Sub-total (1-10)	**55,5**	**51,2**	**77,3**	**60,3**	**46,9**	**63,8**	**Sub-total** (1-10)
11. General promotion of knowledge (except Higher Education)	8,2	10,0	9,8	11,4	4,7	9,0	11. General promotion of knowledge (except Higher Education)
12. General promotion of knowledge (Higher Education)	36,3	38,8	12,6	28,2	47,9	27,0	12. General promotion of knowledge (Higher Education)
Not itemized	0,0	0,0	0,3	0,0	0,5	0,2	Not itemized
TOTAL	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**TOTAL**
(*of which* : developing countries)	(0,0)	(0,7)	(1,2)	(0,0)	(0,5)	(0,5)	(*of which* : developing countries)
In 10^6 u.a.							
1. Nuclear	283,1	31,4	246,6	94,0	32,4	687,4	1. Nuclear
2. Space	94,1	7,7	108,8	12,5	8,9	232,1	2. Space
3. Defence	314,5	2,8	504,1	18,1	13,9	853,4	3. Defence
4. Earth and its atmosphere	30,3	3,0	32,3	6,2	5,0	76,9	4. Earth and its atmosphere
5. Health	43,4	4,4	48,6	13,5	12,4	122,3	5. Health
6. Human environment	18,2	1,7	83,1	12,8	10,4	126,2	6. Human environment
7. Agricultural productivity	37,5	7,1	71,0	14,8	29,2	159,7	7. Agricultural productivity
8. Industrial productivity	98,6	14,4	161,8	77,7	18,4	370,9	8. Industrial productivity
9. Computer science, automation	34,4	0,1	54,7	1,2	1,6	92,0	9. Computer science, automation
10. Social sciences and humanities	31,6	0,9	25,8	3,5	12,0	73,8	10. Social sciences and humanities
Sub-total (1-10)	**985,7**	**73,6**	**1 336,8**	**254,3**	**144,2**	**2 794,7**	**Sub-total** (1-10)
11. General promotion of knowledge (except Higher Education)	146,2	14,3	169,1	48,2	14,6	392,4	11. General promotion of knowledge (except Higher Education)
12. General promotion of knowledge (Higher Education)	644,8	55,9	217,0	118,9	147,3	1 183,9	12. General promotion of knowledge (Higher Education)
Not itemized	0,0	0,0	5,5	0,0	1,4	7,0	Not itemized
TOTAL	**1 766,6**	**143,8**	**1 728,4**	**421,5**	**307,6**	**4 377,9**	**TOTAL**
(*of which* : developing countries)	(0,0)	(1,0)	(20,4)	(0,0)	(1,5)	(22,9)	(*of which* : developing countries)

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Part II : ANNEXES

CONTENTS

ANNEX I

Notes on Methodology

Notes on Methodology

1. The tables in Annex II, from which most of the figured data in this report were calculated, relate to the central government budgets for research and development. The appropriations are tabulated under the objectives listed in the Nomenclature for the Analysis and Comparison of Science Programmes and Budgets (NASB).

The NASB, the general outlines of which has already been described (1), is a *functional nomenclature* which aims at analysing governmental R&D efforts, not according to institutions or groups of institutions who receive the appropriations, but in terms of the social and economic ends pursued or recognized by the central government at the time of preparing the budgets and programmes. This type of classification is generally more suitable for the requirements of budget and science policies than are the institutional nomenclatures; also it makes for easier comparison of countries by reducing, though not entirely eliminating, certain distortions resulting from structural differences between the countries considered.

2. The NASB is a *one-level funding* nomenclature. For each specific research scheme in the institutes or projects financed there is a single dominant objective. The objectives are classified in twelve one-figure groups (major goals) which are subdivided into two-figure sub-groups and three-figure items; with the exception of those in Major Goals 11 and 12 (General Promotion of Knowledge), the items are expositive and their sum is equal to or less than the corresponding subgroups. This articulated system was devised with due regard to the existing international classifications, the present-day organization of the European research networks and the needs expressed hitherto in endeavours to define a Community science policy. Based on decimalization, the system is intended to be open-ended and capable of being periodically revised in keeping with the constantly changing pattern of the organization of the activities described.

3. The compiling of the R&D activities financed follows the general concepts and definitions of the OECD statistical system (Frascati Manual, 1970 revised version). In principle the figures exclude, wherever possible, what it was agreed to call R&D-related activities (scientific education and information, general surveys, tests and inspections, standardization work, preparatory studies, patent and licence work), except for certain activities which are directly linked with R&D and can be regarded as auxiliary to research. Also excluded are certain technical activities connected with actual production which do not generally involve any appreciable novelty factor (engineering work, feasibility studies, testing and inspection of products and processes, tooling-up, trial production, production planning, etc.).

4. As the analysis concerns the flow of funds to, rather than the performance of, research, the field covered by the Community surveys is rather different from the one dealt with in the OECD publications. The latter are mainly based on the concept of intramural expenditure for the various units and sectors and the concept of domestic expenditure for the economy as a whole, whereas the tables used here cover the funding by central government of R&D activities to be carried out both in units under their authority (part of intramural budgetary expenditure) and in units belonging to other domestic sectors and to the rest of the world (all extramural budgetary expenditure). The OECD figures do not as a rule take the whole of this latter flow into consideration.

5. Generally speaking, the data given in the Community system tables differ from the OECD data in the following respects :

a) in principle, the figures relate only to public *appropriations* for R&D agreed by the central

(1) See : "Public Financing of Research and Development in the Community Countries 1967-1970" — Analysis by Objectives, Annex I (Commission of the European Communities, 1970).

government (see definition appended), and not to completed activities or their final financing, as in the OECD statistics, which furthermore cover all sectors of the economy;

b) as far as the public authorities are concerned, although the activities covered coincide to a large extent in the two systems, they are not strictly identical. The Community system is concerned only with appropriations by *the central government*, but includes therein the appropriations reserved for higher education; it covers the funding of projects to be carried out in the rest of the world, some of the data for which are the subject of a special Annex; lastly, it excludes in principle that part of the central-government intramural expenditure which is financed by other domestic sectors and from abroad. In its analysis of the funding procedure, the OECD distinguishes a "Government" sector and a "Higher Education" sector, but does not explicitly include projects funded abroad;

c) funded research projects relating to the *social and human sciences* are included in the Community system, whereas the OECD gives them only in tabulated annexes (1).

6. The figures shown in the tables in Annex II are established by the various countries' coordinating bodies in liaison with the Commission.

For some years now the Community countries, when preparing the general budgets, have been grouping together the appropriations relating to R&D or other scientific activities. It is on the basis of these groupings, to which certain adjustments are made by agreement between the parties concerned, that the basic figures are worked out in line with the definitions in the Frascati Manual.

In the second stage, the appropriations thus isolated are split up among a certain number of *research projects*, the aims of which are assessed in the light of the objectives listed in the NASB and classified under its different headings (2).

7. It should be pointed out that the fact of deciding on and apportioning the flows of public funds at the budget stage, rather than at the final stage of execution in institutes, centres, laboratories and other units, means that the work can only in a limited number of cases be done directly on the basis of real factors, such as an evaluation and a detailed description of the research programmes to be financed. In many cases the only way is to employ estimates, which tend to vary from one country to another and sometimes, in a given country, from one type of expenditure to another.

Nevertheless, knowledge of the programmes undertaken and of the units that carry them out grows with time and, as the retrospective investigations and schedules succeed one another, the computing and evaluating factors, particularly certain coefficients, improve, thus making forgreater exactness and comparability in the budget figures submitted.

8. By comparison with the previous analysis, which covered the period 1967-1970, there has been some substantial progress at the statistical level.

As regards the actual foundation for the figures used, all the countries have this time proceeded from the *appropriations voted* by the Parliaments, at all events for the first four years of the period in question (1967, 1968, 1969 and 1970) (3); in the

(1) This difference results from the fact that as yet the Frascati Manual only deals with R&D in the exact and natural sciences. However, work is being performed in the international organizations with the aim of integrating research on social and human sciences systematically into the surveys ; in the normal course, therefore, the distinction will ultimately disappear.

(2) For further details on the grouping and breakdown by country, see Annex II of "Public Financing of Research and Development 1967-1970 — Analysis by Objectives".

(3) The appropriations voted can henceforth be taken in their widest meaning ; they cover and embody the particular features of certain national budget techniques (voting of special or supplementary budgetary laws in the course of the financial year, for instance) together with the final corrective measures resulting from the governments' economic and financial policies (cancellations, reductions or blocking of appropriations) ; most of these factors are included in the sets of figures submitted in the year in question, but were not always entered so fully in the previous sets.

previous report several sets of figures have been calculated on the basis of appropriations which had only been proposed or had received a first-stage vote. France (for 1967 and 1968) and Belgium (for 1967) aligned their figures with those on the schedules of research carried out in respect of those years; in regard to the other countries' data, these statistics must be considered as closely adjusted estimates, but still not representative of the results of the definitive financing operations. For 1971, the countries were at least able to supply sets of figures based on the appropriations submitted to the Parliaments; France was able to extract them from the budgets which had passed the first-stage vote. Except for Italy, which still had to confine itself to the major goals, the figures relating to the last year of the period (1971) are now available for all the headings in the nomenclature.

9. Apart from these changes, which chiefly reflect the actual trend in budget appropriations and may call into question certain aspects of the former analysis, the countries concerned have improved the *breakdown* of their appropriations under the various NASB headings.

In Italy, for instance, a major CNR industrial R&D programme has been dissected and broken down under the different headings of Major Goal 8. In Germany, improvements as regards the last year of the period in question have been made in the breakdown of the appropriations in Major Goal 5 (Human Health, Pollution) and Major Goal 11 (General Promotion of Knowledge). The Netherlands have broken down their nuclear R&D funding under the various sub-groups of Major 1; progress has been achieved in the pinpointing of appropriations for research on nutrition (Major Goal 5) and on agriculture (Major Goal 7); furthermore, the appropriations relating to pollution, the amount of which, shown in sub-group 5.3, is still an underestimate, are currently being subjected to a systematic review, the results of which will be integrated in the next report. France, which has made considerable progress in functional classification during the preparation of the Sixth Plan, has noticeably improved its statistics at the level of most of the Major Goals in the nomenclature; the systematic cross-referencing of the main fields of the Plan to the NASB headings, and the diversification of activities, led to a more methodical outlining of the major nuclear and space programmes, which have been partially broken down into more conventional objectives (Major Goals 4, 5 and 6 in particular); the same applies to other institutions and programmes whose effective projects have been analysed more closely (ORSTOM, CNET, IRCHA, DGRST, Plan Calcul, etc.) and to the funding of Major Goals 11 and 12 (General Promotion of Knowledge) within which the breakdown of research activities has also been revised. France's effort at functional classification of its major programmes, which has yielded results equal to those recently achieved in America, might serve as a model for a revision of the Community nomenclature on those lines.

10. It should be mentioned that some countries have also improved their statistics by taking *new factors* into consideration. In Germany, for instance, research activities in the engineering schools have been incorporated into the appropriations for Major Goal 12.

It is Belgium, however, that is making the biggest strides in this field. A detailed examination of that country's science budgets and a comparison with the figures supplied by the other Community member countries revealed that the Belgian figures did not include certain funds earmarked for the universities and other public establishments, more particularly for capital expenditure. Provisional systematic reassessments have been made to fill up these gaps and will be calculated item by item in the next few months; they relate mainly to Major Goals 1, 11 and 12 (1). Where Belgium is concerned, too, the groupings mentioned in paragraph 6 have hitherto been in respect of funds earmarked for scientific activities as a whole

(1) Similar reassessments will likewise be introduced into the national statistics and into those supplied by Belgium to the OECD. In their final version the reassessments will be based mainly on the results of the 1969 R&D survey, the data in the extraordinary budgets, and the standardized university accounting.

(research, higher education, other scientific activities) divided into five large functional blocks; but Belgium now plans to treat these various categories individually and to break them down according to an objectives classification system which, though highly detailed, derives from the NASB. This system, planned for the country's particular requirements, was designed to be equally applicable to the funding flow and to the production of research services, on the lines of Italy's statistical system (Nomenclatura per campo di ricerca).

11. The improvements described above, which raise the question of the general comparability of the appropriations considered and of their detailed breakdown under the various headings of the nomenclature, do not cover the entire range of problems that emerge when this exercise in statistical analysis was begun.

Two of the reservations expressed in the previous report still hold good today. One concerns the evaluation of the details given under Major Goal 12 (General Promotion of Knowledge — Higher Education).

The coefficients on which calculations are to a large extent based still differ from country to country and may affect the comparability of the figures. However, the relative stability of the methods of determining these coefficients ensures a certain continuity of the series at the various national levels. It will be noted that the Netherlands and Belgium have recently initiated direct enquiries among university research scientists with a view to arriving at a better assessment of their real activities. The results of these enquiries have not yet been integrated into the statistical annexes to the present report. As regards the Netherlands, the information received to date nevertheless show that the 1967-71 series for Major Goal 12, calculated from earlier coefficients, established in 1964, have been overestimated by about 10%. Because the new evaluations are still incomplete and on account of the time factor, it has not been possible here to take the appropriate corrections into consideration. The Netherlands figures in respect of Major Goal 12 must therefore be interpreted with caution.

The other reservation concerns the situation still prevailing in Germany as regards taking into account the public appropriations earmarked for the activities of scientific institutes coming within the central government sector, excluding higher education. In addition to their research and development activities, these institutes assume other tasks of a public-service nature, but the government's accounting system is not such as to enable their expenditure to be broken down according to these various functions. Contrary to the directives in the Frascati Manual, therefore, one is obliged to treat the activities of the institutes in question as follows. If R&D constitutes their specific task and exceeds their other activities in scope, the whole of their expenditure is taken into account; if, on the other hand, other public-service activities performed exceed the research work, such bodies are excluded from the survey. This method affords compensation of errors at the overall R&D budget level, but it may give rise to discrepancies when the appropriations are broken down by specific objectives. Such discrepancies are nevertheless of little significance because of the very minor proportion accounted for by public institutes of this kind in the total appropriations devoted by the central government to R&D.

APPENDIX

The Definition of Central Government
(cf. ESA paragraphs 239, 240, 242)

The general government sector includes all institutional units [1] whose main function is to produce *non-market* services for the community and/or to redistribute the country's income and wealth. The main resources of these units come directly or indirectly from compulsory payments made by other institutional units (non-financial corporate and quasi-corporate enterprises, credit institutions, insurance enterprises, private non-profit institutions, households, the rest of the world).

The majority of these units are *government agencies* which administer, finance and account for services of a *non-market* nature (rendered to the community gratuitously or quasi-gratuitously); in addition, some *incorporated non-profit institutions* which pursue non-market activities and are mainly financed by government agencies are included.

Central government is a sub-sector of general government. It includes institutional units other than social security agencies whose competence extends to the whole economic territory.

This sub-sector comprises not only the traditional bodies included in the state budget (parliament, ministerial departments, linked agencies, etc.) but also other units, which may or may not be controlled by a state ministry, and which are financed from special budgetary or extra-budgetary resources (autonomous funds, administrative establishments, etc.). In the case of the Federal Republic of Germany, the central government agencies of the Länder are part of the central government sub-sector.

In general, these government units differ fundamentally from public enterprises. The latter are institutional units whose main function is either to make credit and insurance transactions or to produce goods and market services (which can be sold on the market). The actual nature of these units' activities calls for their classification in the credit institutions sector, in the insurance sector or in the non-financial corporate and quasi-corporate entreprises sector. Their public character results from the fact that they are entirely or partially owned by government agencies whose control is effective in all the main aspects of their management. Public enterprises may include joint stock companies and analogous incorporated units as well as autonomous public services whose pattern of behaviour is similar to that of financial and non-financial corporate enterprises.

It is particularly important to distinguish between government agencies and public enterprises in estimating total central government financial support of R &D and also in breaking down such support into intramural and extramural expenditures. If an R & D performing unit is included in the central government sector the funds made available to this unit from the State budget will be considered as intramural expenditure whilst similar payments to public enterprises will be considered as extramural expenditure.

[1] Institutional units are considered to be units participating in the economic life which keep complete accounting records and enjoy autonomy of decision in the exercise of their main function. Units which do not possess these two characteristics are, in principle, integrated in the larger units which control them.

ANNEX II

Central Government R&D Expenditure by Objectives (condensed and detailed tables)

TABLES

ANNEX II

Central Government R & D Expenditure by Objective

Condensed Table

1967

OBJECTIVE	GERMANY			BELGIUM		
	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
1. NUCLEAR R & D	235.619	19,3	31,7	21.087	20,5	39,5
2. SPACE	75.416	6,2	10,2	6.996	6,8	13,1
3. DEFENCE	260.944	21,4	35,2	1.101	1,1	2,1
4. EARTH AND ITS ATMOSPHERE	22.123	1,8	3,0	2.389	2,3	4,5
5. HEALTH	24.874	2,0	3,4	2.991	2,9	5,6
6. HUMAN ENVIRONMENT	9.868	0,8	1,3	2.002	1,9	3,8
7. AGRICULTURAL PRODUCTIVITY	27.262	2,2	3,7	4.498	4,4	8,4
8. INDUSTRIAL PRODUCTIVITY	48.594	4,0	6,5	11.593	11,3	21,7
9. COMPUTER SCIENCE AND AUTOMATION	16.945	1,4	2,3	C	0,0	0,0
10. SOCIAL SCIENCES	20.719	1,7	2,8	728	0,7	1,4
SUB-TOTAL (1-10)	742.364	60,8	100,0	53.385	51,8	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	81.360	6,7	0,0	11.522	11,2	0,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	396.325	32,5	0,0	38.073	37,0	0,0
NOT ITEMIZED	0	0,0	0,0	C	0,0	0,0
TOTAL	1.220.049	100,0	0,0	102.980	100,0	0,0
(OF WHICH: DEVELOPING COUNTRIES)	0	0,0	0,0	732	0,7	0,0

Central Government R & D Expenditure by Objective

Condensed Table

1967

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
312.109	17,4	21,9	98.990	34,6	61,5	22.491	10,8	22,2	690.296	19,1	27,8
94.692	5,3	6,7	21.234	7,4	13,2	6.342	3,0	6,3	204.680	5,7	8,3
606.434	33,9	42,6	14.331	5,0	8,9	9.502	4,6	9,4	892.312	24,7	36,0
21.470	1,2	1,5	2.050	0,7	1,3	4.124	2,0	4,1	52.156	1,4	2,1
44.662	2,5	3,1	4.219	1,5	2,6	7.735	3,7	7,6	84.481	2,3	3,4
59.165	3,3	4,2	5.598	2,0	3,5	5.820	2,8	5,7	82.453	2,3	3,3
66.902	3,7	4,7	4.435	1,6	2,8	21.194	10,2	20,9	124.291	3,4	5,0
184.584	10,3	13,0	4.192	1,5	2,6	16.648	8,0	16,4	265.611	7,4	10,7
17.075	1,0	1,2	794	0,3	0,5	19	0,0	0,0	34.833	1,0	1,4
15.515	0,9	1,1	5.226	1,8	3,2	7.553	3,6	7,4	49.741	1,4	2,0
1.422.608	79,5	100,0	161.069	56,3	100,0	101.428	48,6	100,0	2.480.854	68,8	100,0
141.684	7,9	0,0	36.253	12,7	0,0	10.200	4,9	0,0	281.019	7,8	0,0
218.551	12,2	0,0	88.618	31,0	0,0	96.997	46,5	0,0	838.564	23,2	0,0
6.887	0,4	0,0	0	0,0	0,0	0	0,0	0,0	6.887	0,2	0,0
1.789.730	100,0	0,0	285.940	100,0	0,0	208.625	100,0	0,0	3.607.324	100,0	0,0
18.635	1,0	0,8	0	0,0	0,0	909	0,4	0,4	20.276	0,6	0,4

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1968

OBJECTIVE	GERMANY			BELGIUM		
	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
1. NUCLEAR R & D	230.879	18,2	31,3	23.768	22,5	42,9
2. SPACE	85.382	6,7	11,6	6.765	6,4	12,2
3. DEFENCE	246.489	19,4	33,4	1.127	1,1	2,0
4. EARTH AND ITS ATMOSPHERE	19.825	1,6	2,7	2.354	2,2	4,3
5. REALTH	27.903	2,2	3,8	3.182	3,0	5,7
6. HUMAN ENVIRONMENT	10.495	0,8	1,4	1.536	1,4	2,8
7. AGRICULTURAL PRODUCTIVITY	27.097	2,1	3,7	5.879	5,6	10,6
8. INDUSTRIAL PRODUCTIVITY	48.315	3,8	6,6	9.679	9,2	17,5
9. COMPUTER SCIENCE AND AUTOMATION	18.427	1,5	2,5	240	0,2	0,4
10. SOCIAL SCIENCES	22.080	1,7	3,0	835	0,8	1,5
SUB-TOTAL (1-10)	736.892	58,0	100,0	55.359	52,3	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	88.953	7,0	0,0	11.403	10,8	0,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	443.900	35,0	0,0	38.992	36,9	0,0
NOT ITEMIZED	0	0,0	0,0	0	0,0	0,0
TOTAL	1.269.745	100,0	0,0	105.754	100,0	0,0
(OF WHICH: DEVELOPING COUNTRIES)	0	0,0	0,0	777	0,7	0,0

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1968

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
286.993	15,4	19,9	95.494	31,1	55,1	26.045	10,7	22,1	663.179	17,5	26,3
99.614	5,4	6,9	16.912	5,5	9,8	9.481	3,9	8,0	218.154	5,8	8,6
612.308	32,9	42,5	14.309	4,7	8,3	12.527	5,1	10,6	886.760	23,4	35,1
24.184	1,3	1,7	4.822	1,6	2,8	2.992	1,2	2,5	54.177	1,4	2,1
49.463	2,7	3,4	6.656	2,2	3,8	8.652	3,6	7,3	95.856	2,5	3,8
61.757	3,3	4,3	7.384	2,4	4,3	7.021	2,9	5,9	88.187	2,3	3,5
78.832	4,2	5,5	11.418	3,7	6,6	22.941	9,4	19,4	146.167	3,9	5,8
176.137	9,5	12,2	9.861	3,2	5,7	20.464	8,4	17,3	264.456	7,0	10,5
29.775	1,6	2,1	1.898	0,6	1,1	22	0,0	0,0	50.362	1,3	2,0
23.010	1,2	1,6	4.501	1,5	2,6	7.944	3,3	6,7	58.370	1,5	2,3
1.442.073	77,5	100,0	173.255	56,4	100,0	118.089	48,5	100,0	2.525.668	66,7	100,0
164.632	8,8	0,0	37.816	12,3	0,0	11.597	4,8	0,0	314.401	8,3	0,0
247.111	13,3	0,0	95.965	31,3	0,0	113.704	46,7	0,0	939.672	24,8	0,0
7.008	0,4	0,0	0	0,0	0,0	0	0,0	0,0	7.008	0,2	0,0
1.860.824	100,0	0,0	307.036	100,0	0,0	243.390	100,0	0,0	3.786.749	100,0	0,0
21.431	1,2	0,9	0	0,0	0,0	541	0,2	0,2	22.749	0,6	0,5

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1969

OBJECTIVE	GERMANY			BELGIUM		
	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
1. NUCLEAR R & D	236.320	16,4	28,7	25.693	21,5	41,5
2. SPACE	91.816	6,4	11,2	7.150	6,0	11,5
3. DEFENCE	271.861	18,8	33,1	2.515	2,1	4,1
4. EARTH AND ITS ATMOSPHERE	22.938	1,6	2,8	2.611	2,2	4,2
5. HEALTH	28.236	2,0	3,4	3.694	3,1	6,0
6. HUMAN ENVIRONMENT	14.991	1,0	1,8	1.915	1,6	3,1
7. AGRICULTURAL PRODUCTIVITY	28.986	2,0	3,5	6.018	5,0	9,7
8. INDUSTRIAL PRODUCTIVITY	73.401	5,1	8,9	11.408	9,6	18,4
9. COMPUTER SCIENCE AND AUTOMATION	29.754	2,1	3,6	86	0,1	0,1
10. SOCIAL SCIENCES	23.784	1,6	2,9	855	0,7	1,4
SUB-TOTAL (1-10)	822.087	56,9	100,0	61.945	51,9	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	118.426	8,2	0,0	14.103	11,8	0,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	503.362	34,9	0,0	43.232	36,2	0,0
NOT ITEMIZED	0	0,0	0,0	0	0,0	0,0
TOTAL	1.443.875	100,0	0,0	119.280	100,0	0,0
(OF WHICH: DEVELOPING COUNTRIES)	0	0,0	0,0	870	0,7	0,

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1969

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
268.883	14,8	19,4	100.053	30,0	53,5	27.418	10,2	21,0	658.367	16,5	25,5
103.228	5,7	7,5	16.622	5,0	8,9	10.662	4,0	8,2	229.478	5,8	8,9
521.352	28,7	37,7	13.810	4,1	7,4	14.654	5,4	11,2	824.192	20,7	31,9
31.185	1,7	2,3	4.962	1,5	2,7	4.379	1,6	3,4	66.075	1,7	2,6
51.035	2,8	3,7	9.443	2,8	5,0	10.783	4,0	8,3	103.191	2,6	4,0
68.336	3,8	4,9	6.864	2,1	3,7	8.534	3,2	6,5	100.640	2,5	3,9
75.306	4,1	5,4	12.163	3,7	6,5	25.591	9,5	19,6	148.064	3,7	5,7
195.044	10,7	14,1	16.549	5,0	8,8	17.825	6,6	13,6	314.227	7,9	12,2
42.751	2,4	3,1	2.429	0,7	1,3	1.141	0,4	0,9	76.161	1,9	2,9
25.604	1,4	1,9	4.173	1,3	2,2	9.642	3,6	7,4	64.058	1,6	2,5
1.382.724	76,2	100,0	187.068	56,2	100,0	130.629	48,5	100,0	2.584.453	64,9	100,0
194.233	10,7	0,0	38.002	11,4	0,0	13.380	5,0	0,0	378.144	9,5	0,0
231.712	12,8	0,0	107.974	32,4	0,0	125.539	46,6	0,0	1.011.819	25,4	0,0
6.411	0,4	0,0	0	0,0	0,0	0	0,0	0,0	6.411	0,2	0,0
1.815.080	100,0	0,0	333.044	100,0	0,0	269.548	100,0	0,0	3.980.827	100,0	0,0
21.279	1,2	1,0	0	0,0	0,0	761	0,3	0,3	22.910	0,6	0,5

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1970

OBJECTIVE	GERMANY			BELGIUM		
	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
1. NUCLEAR R & D	283.076	15,9	28,7	31.434	21,9	42,7
2. SPACE	94.146	5,3	9,6	7.659	5,3	10,4
3. DEFENCE	314.475	17,7	31,9	2.772	1,9	3,8
4. EARTH AND ITS ATMOSPHERE	30.282	1,7	3,1	3.018	2,1	4,1
5. HEALTH	43.395	2,4	4,4	4.418	3,1	6,0
6. HUMAN ENVIRONMENT	18.167	1,0	1,8	1.734	1,2	2,4
7. AGRICULTURAL PRODUCTIVITY	37.508	2,1	3,8	7.142	5,0	9,7
8. INDUSTRIAL PRODUCTIVITY	98.586	5,5	10,0	14.413	10,0	19,6
9. COMPUTER SCIENCE AND AUTOMATION	34.436	1,9	3,5	104	0,1	0,1
10. SOCIAL SCIENCES	31.617	1,8	3,2	931	0,6	1,3
SUB-TOTAL (1-10)	985.688	55,5	100,0	73.625	51,2	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	146.153	8,2	0,0	14.331	10,0	0,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	644.754	36,3	0,0	55.863	38,8	0,0
NOT ITEMIZED	0	0,0	0,0	0	0,0	0,0
TOTAL	1.776.595	100,0	0,0	143.819	100,0	0,0
(OF WHICH: DEVELOPING COUNTRIES)	0	0,0	0,0	1.007	0,7	0,0

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1970

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
246.553	14,3	18,4	93.986	22,3	37,0	32.379	10,5	22,5	687.428	15,7	24,6
108.765	6,3	8,1	12.546	3,0	4,9	8.938	2,9	6,2	232.054	5,3	8,3
504.124	29,2	37,7	18.066	4,3	7,1	13.944	4,5	9,7	853.381	19,5	30,5
32.318	1,9	2,4	6.248	1,5	2,5	5.001	1,6	3,5	76.867	1,8	2,8
48.594	2,8	3,6	13.506	3,2	5,3	12.354	4,0	8,6	122.267	2,8	4,4
83.090	4,8	6,2	12.835	3,0	5,0	10.390	3,4	7,2	126.216	2,9	4,5
71.009	4,1	5,3	14.824	3,5	5,8	29.209	9,5	20,3	159.692	3,6	5,7
161.842	9,4	12,1	77.667	18,4	30,5	18.417	6,C	12,8	370.925	8,5	13,3
54.715	3,2	4,1	1.173	0,3	0,5	1.616	0,5	1,1	92.044	2,1	3,3
25.800	1,5	1,9	3.496	0,8	1,4	11.962	3,9	8,3	73.806	1,7	2,6
1.336.810	77,3	100,0	254.347	60,3	100,0	144.210	46,9	100,0	2.794.680	63,8	100,0
169.C98	9,8	0,0	48.210	11,4	0,0	14.609	4,7	0,0	392.401	9,0	0,0
217.007	12,6	0,0	118.931	28,2	0,0	147.343	47,9	0,0	1.183.898	27,0	0,0
5.509	C,3	0,0	0	0,0	0,0	1.442	C,5	C,0	6.951	0,2	0,0
1.728.424	1CC,0	0,0	421.488	100,0	0,0	307.604	100,0	0,0	4.377.930	100,0	0,0
20.398	1,2	1,0	0	0,0	0,0	1.460	0,5	0,5	22.865	0,5	0,4

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1971

OBJECTIVE	GERMANY			BELGIUM		
	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
1. NUCLEAR R & D	334.530	15,6	27,7	34.941	21,2	41,1
2. SPACE	140.963	6,6	11,7	10.021	6,1	11,8
3. DEFENCE	320.520	15,0	26,5	2.465	1,5	2,9
4. EARTH AND ITS ATMOSPHERE	40.674	1,9	3,4	3.656	2,2	4,3
5. HEALTH	57.157	2,7	4,7	4.933	3,0	5,8
6. HUMAN ENVIRONMENT	20.830	1,0	1,7	2.608	1,6	3,1
7. AGRICULTURAL PRODUCTIVITY	44.349	2,1	3,7	7.700	4,7	9,1
8. INDUSTRIAL PRODUCTIVITY	144.380	6,7	11,9	17.582	10,6	20,7
9. COMPUTER SCIENCE AND AUTOMATION	67.963	3,2	5,6	59	0,0	0,1
10. SOCIAL SCIENCES	37.542	1,8	3,1	1.119	0,7	1,3
SUB-TOTAL (1-10)	1.208.908	56,5	100,0	85.078	51,5	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	167.324	7,8	0,0	17.479	10,6	0,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	763.251	35,7	0,0	62.586	37,9	0,0
NOT ITEMIZED	0	0,0	0,0	0	0,0	0,0
TOTAL	2.139.483	100,0	0,0	165.137	100,0	0,0
(OF WHICH: DEVELOPING COUNTRIES)	0	0,0	0,0	1.161	0,7	0,0

Central Government R & D Expenditure by Objective (continued)

Condensed Table

1971

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10	1000 U.A.	% 1-12	% 1-10
245.382	13,5	17,5	103.680	20,8	33,4	29.862	8,5	18,3	748.395	15,1	23,6
114.940	6,3	8,2	28.874	5,8	9,3	12.374	3,5	7,6	307.172	6,2	9,7
522.128	28,7	37,2	17.600	3,5	5,7	15.250	4,4	9,4	877.963	17,7	27,7
38.277	2,1	2,7	6.400	1,3	2,1	4.998	1,4	3,1	93.999	1,9	3,0
56.714	3,1	4,0	14.624	2,9	4,7	14.114	4,0	8,7	147.542	3,0	4,7
96.828	5,3	6,9	7.648	1,5	2,5	11.469	3,3	7,0	139.383	2,8	4,4
81.128	4,5	5,8	15.680	3,2	5,1	31.970	9,2	19,6	180.827	3,6	5,7
160.167	8,8	11,4	109.062	21,9	35,2	25.478	7,3	15,6	456.669	9,2	14,4
56.534	3,1	4,0	2.400	0,5	0,8	1.851	0,5	1,1	128.807	2,6	4,1
29.797	1,6	2,1	4.000	0,8	1,3	15.643	4,5	9,6	88.101	1,8	2,8
1.401.895	77,1	100,0	309.968	62,3	100,0	163.009	46,7	100,0	3.168.858	63,8	100,0
198.751	10,9	0,0	52.688	10,6	0,0	17.300	5,0	0,0	453.542	9,1	0,0
211.822	11,6	0,0	134.842	27,1	0,0	166.899	47,8	0,0	1.339.394	27,0	0,0
5.977	0,3	0,0	0	0,0	0,0	2.072	0,6	0,0	8.049	0,2	0,0
1.818.445	100,0	0,0	497.498	100,0	0,0	349.280	100,0	0,0	4.969.843	100,0	0,0
22.415	1,2	1,0	0	0,0	0,0	2.006	0,6	0,6	25.582	0,5	0,4

ANNEX II

Central Government R & D Expenditure by Objective

Country: GERMANY
(Federation and Lands)

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 DM	0/0	1000 DM	0/0	1000 DM
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	942.476*	19,3*	923.516*	18,2*	930.750*
1.0. R & D OF A GENERAL NATURE	215.321	4,4	191.764	3,8	218.285
1.1. ENERGY R & D	661.090	13,5	678.080	13,4	656.907
1.9. OTHER RESEARCH	66.065	1,4	53.672	1,1	55.558
(OF WHICH: DEVELOPING COUNTRIES)	(C)	(C,C)	(0)	(0,0)	(0)
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	301.664*	6,2*	341.526*	6,7*	361.619*
2.0. R & D OF A GENERAL NATURE (B)	94.476	1,9	101.019	2,0	126.988
2.1. R & D ON LAUNCHERS AND SATELLITES	206.543	4,2	239.447	4,7	233.501
2.1.1. LAUNCHING SYSTEMS (C)	(91.800)	(1,9)	(102.600)	(2,0)	(91.100)
2.1.2. SCIENTIFIC EXPLORATION (D)	(94.873)	(1,9)	(111.492)	(2,2)	(111.546)
2.1.3. SYSTEMS OF APPLICATION (E)	(6.000)	(0,1)	(10.000)	(0,2)	(21.000)
2.9. OTHER R & D	645	C,C	1.060	0,0	1.130
(OF WHICH: DEVELOPING COUNTRIES)	(C)	(C,C)	(0)	(0,0)	(0)
3. DEFENCE (A)	1.043.777*	21,4*	985.956*	19,4*	1.070.731*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	88.490*	1,8*	79.300*	1,6*	90.343*
4.0. R & D OF A GENERAL NATURE	6.823	C,1	7.820	0,2	6.346
4.1. SOIL AND SUB-STRATUM (F)	41.045	C,8	39.860	0,8	43.016
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(4.315)	(0,1)	(4.631)	(0,1)	(5.250)
4.2. SEAS AND OCEANS (G)	39.403	C,8	30.078	0,6	39.412
4.3. ATMOSPHERE	1.219	C,C	1.542	0,0	1.569
4.3.3. METEOROLOGY	(1.219)	(0,0)	(1.542)	(0,0)	(1.569)
4.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	99.495*	2,0*	111.612*	2,2*	111.207*
5.0. R & D OF A GENERAL NATURE	33.123	0,7	38.627	0,8	39.085
5.1. MEDICAL RESEARCH	36.946	0,8	44.158	0,9	44.776
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	11.242	0,2	10.143	0,2	9.380
5.3. R & D ON NOXIOUS PHENOMENA (H)	13.826	0,3	14.196	0,3	13.159
5.3.1. WATER POLLUTION	(2.543)	(0,1)	(2.758)	(0,1)	(2.657)
5.3.2. AIR POLLUTION	(3.028)	(0,1)	(3.028)	(0,1)	(3.028)
5.3.3. ACTION AGAINST NOISE	(578)	(0,0)	(1.352)	(0,0)	(1.318)
5.9. OTHER R & D	4.358	0,1	4.488	0,1	4.807
(OF WHICH: DEVELOPING COUNTRIES)	(C)	(C,0)	(0)	(0,0)	(0)
6. PLANNING OF HUMAN ENVIRONMENT	39.471*	0,8*	41.979*	0,8*	59.044*
6.0. R & D OF A GENERAL NATURE (I)	15.011	0,3	15.717	0,3	20.630
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	6.907	C,1	6.459	0,1	9.888
6.1.1. RESIDENTIAL	(685)	(0,0)	(735)	(0,0)	(1.400)
6.1.2. NON-RESIDENTIAL	(643)	(0,0)	(1.105)	(0,0)	(1.608)
6.2. CIVIL ENGINEERING (J)	7.632	0,2	8.595	0,2	7.859
6.3. TRANSPORT SYSTEMS	9.700	0,2	10.831	0,2	20.290
6.4. SYSTEMS OF TELECOMMUNICATIONS	221	0,0	377	0,0	377
6.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	109.047*	2,2*	108.388*	2,1*	114.162*
7.0. R & D OF A GENERAL NATURE (K)	11.461	0,2	11.777	0,2	11.446
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	23.138	0,5	21.103	0,4	21.517
7.1.3. VETERINARY MEDICINE	(5.372)	(0,1)	(4.910)	(0,1)	(4.717)
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	62.933	1,3	64.978	1,3	69.133
7.3. PRODUCTS OF FISHING AND FISH BREEDING	7.526	0,2	6.991	0,1	8.550
7.9. OTHER R & D	3.989	0,1	3.539	0,1	3.516
(OF WHICH: DEVELOPING COUNTRIES)	(C)	(0,0)	(0)	(0,0)	(0)

Central Government R & D Expenditure by Objective

Country: GERMANY
(Federation and Lands)

Appropriations 1967-1971

1970		1971		OBJECTIVE
0/0	1000 DM	0/0	1000 DM	0/0	
* 16,4*	1.036.059*	15,9*	1.224.381*	15,6*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
3,8	231.047	3,6	286.933	3,7	1.0. R & D OF A GENERAL NATURE
11,6	734.980	11,3	864.557	11,0	1.1. ENERGY R & D
1,0	70.032	1,1	72.891	0,9	1.9. OTHER RESEARCH
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
6,4*	344.573*	5,3*	515.925*	6,6*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
2,2	113.711	1,7	166.495	2,1	2.0. R & D OF A GENERAL NATURE (B)
4,1	229.701	3,5	347.900	4,4	2.1. R & D ON LAUNCHERS AND SATELLITES
(1,6)	(86.500)	(1,3)	(78.200)	(1,0)	2.1.1. LAUNCHING SYSTEMS (C)
(2,0)	(99.497)	(1,5)	(174.200)	(2,2)	2.1.2. SCIENTIFIC EXPLORATION (D)
(0,4)	(32.450)	(0,5)	(7.500)	(0,1)	2.1.3. SYSTEMS OF APPLICATION (E)
0,0	1.161	0,0	1.530	0,0	2.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
18,8*	1.150.980*	17,7*	1.173.105*	15,0*	3. DEFENCE (A)
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,6*	110.833*	1,7*	148.866*	1,9*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,1	7.336	0,1	7.971	0,1	4.0. R & D OF A GENERAL NATURE
0,8	53.155	0,8	65.063	0,8	4.1. SOIL AND SUB-STRATUM (F)
(0,1)	(6.706)	(0,1)	(7.731)	(0,1)	4.1.3. PROSPECTING FOR MINES AND PETROLEUM
0,7	42.731	0,7	67.032	0,9	4.2. SEAS AND OCEANS (G)
0,0	7.611	0,1	8.800	0,1	4.3. ATMOSPHERE
(0,0)	(1.155)	(0,0)	(1.280)	(0,0)	4.3.3. METEOROLOGY
0,0	0	0,0	0	0,0	4.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,0*	158.827*	2,4*	209.195*	2,7*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
0,7	37.358	0,6	49.857	0,6	5.0. R & D OF A GENERAL NATURE
0,8	82.426	1,3	100.081	1,3	5.1. MEDICAL RESEARCH
0,2	12.824	0,2	20.690	0,3	5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
0,2	22.243	0,3	32.258	0,4	5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,0)	(4.034)	(0,1)	(7.057)	(0,1)	5.3.1. WATER POLLUTION
(0,1)	(3.200)	(0,0)	(4.679)	(0,1)	5.3.2. AIR POLLUTION
(0,0)	(0)	(0,0)	(0)	(0,0)	5.3.3. ACTION AGAINST NOISE
0,1	3.976	0,1	6.309	0,1	5.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,0*	66.491*	1,0*	76.236*	1,0*	6. PLANNING OF HUMAN ENVIRONMENT
0,4	20.198	0,3	23.097	0,3	6.0. R & D OF A GENERAL NATURE (I)
0,2	4.626	0,1	6.176	0,1	6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,0)	(0)	(0,0)	(0)	(0,0)	6.1.1. RESIDENTIAL
(0,0)	(1.517)	(0,0)	(1.745)	(0,0)	6.1.2. NON-RESIDENTIAL
0,1	7.780	0,1	9.226	0,1	6.2. CIVIL ENGINEERING (J)
0,4	33.420	0,5	37.200	0,5	6.3. TRANSPORT SYSTEMS
0,0	467	0,0	537	0,0	6.4. SYSTEMS OF TELECOMMUNICATIONS
0,0	0	0,0	0	0,0	6.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,0*	137.281*	2,1*	162.319*	2,1*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
0,2	12.472	0,2	13.309	0,2	7.0. R & D OF A GENERAL NATURE (K)
0,4	28.289	0,4	33.055	0,4	7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(0,1)	(4.494)	(0,1)	(5.168)	(0,1)	7.1.3. VETERINARY MEDICINE
1,2	82.188	1,3	92.634	1,2	7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
0,2	10.688	0,2	19.116	0,2	7.3. PRODUCTS OF FISHING AND FISH BREEDING
0,1	3.644	0,1	4.205	0,1	7.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Country: GERMANY
(Federation and Lands)

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 DM	0/0	1000 DM	0/0	1000 DM
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	194.377*	4,0*	193.259*	3,8*	289.093
8.0. R & D OF A GENERAL NATURE (L)	86.907	1,8	82.677	1,6	113.56
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	0	0,0	0	0,0	
8.2. PRODUCTS OF OTHER INDUSTRIES	106.770	2,2	107.882	2,1	169.5
8.2.1. CHEMICAL	(0)	(0,0)	(0)	(0,0)	
8.2.2. METALLURGY	(6.527)	(0,1)	(8.174)	(0,2)	(6.6
8.2.3. ELECTRONICS (M)	(0)	(0,0)	(0)	(0,0)	
8.2.4. CIVIL AERONAUTICS	(49.908)	(1,0)	(48.990)	(1,0)	(105.30
8.2.5. OTHER MEANS OF TRANSPORT	(1.603)	(0,0)	(1.696)	(0,0)	(3.550
8.2.9. MISCELLANEOUS INDUSTRIES	(30.232)	(0,6)	(28.022)	(0,6)	(29.985
8.9. OTHER R & D	700	0,0	2.700	0,1	6.000
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	67.781*	1,4*	73.708*	1,5*	117.186
9.0. R & D OF A GENERAL NATURE	4.430	0,1	4.225	0,1	16.173
9.1. R & D ON HARDWARE	47.500	1,0	47.000	0,9	64.000
9.2. R & D ON SOFTWARE	15.200	0,3	21.912	0,4	36.442
9.9. OTHER R & D	651	0,0	571	0,0	571
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	82.874*	1,7*	88.321*	1,7*	93.672
10.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	11.038	0,2	12.420	0,2	10.506
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(0)	(0,0)	(0
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(0
10.1.3. IN THE FIELD OF AGRICULTURE	(0)	(0,0)	(0)	(0,0)	(0
10.2. R & D ON BUSINESS ADMINISTRATION	3.436	0,1	3.293	0,1	3.560
10.9. OTHER R & D (N)	68.400	1,4	72.608	1,4	79.606
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (O)	325.440*	6,7*	355.813*	7,0*	466.425
11.0. R & D OF A GENERAL NATURE	53.621	1,1	67.125	1,3	72.514
11.1. R & D IN THE NATURAL SCIENCES	244.662	5,0	258.119	5,1	352.999
11.1.0. R & D OF A GENERAL NATURE	(58.810)	(1,2)	(50.520)	(1,0)	(80.855
11.1.1. NATURAL SCIENCES	(107.274)	(2,2)	(126.071)	(2,5)	(147.892
11.1.2. ENGINEERING	(36.378)	(0,7)	(41.120)	(0,8)	(54.487
11.1.3. MEDICAL SCIENCES	(19.658)	(0,4)	(22.071)	(0,4)	(29.474
11.1.4. AGRICULTURAL SCIENCES	(9.614)	(0,2)	(10.768)	(0,2)	(14.409
11.1.9. OTHER FIELDS	(12.928)	(0,3)	(7.569)	(0,1)	(25.882
11.2. R & D IN THE SOCIAL SCIENCES	27.157	0,6	30.569	0,6	40.912
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)	1.585.300*	32,5*	1.775.600*	35,0*	1.982.500
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
12.1. R & D IN THE NATURAL SCIENCES	1.402.100	28,7	1.569.600	30,9	1.750.000
12.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(0
12.1.1. NATURAL SCIENCES	(537.900)	(11,0)	(610.900)	(12,0)	(696.400
12.1.2. ENGINEERING	(259.900)	(5,3)	(291.900)	(5,7)	(332.200
12.1.3. MEDICAL SCIENCES	(479.200)	(9,8)	(524.700)	(10,3)	(559.400
12.1.4. AGRICULTURAL SCIENCES	(125.100)	(2,6)	(142.100)	(2,8)	(162.000
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	183.200	3,8	206.000	4,1	232.500
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	0*	0,0*	0*	0,0*	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
GRAND TOTAL	4.880.192*	100,0*	5.078.978*	100,0*	5.686.732
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

Country: GERMANY
(Federation and Lands)

1970		1971		OBJECTIVE
0/0	1000 DM	0/0	1000 DM	
5,1*	360.825*	5,5*	528.430*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
2,0	139.644	2,1	206.721	8.0. R & D OF A GENERAL NATURE (L)
0,0	0	0,0	0	8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
3,0	208.911	3,2	293.622	8.2. PRODUCTS OF OTHER INDUSTRIES
(0,0)	(0)	(0,0)	(0)	8.2.1. CHEMICAL
(0,1)	(0)	(0,0)	(0)	8.2.2. METALLURGY
(0,0)	(0)	(0,0)	(0)	8.2.3. ELECTRONICS (M)
(1,9)	(136.944)	(2,1)	(197.986)	8.2.4. CIVIL AERONAUTICS
(0,1)	(3.382)	(0,1)	(3.610)	8.2.5. OTHER MEANS OF TRANSPORT
(0,5)	(30.173)	(0,5)	(30.391)	8.2.9. MISCELLANEOUS INDUSTRIES
0,1	12.270	0,2	28.087	8.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(OF WHICH: DEVELOPING COUNTRIES)
2,1*	126.034*	1,9*	248.746*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
0,3	18.313	0,3	34.009	9.0. R & D OF A GENERAL NATURE
1,1	65.550	1,0	101.050	9.1. R & D ON HARDWARE
0,6	41.600	0,6	113.116	9.2. R & D ON SOFTWARE
0,0	571	0,0	571	9.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(OF WHICH: DEVELOPING COUNTRIES)
1,6*	115.718*	1,8*	137.403*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
0,0	1.545	0,0	3.352	10.0. R & D OF A GENERAL NATURE
0,2	15.597	0,2	17.829	10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0,0)	(0)	(0,0)	(0)	10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(0,0)	(0)	(0,0)	(0)	10.1.2. IN THE FIELD OF INDUSTRY
(0,0)	(0)	(0,0)	(0)	10.1.3. IN THE FIELD OF AGRICULTURE
0,1	3.495	0,1	9.168	10.2. R & D ON BUSINESS ADMINISTRATION
1,4	95.081	1,5	107.054	10.9. OTHER R & D (N)
(0,0)	(0)	(0,0)	(0)	(OF WHICH: DEVELOPING COUNTRIES)
8,2*	534.920*	8,2*	612.407*	11. GENERAL PROMOTION OF KNOWLEDGE
1,3	115.723	1,8	141.461	(EXCEPT HIGHER EDUCATION) (O)
6,2	372.684	5,7	418.059	11.0. R & D OF A GENERAL NATURE
(1,4)	(59.373)	(0,9)	(69.300)	11.1. R & D IN THE NATURAL SCIENCES
(2,6)	(207.107)	(3,2)	(233.486)	11.1.0. R & D OF A GENERAL NATURE
(1,0)	(60.970)	(0,9)	(65.403)	11.1.1. NATURAL SCIENCES
(0,5)	(30.194)	(0,5)	(33.320)	11.1.2. ENGINEERING
(0,3)	(14.490)	(0,2)	(16.010)	11.1.3. MEDICAL SCIENCES
(0,5)	(550)	(0,0)	(540)	11.1.4. AGRICULTURAL SCIENCES
C,7	46.513	0,7	52.887	11.1.9. OTHER FIELDS
(0,0)	(0)	(0,0)	(0)	11.2. R & D IN THE SOCIAL SCIENCES
34,9*	2.359.800*	36,3*	2.793.500*	(OF WHICH: DEVELOPING COUNTRIES)
C,0	30.000	0,5	60.000	12. GENERAL PROMOTION OF KNOWLEDGE
30,8	2.050.100	31,5	2.404.400	(HIGHER EDUCATION) (P)
(0,0)	(0)	(0,0)	(0)	12.0. R & D OF A GENERAL NATURE
(12,2)	(833.800)	(12,8)	(983.600)	12.1. R & D IN THE NATURAL SCIENCES
(5,8)	(394.400)	(6,1)	(459.900)	12.1.0. R & D OF A GENERAL NATURE
(9,8)	(628.000)	(9,7)	(732.100)	12.1.1. NATURAL SCIENCES
(2,8)	(193.900)	(3,0)	(228.800)	12.1.2. ENGINEERING
(0,0)	(0)	(0,0)	(0)	12.1.3. MEDICAL SCIENCES
4,1	279.700	4,3	329.100	12.1.4. AGRICULTURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	12.1.9. OTHER FIELDS
C,0*	0*	0,0*	0*	12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(0,0)	(0)	(0,0)	(0)	(OF WHICH: DEVELOPING COUNTRIES)
				MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
				(OF WHICH: DEVELOPING COUNTRIES)
100,0*	6.502.341*	100,0*	7.830.513*	GRAND TOTAL
(0,0)	(0)	(0,0)	(0)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective

Country: BELGIUM

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 BFR	0/0	1000 BFR	0/0	1000 BFR
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	1.054.345*	20,5*	1.188.407*	22,5*	1.284.641
1.0. R & D OF A GENERAL NATURE	240.192	4,7	295.398	5,6	310.566
1.1. ENERGY R & D	714.283	13,9	827.702	15,7	922.969
1.9. OTHER RESEARCH	99.870	1,9	65.307	1,2	51.106
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	349.777*	6,8*	338.227*	6,4*	357.512
2.0. R & D OF A GENERAL NATURE (B)	41.477	0,8	53.227	1,0	54.762
2.1. R & D ON LAUNCHERS AND SATELLITES	308.300	6,0	285.000	5,4	302.750
2.1.1. LAUNCHING SYSTEMS (C)	(198.853)	(3,9)	(183.825)	(3,5)	(196.250
2.1.2. SCIENTIFIC EXPLORATION (D)	(109.447)	(2,1)	(101.175)	(1,9)	(106.500
2.1.3. SYSTEMS OF APPLICATION (E)	(0)	(0,0)	(0)	(0,0)	(0
2.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
3. DEFENCE (A)	55.029*	1,1*	56.361*	1,1*	125.733
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	119.430*	2,3*	117.692*	2,2*	130.533
4.0. R & D OF A GENERAL NATURE	4.540	0,1	2.545	0,0	5.588
4.1. SOIL AND SUB-STRATUM (F)	80.705	1,6	74.756	1,4	80.773
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(2.900)	(0,1)	(3.121)	(0,1)	(3.742
4.2. SEAS AND OCEANS (G)	3.902	0,1	4.324	0,1	4.500
4.3. ATMOSPHERE	30.283	0,6	36.067	0,7	39.672
4.3.3. METEOROLOGY	(29.808)	(0,6)	(35.571)	(0,7)	(39.086
4.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	149.540*	2,9*	159.112*	3,0*	184.688
5.0. R & D OF A GENERAL NATURE	51.373	1,0	65.850	1,2	77.614
5.1. MEDICAL RESEARCH	69.643	1,4	56.612	1,1	69.240
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	4.153	0,1	4.050	0,1	4.640
5.3. R & D ON NOXIOUS PHENOMENA (H)	13.387	0,3	19.368	0,4	18.605
5.3.1. WATER POLLUTION	(1.125)	(0,0)	(4.797)	(0,1)	(1.350
5.3.2. AIR POLLUTION	(5.190)	(0,1)	(5.847)	(0,1)	(6.329
5.3.3. ACTION AGAINST NOISE	(0)	(0,0)	(0)	(0,0)	(860
5.9. OTHER R & D	10.984	0,2	13.232	0,3	14.589
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
6. PLANNING OF HUMAN ENVIRONMENT	100.093*	1,9*	76.485*	1,4*	95.771
6.0. R & D OF A GENERAL NATURE (I)	38.550	0,7	1.128	0,0	1.238
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	16.516	0,3	14.258	0,3	20.495
6.1.1. RESIDENTIAL	(0)	(0,0)	(0)	(0,0)	(1.650
6.1.2. NON-RESIDENTIAL	(16.516)	(0,3)	(14.258)	(0,3)	(18.845
6.2. CIVIL ENGINEERING (J)	24.445	0,5	38.903	0,7	26.728
6.3. TRANSPORT SYSTEMS	11.635	0,2	12.501	0,2	18.962
6.4. SYSTEMS OF TELECOMMUNICATIONS	0	0,0	0	0,0	18.480
6.9. OTHER R & D	8.947	0,2	9.695	0,2	9.868
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	224.880*	4,4*	293.963*	5,6*	300.905
7.0. R & D OF A GENERAL NATURE (K)	37.010	0,7	80.279	1,5	43.336
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	41.174	0,8	75.715	1,4	64.035
7.1.3. VETERINARY MEDICINE	(14.210)	(0,3)	(8.550)	(0,2)	(21.554
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	146.696	2,8	134.129	2,5	191.814
7.3. PRODUCTS OF FISHING AND FISH BREEDING	0	0,0	3.840	0,1	1.720
7.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0

Central Government R & D Expenditure by Objective

Appropriations 1967-1971

Country: BELGIUM

1970		1971		OBJECTIVE
0/0	1000 BFR	1000 BFR	0/0	
21,5*	1.571.715*	1.747.026*	21,2*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
5,2	402.049	422.938	5,1	1.0. R & D OF A GENERAL NATURE
15,5	1.093.451	1.199.805	14,5	1.1. ENERGY R & D
0,9	76.215	124.283	1,5	1.9. OTHER RESEARCH
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
6,0*	382.940*	501.058*	6,1*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
0,9	54.840	64.763	0,8	2.0. R & D OF A GENERAL NATURE (B)
5,1	328.100	436.295	5,3	2.1. R & D ON LAUNCHERS AND SATELLITES
(3,3)	(212.725)	(282.034)	(3,4)	2.1.1. LAUNCHING SYSTEMS (C)
(1,8)	(115.375)	(154.261)	(1,9)	2.1.2. SCIENTIFIC EXPLORATION (D)
(0,0)	(0)	(0)	(0,0)	2.1.3. SYSTEMS OF APPLICATION (E)
0,0	0	0	0,0	2.9. OTHER R & D
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,1*	138.614*	123.264*	1,5*	3. DEFENCE (A)
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,2*	150.883*	182.497*	2,2*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,1	3.835	5.861	0,1	4.0. R & D OF A GENERAL NATURE
1,4	94.982	119.366	1,4	4.1. SOIL AND SUB-STRATUM (F)
(0,1)	(4.378)	(4.836)	(0,1)	4.1.3. PROSPECTING FOR MINES AND PETROLEUM
0,1	9.312	8.447	0,1	4.2. SEAS AND OCEANS (G)
0,7	42.754	48.823	0,6	4.3. ATMOSPHERE
(0,7)	(42.093)	(48.063)	(0,6)	4.3.3. METEOROLOGY
0,0	0	0	0,0	4.9. OTHER R & D
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
3,1*	220.914*	246.647*	3,0*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
1,3	86.137	90.544	1,1	5.0. R & D OF A GENERAL NATURE
1,2	80.630	102.249	1,2	5.1. MEDICAL RESEARCH
0,1	4.882	6.139	0,1	5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
0,3	27.871	26.669	0,3	5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,0)	(1.950)	(2.018)	(0,0)	5.3.1. WATER POLLUTION
(0,1)	(7.952)	(8.721)	(0,1)	5.3.2. AIR POLLUTION
(0,0)	(1.044)	(591)	(0,0)	5.3.3. ACTION AGAINST NOISE
0,2	21.394	21.046	0,3	5.9. OTHER R & D
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,6*	86.717*	130.419*	1,6*	6. PLANNING OF HUMAN ENVIRONMENT
0,0	1.375	32.075	0,4	6.0. R & D OF A GENERAL NATURE (I)
0,3	24.565	27.335	0,3	6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,0)	(1.860)	(1.054)	(0,0)	6.1.1. RESIDENTIAL
(0,3)	(22.705)	(26.280)	(0,3)	6.1.2. NON-RESIDENTIAL
0,4	9.591	25.281	0,3	6.2. CIVIL ENGINEERING (J)
0,3	18.169	19.746	0,2	6.3. TRANSPORT SYSTEMS
0,3	21.242	12.044	0,1	6.4. SYSTEMS OF TELECOMMUNICATIONS
0,2	11.775	13.938	0,2	6.9. OTHER R & D
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
5,0*	357.101*	385.022*	4,7*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
0,7	50.797	58.846	0,7	7.0. R & D OF A GENERAL NATURE (K)
1,1	75.721	76.356	0,9	7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(0,4)	(24.816)	(25.605)	(0,3)	7.1.3. VETERINARY MEDICINE
3,2	228.495	248.637	3,0	7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
0,0	2.088	1.183	0,0	7.3. PRODUCTS OF FISHING AND FISH BREEDING
0,0	0	0	0,0	7.9. OTHER R & D
(0,0)	(0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Country: BELGIUM

Appropriations 1967-1971

OBJECTIVE	1967		1968		19
	1000 BFR	%	1000 BFR	%	1000 BFR
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	579.632*	11,3*	483.943*	9,2*	570.40
8.0. R & D OF A GENERAL NATURE (L)	18.784	0,4	35.458	0,7	9.73
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	0	0,0	0	0,0	21.07
8.2. PRODUCTS OF OTHER INDUSTRIES	560.848	10,9	448.485	8,5	539.60
8.2.1. CHEMICAL	(94.949)	(1,8)	(93.931)	(1,8)	(118.01
8.2.2. METALLURGY	(111.954)	(2,2)	(96.769)	(1,8)	(89.68
8.2.3. ELECTRONICS (M)	(47.884)	(0,9)	(37.680)	(0,7)	(15.33
8.2.4. CIVIL AERONAUTICS	(10.175)	(0,2)	(3.329)	(0,1)	(2.34
8.2.5. OTHER MEANS OF TRANSPORT	(47.302)	(0,9)	(38.590)	(0,7)	(4.95
8.2.9. MISCELLANEOUS INDUSTRIES	(248.584)	(4,8)	(178.186)	(3,4)	(308.67
8.9. OTHER R & D	0	0,0	0	0,0	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	0*	0,0*	12.000*	0,2*	4.30
9.0. R & D OF A GENERAL NATURE	0	0,0	12.000	0,2	4.30
9.1. R & D ON HARDWARE	0	0,0	0	0,0	
9.2. R & D ON SOFTWARE	0	0,0	0	0,0	
9.9. OTHER R & D	0	0,0	0	0,0	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	36.422*	0,7*	41.756*	0,8*	42.77
10.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	0	0,0	145	0,0	14
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(0)	(0,0)	(
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(
10.1.3. IN THE FIELD OF AGRICULTURE	(0)	(0,0)	(0)	(0,0)	(
10.2. R & D ON BUSINESS ADMINISTRATION	15.716	0,3	15.794	0,3	15.90
10.9. OTHER R & D (N)	20.706	0,4	25.817	0,5	26.72
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (O)	576.110*	11,2*	570.133*	10,8*	705.15
11.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	
11.1. R & D IN THE NATURAL SCIENCES	369.302	7,2	324.440	6,1	403.11
11.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(
11.1.1. NATURAL SCIENCES	(275.303)	(5,3)	(278.111)	(5,3)	(345.03
11.1.2. ENGINEERING	(12.282)	(0,2)	(11.631)	(0,2)	(14.45
11.1.3. MEDICAL SCIENCES	(80.565)	(1,6)	(33.638)	(0,6)	(42.38
11.1.4. AGRICULTURAL SCIENCES	(25)	(0,0)	(34)	(0,0)	(4
11.1.9. OTHER FIELDS	(1.127)	(0,0)	(1.026)	(0,0)	(1.19
11.2. R & D IN THE SOCIAL SCIENCES	206.808	4,0	245.693	4,6	302.04
(OF WHICH: DEVELOPING COUNTRIES)	(14.654)	(0,3)	(15.937)	(0,3)	(17.79
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)	1.903.632*	37,0*	1.949.613*	36,9*	2.161.58
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	
12.1. R & D IN THE NATURAL SCIENCES	1.559.260	30,3	1.596.734	30,2	1.770.33
12.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(
12.1.1. NATURAL SCIENCES	(886.631)	(17,2)	(908.520)	(17,2)	(1.007.29
12.1.2. ENGINEERING	(179.403)	(3,5)	(183.264)	(3,5)	(203.18
12.1.3. MEDICAL SCIENCES	(467.932)	(9,1)	(479.605)	(9,1)	(531.74
12.1.4. AGRICULTURAL SCIENCES	(25.294)	(0,5)	(25.345)	(0,5)	(28.10
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	344.372	6,7	352.879	6,7	391.24
(OF WHICH: DEVELOPING COUNTRIES)	(21.960)	(0,4)	(22.904)	(0,4)	(25.69
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	0*	0,0*	0*	0,0*	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(
GRAND TOTAL	5.148.890*	100,0*	5.287.692*	100,0*	5.963.99
(OF WHICH: DEVELOPING COUNTRIES)	(36.614)	(0,7)	(38.841)	(0,7)	(43.48

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

Country: BELGIUM

1970		1971		OBJECTIVE
0/0	1000 BFR	0/0	1000 BFR	0/0	
9,6*	720.625*	10,0*	879.110*	10,6*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
0,2	11.192	0,2	21.595	0,3	8.0. R & D OF A GENERAL NATURE (L)
0,4	25.578	0,4	14.502	0,2	8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
9,0	683.855	9,5	843.013	10,2	8.2. PRODUCTS OF OTHER INDUSTRIES
(2,0)	(143.056)	(2,0)	(158.187)	(1,9)	8.2.1. CHEMICAL
(1,5)	(107.167)	(1,5)	(151.642)	(1,8)	8.2.2. METALLURGY
(0,3)	(17.902)	(0,2)	(49.019)	(0,6)	8.2.3. ELECTRONICS (M)
(0,0)	(2.821)	(0,0)	(9.859)	(0,1)	8.2.4. CIVIL AERONAUTICS
(0,1)	(5.580)	(0,1)	(41.561)	(0,5)	8.2.5. OTHER MEANS OF TRANSPORT
(5,2)	(407.329)	(5,7)	(432.743)	(5,2)	8.2.9. MISCELLANEOUS INDUSTRIES
0,0	0	0,0	0	0,0	8.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
0,1*	5.220*	0,1*	2.959*	0,0*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
0,1	5.220	0,1	2.959	0,0	9.0. R & D OF A GENERAL NATURE
0,0	0	0,0	0	0,0	9.1. R & D ON HARDWARE
0,0	0	0,0	0	0,0	9.2. R & D ON SOFTWARE
0,0	0	0,0	0	0,0	9.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
0,7*	46.567*	0,6*	55.968*	0,7*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
0,0	0	0,0	0	0,0	10.0. R & D OF A GENERAL NATURE
0,0	145	0,0	82	0,0	10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.2. IN THE FIELD OF INDUSTRY
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.3. IN THE FIELD OF AGRICULTURE
0,3	16.031	0,2	21.847	0,3	10.2. R & D ON BUSINESS ADMINISTRATION
0,4	30.391	0,4	34.039	0,4	10.9. OTHER R & D (N)
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
11,8*	716.556*	10,0*	873.944*	10,6*	11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (O)
0,0	0	0,0	0	0,0	11.0. R & D OF A GENERAL NATURE
6,8	408.049	5,7	531.145	6,4	11.1. R & D IN THE NATURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	11.1.0. R & D OF A GENERAL NATURE
(5,8)	(349.321)	(4,9)	(421.542)	(5,1)	11.1.1. NATURAL SCIENCES
(0,2)	(14.546)	(0,2)	(18.217)	(0,2)	11.1.2. ENGINEERING
(0,7)	(42.993)	(0,6)	(89.775)	(1,1)	11.1.3. MEDICAL SCIENCES
(0,0)	(43)	(0,0)	(44)	(0,0)	11.1.4. AGRICULTURAL SCIENCES
(0,0)	(1.146)	(0,0)	(1.564)	(0,0)	11.1.9. OTHER FIELDS
5,1	308.507	4,3	342.799	4,2	11.2. R & D IN THE SOCIAL SCIENCES
(0,3)	(18.920)	(0,3)	(22.400)	(0,3)	(OF WHICH: DEVELOPING COUNTRIES)
36,2*	2.793.148*	38,8*	3.128.987*	37,9*	12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)
0,0	0	0,0	0	0,0	12.0. R & D OF A GENERAL NATURE
29,7	2.287.588	31,8	2.562.791	31,0	12.1. R & D IN THE NATURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	12.1.0. R & D OF A GENERAL NATURE
(16,9)	(1.301.607)	(18,1)	(1.457.733)	(17,7)	12.1.1. NATURAL SCIENCES
(3,4)	(262.556)	(3,7)	(294.499)	(3,6)	12.1.2. ENGINEERING
(8,9)	(687.114)	(9,6)	(769.437)	(9,3)	12.1.3. MEDICAL SCIENCES
(0,5)	(36.311)	(0,5)	(41.120)	(0,5)	12.1.4. AGRICULTURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	12.1.9. OTHER FIELDS
6,6	505.560	7,0	566.196	6,9	12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(0,4)	(31.447)	(0,4)	(35.641)	(0,4)	(OF WHICH: DEVELOPING COUNTRIES)
0,0*	0*	0,0*	0*	0,0*	MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
100,0*	7.191.000*	100,0*	8.256.901*	100,0*	GRAND TOTAL
(0,7)	(50.367)	(0,7)	(58.041)	(0,7)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective

Country: FRANCE

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 FFR	%	1000 FFR	%	1000 FFR
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	1.540.900*	17,4*	1.416.900*	15,4*	1.392.500
1.0. R & D OF A GENERAL NATURE	480.300	5,4	463.600	5,0	471.500
1.1. ENERGY R & D	1.060.600	12,0	953.300	10,4	921.000
1.9. OTHER RESEARCH	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	467.500*	5,3*	491.800*	5,4*	534.600
2.0. B & D OF A GENERAL NATURE (B)	54.000	0,6	55.800	0,6	60.400
2.1. R & D ON LAUNCHERS AND SATELLITES	413.500	4,7	436.000	4,7	474.200
2.1.1. LAUNCHING SYSTEMS (C)	(11.900)	(0,1)	(118.400)	(1,3)	(129.100
2.1.2. SCIENTIFIC EXPLORATION (D)	(296.600)	(3,4)	(311.100)	(3,4)	(336.500
2.1.3. SYSTEMS OF APPLICATION (E)	(6.000)	(0,1)	(6.500)	(0,1)	(8.600
2.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
3. DEFENCE (A)	2.994.000*	33,9*	3.023.000*	32,9*	2.700.000
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	106.000*	1,2*	119.400*	1,3*	161.500
4.0. R & D OF A GENERAL NATURE	3.800	0,0	7.600	0,1	9.500
4.1. SOIL AND SUB-STRATUM (F)	64.500	0,7	64.600	0,7	67.100
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(14.000)	(0,2)	(11.100)	(0,1)	(11.100
4.2. SEAS AND OCEANS (G)	13.200	0,1	21.000	0,2	48.100
4.3. ATMOSPHERE	12.600	0,1	14.300	0,2	21.800
4.3.3. METEOROLOGY	(9.000)	(0,1)	(10.000)	(0,1)	(13.000
4.9. OTHER R & D	11.900	0,1	11.900	0,1	15.000
(OF WHICH: DEVELOPING COUNTRIES)	(26.200)	(0,3)	(29.300)	(0,3)	(31.700
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	220.500*	2,5*	244.200*	2,7*	264.300
5.0. R & D OF A GENERAL NATURE	4.600	0,1	5.100	0,1	5.600
5.1. MEDICAL RESEARCH	157.600	1,8	179.300	2,0	194.800
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	6.400	0,1	7.000	0,1	7.200
5.3. R & D ON NOXIOUS PHENOMENA (H)	34.300	0,4	36.300	0,4	40.300
5.3.1. WATER POLLUTION	(8.600)	(0,1)	(8.700)	(0,1)	(10.400
5.3.2. AIR POLLUTION	(17.500)	(0,2)	(17.600)	(0,2)	(19.000
5.3.3. ACTION AGAINST NOISE	(0)	(0,0)	(1.200)	(0,0)	(1.200
5.9. OTHER R & D	17.600	0,2	16.500	0,2	16.400
(OF WHICH: DEVELOPING COUNTRIES)	(2.700)	(0,0)	(3.000)	(0,0)	(3.200
6. PLANNING OF HUMAN ENVIRONMENT	292.100*	3,3*	304.900*	3,3*	353.900
6.0. R & D OF A GENERAL NATURE (I)	14.000	0,2	10.000	0,1	13.000
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	17.000	0,2	20.100	0,2	18.700
6.1.1. RESIDENTIAL	(0)	(0,0)	(0)	(0,0)	(0
6.1.2. NON-RESIDENTIAL	(0)	(0,0)	(0)	(0,0)	(0
6.2. CIVIL ENGINEERING (J)	50.500	0,6	44.900	0,5	50.700
6.3. TRANSPORT SYSTEMS	21.000	0,2	29.900	0,3	31.600
6.4. SYSTEMS OF TELECOMMUNICATIONS	183.600	2,1	194.900	2,1	233.200
6.9. OTHER R & D	6.000	0,1	5.100	0,1	6.700
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	330.300*	3,7*	389.200*	4,2*	390.000
7.0. R & D OF A GENERAL NATURE (K)	19.800	0,2	22.500	0,2	20.700
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	107.000	1,2	129.700	1,4	123.800
7.1.3. VETERINARY MEDICINE	(18.600)	(0,2)	(22.900)	(0,2)	(21.500
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	166.700	1,9	196.600	2,1	195.600
7.3. PRODUCTS OF FISHING AND FISH BREEDING	20.900	0,2	22.000	0,2	32.700
7.9. OTHER R & D	15.900	0,2	18.400	0,2	17.200
(OF WHICH: DEVELOPING COUNTRIES)	(40.500)	(0,5)	(47.300)	(0,5)	(48.200

Central Government R & D Expenditure by Objective

Appropriations 1967-1971 — Country: FRANCE

1970		1971		OBJECTIVE
0/0	1000 FFR	0/0	1000 FFR	0/0	
14,8*	1.369.400*	14,3*	1.362.900*	13,5*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
5,0	480.900	5,0	496.300	4,9	1.0. R & D OF A GENERAL NATURE
9,8	888.500	9,3	866.600	8,6	1.1. ENERGY R & D
0,0	0	0,0	0	0,0	1.9. OTHER RESEARCH
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
5,7*	604.100*	6,3*	638.400*	6,3*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
0,6	66.500	0,7	72.500	0,7	2.0. R & D OF A GENERAL NATURE (B)
5,0	537.600	5,6	565.900	5,6	2.1. R & D ON LAUNCHERS AND SATELLITES
(1,4)	(142.000)	(1,5)	(153.300)	(1,5)	2.1.1. LAUNCHING SYSTEMS (C)
(3,6)	(379.600)	(4,0)	(394.500)	(3,9)	2.1.2. SCIENTIFIC EXPLORATION (D)
(0,1)	(16.000)	(0,2)	(18.100)	(0,2)	2.1.3. SYSTEMS OF APPLICATION (E)
0,0	0	0,0	0	0,0	2.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
28,7*	2.800.000*	29,2*	2.900.000*	28,7*	3. DEFENCE (A)
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,7*	179.500*	1,9*	212.600*	2,1*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,1	9.500	0,1	14.600	0,1	4.0. R & D OF A GENERAL NATURE
0,7	67.100	0,7	77.500	0,8	4.1. SOIL AND SUB-STRATUM (F)
(0,1)	(10.000)	(0,1)	(11.000)	(0,1)	4.1.3. PROSPECTING FOR MINES AND PETROLEUM
0,5	66.800	0,7	83.800	0,8	4.2. SEAS AND OCEANS (G)
0,2	20.100	0,2	18.800	0,2	4.3. ATMOSPHERE
(0,1)	(14.100)	(0,1)	(15.200)	(0,2)	4.3.3. METEOROLOGY
0,2	16.000	0,2	17.900	0,2	4.9. OTHER R & D
(0,3)	(32.800)	(0,3)	(37.400)	(0,4)	(OF WHICH: DEVELOPING COUNTRIES)
2,8*	269.900*	2,8*	315.000*	3,1*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
0,1	5.000	0,1	6.200	0,1	5.0. R & D OF A GENERAL NATURE
2,1	203.500	2,1	236.700	2,3	5.1. MEDICAL RESEARCH
0,1	7.500	0,1	8.500	0,1	5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
0,4	41.500	0,4	45.400	0,4	5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,1)	(9.800)	(0,1)	(9.900)	(0,1)	5.3.1. WATER POLLUTION
(0,2)	(21.300)	(0,2)	(18.600)	(0,2)	5.3.2. AIR POLLUTION
(0,0)	(1.500)	(0,0)	(3.100)	(0,0)	5.3.3. ACTION AGAINST NOISE
0,2	12.400	0,1	18.200	0,2	5.9. OTHER R & D
(0,0)	(3.500)	(0,0)	(3.800)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
3,8*	461.500*	4,8*	537.800*	5,3*	6. PLANNING OF HUMAN ENVIRONMENT
0,1	16.100	0,2	18.700	0,2	6.0. R & D OF A GENERAL NATURE (I)
0,2	24.400	0,3	27.200	0,3	6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,0)	(0)	(0,0)	(0)	(0,0)	6.1.1. RESIDENTIAL
(0,0)	(0)	(0,0)	(0)	(0,0)	6.1.2. NON-RESIDENTIAL
0,5	49.300	0,5	55.600	0,6	6.2. CIVIL ENGINEERING (J)
0,3	33.000	0,3	44.400	0,4	6.3. TRANSPORT SYSTEMS
2,5	331.700	3,5	384.200	3,8	6.4. SYSTEMS OF TELECOMMUNICATIONS
0,1	7.000	0,1	7.700	0,1	6.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
4,1*	394.400*	4,1*	450.600*	4,5*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
0,2	18.000	0,2	22.000	0,2	7.0. R & D OF A GENERAL NATURE (K)
1,3	125.700	1,3	142.900	1,4	7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(0,2)	(23.000)	(0,2)	(25.200)	(0,2)	7.1.3. VETERINARY MEDICINE
2,1	194.000	2,0	217.200	2,2	7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
0,3	39.700	0,4	48.000	0,5	7.3. PRODUCTS OF FISHING AND FISH BREEDING
0,2	17.000	0,2	20.500	0,2	7.9. OTHER R & D
(0,5)	(49.400)	(0,5)	(53.500)	(0,5)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Country: FRANCE

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 FFR	0/0	1000 FFR	0/0	1000 FFR
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	911.300*	10,3*	869.600*	9,5*	1.010.100
8.0. R & D OF A GENERAL NATURE (L)	4.300	0,0	5.600	0,1	9.000
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	0	0,0	0	0,0	0
8.2. PRODUCTS OF OTHER INDUSTRIES	907.000	10,3	864.000	9,4	1.001.100
8.2.1. CHEMICAL	(27.500)	(0,3)	(29.800)	(0,3)	(34.900
8.2.2. METALLURGY	(32.100)	(0,4)	(33.500)	(0,4)	(41.100
8.2.3. ELECTRONICS (M)	(115.200)	(1,3)	(114.000)	(1,2)	(128.400
8.2.4. CIVIL AERONAUTICS	(644.000)	(7,3)	(602.000)	(6,6)	(700.000
8.2.5. OTHER MEANS OF TRANSPORT	(4.500)	(0,1)	(4.700)	(0,1)	(7.800
8.2.9. MISCELLANEOUS INDUSTRIES	(68.700)	(0,8)	(67.000)	(0,7)	(72.900
8.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	84.300*	1,0*	147.000*	1,6*	221.400
9.0. R & D OF A GENERAL NATURE	20.200	0,2	24.400	0,3	42.100
9.1. R & D ON HARDWARE	52.000	0,6	100.000	1,1	138.900
9.2. R & D ON SOFTWARE	12.100	0,1	22.600	0,2	40.400
9.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	76.600*	0,9*	113.600*	1,2*	132.600
10.0. R & D OF A GENERAL NATURE	40.000	0,5	68.000	0,7	78.000
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	34.600	0,4	41.600	0,5	48.600
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(2.000)	(0,0)	(5.600
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(0
10.1.3. IN THE FIELD OF AGRICULTURE	(12.600)	(0,1)	(14.600)	(0,2)	(15.000
10.2. R & D ON BUSINESS ADMINISTRATION	1.000	0,0	1.000	0,0	1.000
10.9. OTHER R & D (N)	1.000	0,0	3.000	0,0	5.000
(OF WHICH: DEVELOPING COUNTRIES)	(5.500)	(0,1)	(6.200)	(0,1)	(6.700
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (O)	699.500*	7,9*	812.800*	8,8*	1.005.900
11.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
11.1. R & D IN THE NATURAL SCIENCES	635.600	7,2	737.600	8,0	910.400
11.1.0. R & D OF A GENERAL NATURE	(33.000)	(0,4)	(39.100)	(0,4)	(68.800
11.1.1. NATURAL SCIENCES	(517.300)	(5,9)	(599.100)	(6,5)	(712.700
11.1.2. ENGINEERING	(2.000)	(0,0)	(2.100)	(0,0)	(7.000
11.1.3. MEDICAL SCIENCES	(83.300)	(0,9)	(97.300)	(1,1)	(121.900
11.1.4. AGRICULTURAL SCIENCES	(0)	(0,0)	(0)	(0,0)	(0
11.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0
11.2. R & D IN THE SOCIAL SCIENCES	63.900	0,7	75.200	0,8	95.500
(OF WHICH: DEVELOPING COUNTRIES)	(5.900)	(0,1)	(7.000)	(0,1)	(7.400
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)	1.079.000*	12,2*	1.220.000*	13,3*	1.200.000
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
12.1. R & D IN THE NATURAL SCIENCES	943.100	10,7	1.066.600	11,6	1.049.600
12.1.0. R & D OF A GENERAL NATURE	(56.300)	(0,6)	(64.000)	(0,7)	(63.200
12.1.1. NATURAL SCIENCES	(701.700)	(7,9)	(791.500)	(8,6)	(776.000
12.1.2. ENGINEERING	(16.400)	(0,2)	(20.000)	(0,2)	(21.600
12.1.3. MEDICAL SCIENCES	(152.700)	(1,7)	(171.900)	(1,9)	(168.000
12.1.4. AGRICULTURAL SCIENCES	(16.000)	(0,2)	(19.200)	(0,2)	(20.800
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	135.900	1,5	153.400	1,7	150.400
(OF WHICH: DEVELOPING COUNTRIES)	(11.200)	(0,1)	(13.000)	(0,1)	(13.000
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	34.000*	0,4*	34.600*	0,4*	33.200
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
GRAND TOTAL	8.836.000*	100,0*	9.187.000*	100,0*	9.400.000
(OF WHICH: DEVELOPING COUNTRIES)	(92.000)	(1,0)	(105.800)	(1,2)	(110.200

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

Country: FRANCE

1970		1971		OBJECTIVE
0/0	1000 FFR	0/0	1000 FFR	0/0	
10,7*	858.900*	9,4*	889.600*	8,8*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
0,1	7.300	0,1	4.900	0,0	8.0. R & D OF A GENERAL NATURE (L)
0,0	0	0,0	0	0,0	8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
10,6	891.600	9,3	884.700	8,8	8.2. PRODUCTS OF OTHER INDUSTRIES
(0,4)	(33.500)	(0,3)	(48.500)	(0,5)	8.2.1. CHEMICAL
(0,4)	(37.600)	(0,4)	(51.200)	(0,5)	8.2.2. METALLURGY
(1,4)	(137.100)	(1,4)	(164.900)	(1,6)	8.2.3. ELECTRONICS (M)
(7,4)	(580.000)	(6,0)	(500.000)	(5,0)	8.2.4. CIVIL AERONAUTICS
(0,1)	(7.000)	(0,1)	(10.400)	(0,1)	8.2.5. OTHER MEANS OF TRANSPORT
(0,8)	(74.900)	(0,8)	(87.100)	(0,9)	8.2.9. MISCELLANEOUS INDUSTRIES
0,0	0	0,0	0	0,0	8.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,4*	303.900*	3,2*	314.000*	3,1*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
0,4	54.000	0,6	63.300	0,6	9.0. R & D OF A GENERAL NATURE
1,5	208.700	2,2	208.800	2,1	9.1. R & D ON HARDWARE
0,4	41.200	0,4	41.900	0,4	9.2. R & D ON SOFTWARE
0,0	0	0,0	0	0,0	9.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,4*	143.300*	1,5*	165.500*	1,6*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
0,8	84.800	0,9	99.600	1,0	10.0. R & D OF A GENERAL NATURE
0,5	52.300	0,5	58.500	0,6	10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0,1)	(3.000)	(0,0)	(3.900)	(0,0)	10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.2. IN THE FIELD OF INDUSTRY
(0,2)	(16.900)	(0,2)	(17.800)	(0,2)	10.1.3. IN THE FIELD OF AGRICULTURE
0,0	900	0,0	1.200	0,0	10.2. R & D ON BUSINESS ADMINISTRATION
0,1	5.300	0,1	6.200	0,1	10.9. OTHER R & D (N)
(0,1)	(6.900)	(0,1)	(7.900)	(0,1)	(OF WHICH: DEVELOPING COUNTRIES)
10,7*	939.200*	9,8*	1.103.900*	10,9*	11. GENERAL PROMOTION OF KNOWLEDGE
0,0	0	0,0	0	0,0	(EXCEPT HIGHER EDUCATION) (0)
9,7	848.800	8,8	998.800	9,9	11.0. R & D OF A GENERAL NATURE
(0,7)	(56.200)	(0,6)	(53.200)	(0,5)	11.1. R & D IN THE NATURAL SCIENCES
(7,6)	(680.200)	(7,1)	(814.400)	(8,1)	11.1.0. R & D OF A GENERAL NATURE
(0,1)	(4.200)	(0,0)	(1.400)	(0,0)	11.1.1. NATURAL SCIENCES
(1,3)	(108.200)	(1,1)	(129.800)	(1,3)	11.1.2. ENGINEERING
(0,0)	(0)	(0,0)	(0)	(0,0)	11.1.3. MEDICAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	11.1.4. AGRICULTURAL SCIENCES
1,0	90.400	0,9	105.100	1,0	11.1.9. OTHER FIELDS
(0,1)	(7.700)	(0,1)	(8.800)	(0,1)	11.2. R & D IN THE SOCIAL SCIENCES
12,8*	1.205.300*	12,6*	1.176.500*	11,6*	(OF WHICH: DEVELOPING COUNTRIES)
0,0	0	0,0	0	0,0	12. GENERAL PROMOTION OF KNOWLEDGE
11,2	1.055.000	11,0	1.029.900	10,2	(HIGHER EDUCATION) (P)
(0,7)	(61.300)	(0,6)	(62.500)	(0,6)	12.0. R & D OF A GENERAL NATURE
(8,3)	(779.300)	(8,1)	(756.300)	(7,5)	12.1. R & D IN THE NATURAL SCIENCES
(0,2)	(23.100)	(0,2)	(24.600)	(0,2)	12.1.0. R & D OF A GENERAL NATURE
(1,8)	(169.200)	(1,8)	(162.800)	(1,6)	12.1.1. NATURAL SCIENCES
(0,2)	(22.100)	(0,2)	(23.700)	(0,2)	12.1.2. ENGINEERING
(0,0)	(0)	(0,0)	(0)	(0,0)	12.1.3. MEDICAL SCIENCES
1,6	150.300	1,6	146.600	1,5	12.1.4. AGRICULTURAL SCIENCES
(0,1)	(13.000)	(0,1)	(13.100)	(0,1)	12.1.9. OTHER FIELDS
0,4*	30.600*	0,3*	33.200*	0,3*	12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
100,0*	9.600.000*	100,0*	10.100.000*	100,0*	MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
(1,2)	(113.300)	(1,2)	(124.500)	(1,2)	(OF WHICH: DEVELOPING COUNTRIES)
					GRAND TOTAL
					(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective

Country: ITALY

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	MIO LIT	O/O	MIO LIT	O/O	MIO LIT
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	61.869*	34,6*	59.684*	31,1*	62.533
1.0. R & D OF A GENERAL NATURE	17.322	9,7	17.316	9,0	18.089
1.1. ENERGY R & D	37.148	20,8	34.712	18,1	38.032
1.9. OTHER RESEARCH	7.399	4,1	7.656	4,0	6.412
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	13.271*	7,4*	10.570*	5,5*	10.389
2.0. R & D OF A GENERAL NATURE (B)	413	0,2	297	0,2	731
2.1. R & D ON LAUNCHERS AND SATELLITES	12.858	7,2	10.146	5,3	9.466
2.1.1. LAUNCHING SYSTEMS (C)	(7.571)	(4,2)	(5.438)	(2,8)	(5.400
2.1.2. SCIENTIFIC EXPLORATION (D)	(4.976)	(2,8)	(4.327)	(2,3)	(4.000
2.1.3. SYSTEMS OF APPLICATION (E)	(0)	(0,0)	(0)	(0,0)	(0
2.9. OTHER R & D	0	0,0	127	0,1	192
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
3. DEFENCE (A)	8.957*	5,0*	8.943*	4,7*	8.631
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	1.281*	0,7*	3.014*	1,6*	3.101
4.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
4.1. SOIL AND SUB-STRATUM (F)	120	0,1	383	0,2	555
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(0)	(0,0)	(0)	(0,0)	(0
4.2. SEAS AND OCEANS (G)	799	0,4	2.104	1,1	1.987
4.3. ATMOSPHERE	362	0,2	527	0,3	559
4.3.3. METEOROLOGY	(286)	(0,2)	(447)	(0,2)	(474
4.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	2.637*	1,5*	4.160*	2,2*	5.902
5.0. R & D OF A GENERAL NATURE	227	0,1	172	0,1	1.063
5.1. MEDICAL RESEARCH	1.408	0,8	2.454	1,3	2.602
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	534	0,3	697	0,4	1.380
5.3. R & D ON NOXIOUS PHENOMENA (H)	157	0,1	520	0,3	548
5.3.1. WATER POLLUTION	(125)	(0,1)	(383)	(0,2)	(406
5.3.2. AIR POLLUTION	(3)	(0,0)	(81)	(0,0)	(32
5.3.3. ACTION AGAINST NOISE	(29)	(0,0)	(56)	(0,0)	(60
5.9. OTHER R & D	311	0,2	317	0,2	309
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
6. PLANNING OF HUMAN ENVIRONMENT	3.499*	2,0*	4.615*	2,4*	4.290
6.0. R & D OF A GENERAL NATURE (I)	0	0,0	3	0,0	33
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	315	0,2	2.453	1,3	1.297
6.1.1. RESIDENTIAL	(0)	(0,0)	(0)	(0,0)	(436
6.1.2. NON-RESIDENTIAL	(98)	(0,1)	(2.000)	(1,0)	(200
6.2. CIVIL ENGINEERING (J)	414	0,2	233	0,1	1.203
6.3. TRANSPORT SYSTEMS	9	0,0	10	0,0	10
6.4. SYSTEMS OF TELECOMMUNICATIONS	367	0,2	645	0,3	647
6.9. OTHER R & D	2.394	1,3	1.271	0,7	1.100
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	2.772*	1,6*	7.136*	3,7*	7.602
7.0. R & D OF A GENERAL NATURE (K)	685	0,4	483	0,3	548
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	568	0,3	432	0,2	719
7.1.3. VETERINARY MEDICINE	(69)	(0,0)	(54)	(0,0)	(41
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	1.504	0,8	2.527	1,3	3.026
7.3. PRODUCTS OF FISHING AND FISH BREEDING	15	0,0	328	0,2	243
7.9. OTHER R & D	0	0,0	3.366	1,8	3.066
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0

Central Government R & D Expenditure by Objective

Appropriations 1967-1971

Country: ITALY

1970		1971		OBJECTIVE
0/0	MIO LIT	0/0	MIO LIT	0/0	
30,0*	58.741*	22,3*	64.800*	20,8*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
8,7	15.527	5,9			1.0. R & D OF A GENERAL NATURE
18,3	37.862	14,4			1.1. ENERGY R & D
3,1	5.352	2,0			1.9. OTHER RESEARCH
(0,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
5,0*	7.841*	3,0*	18.046*	5,8*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
0,4	719	0,3			2.0. R & D OF A GENERAL NATURE (B)
4,5	6.946	2,6			2.1. R & D ON LAUNCHERS AND SATELLITES
(2,6)	(2.196)	(0,8)			2.1.1. LAUNCHING SYSTEMS (C)
(1,9)	(4.750)	(1,8)			2.1.2. SCIENTIFIC EXPLORATION (D)
(0,0)	(0)	(0,0)			2.1.3. SYSTEMS OF APPLICATION (E)
0,1	176	0,1			2.9. OTHER R & D
(C,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
4,1*	11.291*	4,3*	11.000*	3,5*	3. DEFENCE (A)
(0,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
1,5*	3.905*	1,5*	4.000*	1,3*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,0	0	0,0			4.0. R & D OF A GENERAL NATURE
0,3	1.126	0,4			4.1. SOIL AND SUB-STRATUM (F)
(0,0)	(0)	(0,0)			4.1.3. PROSPECTING FOR MINES AND PETROLEUM
1,0	2.062	0,8			4.2. SEAS AND OCEANS (G)
0,3	617	0,2			4.3. ATMOSPHERE
(C,2)	(540)	(0,2)			4.3.3. METEOROLOGY
C,0	100	0,0			4.9. OTHER R & D
(C,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
2,8*	8.441*	3,2*	9.140*	2,9*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
0,5	1.561	0,6			5.0. R & D OF A GENERAL NATURE
1,2	3.672	1,4			5.1. MEDICAL RESEARCH
C,7	1.884	0,7			5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
C,3	650	0,2			5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,2)	(454)	(0,2)			5.3.1. WATER POLLUTION
(0,0)	(140)	(0,1)			5.3.2. AIR POLLUTION
(0,0)	(56)	(0,0)			5.3.3. ACTION AGAINST NOISE
0,1	674	0,3			5.9. OTHER R & D
(0,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
2,1*	8.022*	3,0*	4.780*	1,5*	6. PLANNING OF HUMAN ENVIRONMENT
0,0	3.603	1,4			6.0. R & D OF A GENERAL NATURE (I)
C,6	1.265	0,5			6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,2)	(497)	(0,2)			6.1.1. RESIDENTIAL
(C,1)	(500)	(0,2)			6.1.2. NON-RESIDENTIAL
C,6	1.099	0,4			6.2. CIVIL ENGINEERING (J)
C,0	11	0,0			6.3. TRANSPORT SYSTEMS
C,3	1.053	0,4			6.4. SYSTEMS OF TELECOMMUNICATIONS
C,5	991	0,4			6.9. OTHER R & D
(C,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
3,7*	9.265*	3,5*	9.800*	3,2*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
C,3	1.219	0,5			7.0. R & D OF A GENERAL NATURE (K)
0,3	943	0,4			7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(C,0)	(392)	(0,1)			7.1.3. VETERINARY MEDICINE
1,5	4.198	1,6			7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
C,1	225	0,1			7.3. PRODUCTS OF FISHING AND FISH BREEDING
1,5	2.680	1,0			7.9. OTHER R & D
(C,0)	(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Country: ITALY

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	MIO LIT	0/0	MIO LIT	0/0	MIO LIT
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	2.620*	1,5*	6.163*	3,2*	10.343*
8.0. R & D OF A GENERAL NATURE (L)	291	0,2	649	0,3	851
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	665	0,4	738	0,4	315
8.2. PRODUCTS OF OTHER INDUSTRIES	1.664	0,9	4.776	2,5	8.793
8.2.1. CHEMICAL	(48)	(0,0)	(116)	(0,1)	(139)
8.2.2. METALLURGY	(18)	(0,0)	(417)	(0,2)	(598)
8.2.3. ELECTRONICS (M)	(255)	(0,1)	(1.248)	(0,7)	(2.987)
8.2.4. CIVIL AERONAUTICS	(0)	(0,0)	(150)	(0,1)	(330)
8.2.5. OTHER MEANS OF TRANSPORT	(64)	(0,0)	(207)	(0,1)	(821)
8.2.9. MISCELLANEOUS INDUSTRIES	(1.279)	(0,7)	(2.638)	(1,4)	(3.918)
8.9. OTHER R & D	0	0,0	0	0,0	384
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	496*	0,3*	1.186*	0,6*	1.518*
9.0. R & D OF A GENERAL NATURE	146	0,1	190	0,1	203
9.1. R & D ON HARDWARE	39	0,0	412	0,2	479
9.2. R & D ON SOFTWARE	311	0,2	584	0,3	836
9.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	3.266*	1,8*	2.813*	1,5*	2.608*
10.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	21
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	25	0,0	17	0,0	50
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(0)	(0,0)	(0)
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(0)
10.1.3. IN THE FIELD OF AGRICULTURE	(0)	(0,0)	(0)	(0,0)	(3)
10.2. R & D ON BUSINESS ADMINISTRATION	0	0,0	0	0,0	0
10.9. OTHER R & D (N)	3.241	1,8	2.796	1,5	2.537
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
11. GENERAL PROMOTION OF KNOWLEDGE	22.658*	12,7*	23.635*	12,3*	23.751*
(EXCEPT HIGHER EDUCATION) (O)					
11.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
11.1. R & D IN THE NATURAL SCIENCES	19.797	11,1	20.506	10,7	20.881
11.1.0. R & D OF A GENERAL NATURE	(932)	(0,5)	(3)	(0,0)	(98)
11.1.1. NATURAL SCIENCES	(11.213)	(6,3)	(11.743)	(6,1)	(14.896)
11.1.2. ENGINEERING	(2.901)	(1,6)	(3.634)	(1,9)	(2.708)
11.1.3. MEDICAL SCIENCES	(1.526)	(0,9)	(1.887)	(1,0)	(1.419)
11.1.4. AGRICULTURAL SCIENCES	(2.225)	(1,2)	(2.239)	(1,2)	(1.760)
11.1.9. OTHER FIELDS	(1.000)	(0,6)	(1.000)	(0,5)	(0)
11.2. R & D IN THE SOCIAL SCIENCES	2.861	1,6	3.129	1,6	2.870
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
12. GENERAL PROMOTION OF KNOWLEDGE	55.386*	31,0*	59.978*	31,3*	67.484*
(HIGHER EDUCATION) (P)					
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
12.1. R & D IN THE NATURAL SCIENCES	38.205	21,4	41.373	21,6	46.510
12.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(0)
12.1.1. NATURAL SCIENCES	(20.997)	(11,7)	(22.735)	(11,8)	(25.556)
12.1.2. ENGINEERING	(7.050)	(3,9)	(7.638)	(4,0)	(8.587)
12.1.3. MEDICAL SCIENCES	(7.878)	(4,4)	(8.553)	(4,5)	(9.618)
12.1.4. AGRICULTURAL SCIENCES	(2.260)	(1,3)	(2.447)	(1,3)	(2.749)
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0)
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	17.181	9,6	18.605	9,7	20.974
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	0*	0,0*	0*	0,0*	0*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
GRAND TOTAL	178.712*	100,0*	191.897*	100,0*	208.152*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

Country: ITALY

1970		1971		OBJECTIVE
MIO LIT	0/0	MIO LIT	0/0	
48.542*	18,4*	68.164*	21,9*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
834	0,3			8.0. R & D OF A GENERAL NATURE (L)
427	0,2			8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
47.281	17,9			8.2. PRODUCTS OF OTHER INDUSTRIES
(11.460)	(4,4)			8.2.1. CHEMICAL
(1.907)	(0,7)			8.2.2. METALLURGY
(19.753)	(7,5)			8.2.3. ELECTRONICS (M)
(274)	(0,1)			8.2.4. CIVIL AERONAUTICS
(258)	(0,1)			8.2.5. OTHER MEANS OF TRANSPORT
(13.629)	(5,2)			8.2.9. MISCELLANEOUS INDUSTRIES
0	0,0			8.9. OTHER R & D
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
733*	0,3*	1.500*	0,5*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
298	0,1			9.0. R & D OF A GENERAL NATURE
36	0,0			9.1. R & D ON HARDWARE
399	0,2			9.2. R & D ON SOFTWARE
0	0,0			9.9. OTHER R & D
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
2.185*	0,8*	2.500*	0,8*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
18	0,0			10.0. R & D OF A GENERAL NATURE
173	0,1			10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0)	(0,0)			10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(38)	(0,0)			10.1.2. IN THE FIELD OF INDUSTRY
(27)	(0,0)			10.1.3. IN THE FIELD OF AGRICULTURE
0	0,0			10.2. R & D ON BUSINESS ADMINISTRATION
1.994	0,8			10.9. OTHER R & D (N)
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
30.131*	11,4*	32.930*	10,6*	11. GENERAL PROMOTION OF KNOWLEDGE
				(EXCEPT HIGHER EDUCATION) (0)
0	0,0			11.0. R & D OF A GENERAL NATURE
25.412	9,6			11.1. R & D IN THE NATURAL SCIENCES
(991)	(0,4)			11.1.0. R & D OF A GENERAL NATURE
(16.349)	(6,2)			11.1.1. NATURAL SCIENCES
(3.085)	(1,2)			11.1.2. ENGINEERING
(2.956)	(1,1)			11.1.3. MEDICAL SCIENCES
(2.031)	(0,8)			11.1.4. AGRICULTURAL SCIENCES
(0)	(0,0)			11.1.9. OTHER FIELDS
4.719	1,8			11.2. R & D IN THE SOCIAL SCIENCES
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
74.332*	28,2*	84.276*	27,1*	12. GENERAL PROMOTION OF KNOWLEDGE
				(HIGHER EDUCATION) (P)
0	0,0			12.0. R & D OF A GENERAL NATURE
51.227	19,4			12.1. R & D IN THE NATURAL SCIENCES
(0)	(0,0)			12.1.0. R & D OF A GENERAL NATURE
(28.145)	(10,7)			12.1.1. NATURAL SCIENCES
(9.463)	(3,6)			12.1.2. ENGINEERING
(10.593)	(4,0)			12.1.3. MEDICAL SCIENCES
(3.026)	(1,1)			12.1.4. AGRICULTURAL SCIENCES
(0)	(0,0)			12.1.9. OTHER FIELDS
23.105	8,8			12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
0*	0,0*			MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
(0)	(0,0)			(OF WHICH: DEVELOPING COUNTRIES)
263.429*	100,0*	310.936*	100,0*	GRAND TOTAL
(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective

Country: NETHERLANDS

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 FL	0/0	1000 FL	0/0	1000 FL
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	81.417*	10,8*	94.284*	10,7*	99.252*
1.0. R & D OF A GENERAL NATURE	2.195	0,3	2.375	0,3	2.065
1.1. ENERGY R & D	58.765	7,8	70.925	8,1	72.785
1.9. OTHER RESEARCH	20.457	2,7	20.984	2,4	24.402
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	22.959*	3,0*	34.323*	3,9*	38.598*
2.0. R & D OF A GENERAL NATURE (B)	1.309	0,2	3.462	0,4	5.219
2.1. R & D ON LAUNCHERS AND SATELLITES	21.650	2,9	30.861	3,5	33.379
2.1.1. LAUNCHING SYSTEMS (C)	(10.000)	(1,3)	(17.000)	(1,9)	(17.000)
2.1.2. SCIENTIFIC EXPLORATION (D)	(11.650)	(1,5)	(13.861)	(1,6)	(16.379)
2.1.3. SYSTEMS OF APPLICATION (E)	(0)	(0,0)	(0)	(0,0)	(0)
2.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
3. DEFENCE (A)	34.396*	4,6*	45.346*	5,1*	53.047*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	14.930*	2,0*	10.830*	1,2*	15.851*
4.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
4.1. SOIL AND SUB-STRATUM (F)	3.269	0,4	3.910	0,4	3.915
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(0)	(0,0)	(0)	(0,0)	(0)
4.2. SEAS AND OCEANS (G)	9.608	1,3	4.895	0,6	9.585
4.3. ATMOSPHERE	2.053	0,3	2.025	0,2	2.351
4.3.3. METEOROLOGY	(1.987)	(0,3)	(1.959)	(0,2)	(2.285)
4.9. OTHER R & D	0	0,0	0	0,0	0
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	28.002*	3,7*	31.321*	3,6*	39.035*
5.0. R & D OF A GENERAL NATURE	16.017	2,1	17.616	2,0	23.298
5.1. MEDICAL RESEARCH	2.139	0,3	925	0,1	1.428
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	0	0,0	0	0,0	0
5.3. R & D ON NOXIOUS PHENOMENA (H)	172	0,0	370	0,0	254
5.3.1. WATER POLLUTION	(3)	(0,0)	(203)	(0,0)	(63)
5.3.2. AIR POLLUTION	(0)	(0,0)	(0)	(0,0)	(0)
5.3.3. ACTION AGAINST NOISE	(0)	(0,0)	(0)	(0,0)	(0)
5.9. OTHER R & D	9.674	1,3	12.410	1,4	14.055
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
6. PLANNING OF HUMAN ENVIRONMENT	21.067*	2,8*	25.415*	2,9*	30.894*
6.0. R & D OF A GENERAL NATURE (I)	3.858	0,5	4.799	0,5	5.008
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	6.303	0,8	7.007	0,8	9.630
6.1.1. RESIDENTIAL	(2.634)	(0,3)	(3.225)	(0,4)	(4.599)
6.1.2. NON-RESIDENTIAL	(1.419)	(0,2)	(1.532)	(0,2)	(1.656)
6.2. CIVIL ENGINEERING (J)	6.385	0,8	8.982	1,0	10.272
6.3. TRANSPORT SYSTEMS	3.488	0,5	3.585	0,4	4.670
6.4. SYSTEMS OF TELECOMMUNICATIONS	0	0,0	0	0,0	0
6.9. OTHER R & D	1.033	0,1	1.042	0,1	1.314
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	76.724*	10,2*	83.047*	9,4*	92.641*
7.0. R & D OF A GENERAL NATURE (K)	43.726	5,8	47.456	5,4	54.381
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	8.920	1,2	10.034	1,1	11.040
7.1.3. VETERINARY MEDICINE	(2.623)	(0,3)	(2.881)	(0,3)	(3.433)
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	17.878	2,4	19.883	2,3	21.128
7.3. PRODUCTS OF FISHING AND FISH BREEDING	2.475	0,3	1.530	0,2	1.709
7.9. OTHER R & D	3.725	0,5	4.144	0,5	4.383
(OF WHICH: DEVELOPING COUNTRIES)	(311)	(0,0)	(303)	(0,0)	(1.864)

Central Government R & D Expenditure by Objective

Appropriations 1967-1971

Country: NETHERLANDS

1970		1971		OBJECTIVE
0/0	1000 FL	0/0	1000 FL	0/0	
10,2*	117.213*	10,5*	108.100*	8,5*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
0,2	2.219	0,2	2.325	0,2	1.0. R & D OF A GENERAL NATURE
7,5	88.006	7,9	77.225	6,1	1.1. ENERGY R & D
2,5	26.988	2,4	28.550	2,3	1.9. OTHER RESEARCH
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
4,0*	32.357*	2,9*	44.793*	3,5*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
0,5	8.232	0,7	16.298	1,3	2.0. R & D OF A GENERAL NATURE (B)
3,4	24.125	2,2	28.495	2,3	2.1. R & D ON LAUNCHERS AND SATELLITES
(1,7)	(5.700)	(0,5)	(6.900)	(0,5)	2.1.1. LAUNCHING SYSTEMS (C)
(1,7)	(18.425)	(1,7)	(21.595)	(1,7)	2.1.2. SCIENTIFIC EXPLORATION (D)
(0,0)	(0)	(0,0)	(0)	(0,0)	2.1.3. SYSTEMS OF APPLICATION (E)
0,0	0	0,0	0	0,0	2.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
5,4*	50.476*	4,5*	55.204*	4,4*	3. DEFENCE (A)
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,6*	18.102*	1,6*	18.091*	1,4*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,0	0	0,0	0	0,0	4.0. R & D OF A GENERAL NATURE
0,4	4.422	0,4	4.861	0,4	4.1. SOIL AND SUB-STRATUM (F)
(0,0)	(0)	(0,0)	(0)	(0,0)	4.1.3. PROSPECTING FOR MINES AND PETROLEUM
1,0	11.063	1,0	10.362	0,8	4.2. SEAS AND OCEANS (G)
0,2	2.617	0,2	2.868	0,2	4.3. ATMOSPHERE
(0,2)	(2.551)	(0,2)	(2.802)	(0,2)	4.3.3. METEOROLOGY
0,0	0	0,0	0	0,0	4.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
4,0*	44.721*	4,0*	51.094*	4,0*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
2,4	23.847	2,1	26.614	2,1	5.0. R & D OF A GENERAL NATURE
0,1	2.147	0,2	2.591	0,2	5.1. MEDICAL RESEARCH
0,0	0	0,0	0	0,0	5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
0,0	297	0,0	360	0,0	5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,0)	(63)	(0,0)	(123)	(0,0)	5.3.1. WATER POLLUTION
(0,0)	(0)	(0,0)	(0)	(0,0)	5.3.2. AIR POLLUTION
(0,0)	(0)	(0,0)	(0)	(0,0)	5.3.3. ACTION AGAINST NOISE
1,4	18.430	1,7	21.529	1,7	5.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
3,2*	37.613*	3,4*	41.519*	3,3*	6. PLANNING OF HUMAN ENVIRONMENT
0,5	5.744	0,5	4.823	0,4	6.0. R & D OF A GENERAL NATURE (I)
1,0	11.351	1,0	12.750	1,0	6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,5)	(5.681)	(0,5)	(6.364)	(0,5)	6.1.1. RESIDENTIAL
(0,2)	(1.770)	(0,2)	(1.886)	(0,1)	6.1.2. NON-RESIDENTIAL
1,1	13.092	1,2	13.573	1,1	6.2. CIVIL ENGINEERING (J)
0,5	6.128	0,6	6.926	0,5	6.3. TRANSPORT SYSTEMS
0,0	0	0,0	0	0,0	6.4. SYSTEMS OF TELECOMMUNICATIONS
0,1	1.298	0,1	3.447	0,3	6.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
9,5*	105.737*	9,5*	115.730*	9,2*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
5,6	62.055	5,6	66.845	5,3	7.0. R & D OF A GENERAL NATURE (K)
1,1	13.813	1,2	15.010	1,2	7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(0,4)	(4.164)	(0,4)	(4.441)	(0,4)	7.1.3. VETERINARY MEDICINE
2,2	23.743	2,1	26.538	2,1	7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
0,2	1.968	0,2	2.746	0,2	7.3. PRODUCTS OF FISHING AND FISH BREEDING
0,4	4.158	0,4	4.591	0,4	7.9. OTHER R & D
(0,2)	(2.860)	(0,3)	(1.636)	(0,1)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

Country: NETHERLANDS

Appropriations 1967-1971

OBJECTIVE	1967		1968		1969	
	1000 FL	0/0	1000 FL	0/0	1000 FL	
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	60.264*	8,0*	74.078*	8,4*	64.526*	
8.0. R & D OF A GENERAL NATURE (L)	33.046	4,4	36.729	4,2	34.538	
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	0	0,0	0	0,0	0	
8.2. PRODUCTS OF OTHER INDUSTRIES	27.218	3,6	37.349	4,2	29.988	
8.2.1. CHEMICAL	(0)	(0,0)	(0)	(0,0)	(0)	
8.2.2. METALLURGY	(0)	(0,0)	(0)	(0,0)	(0)	
8.2.3. ELECTRONICS (M)	(0)	(0,0)	(0)	(0,0)	(0)	
8.2.4. CIVIL AERONAUTICS	(21.081)	(2,8)	(22.138)	(2,5)	(11.757)	
8.2.5. OTHER MEANS OF TRANSPORT	(0)	(0,0)	(0)	(0,0)	(0)	
8.2.9. MISCELLANEOUS INDUSTRIES	(6.137)	(0,8)	(15.211)	(1,7)	(18.231)	
8.9. OTHER R & D	0	0,0	0	0,0	0	
(OF WHICH: DEVELOPING COUNTRIES)	(490)	(0,1)	(180)	(0,0)	(0)	
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	70*	0,0*	80*	0,0*	4.130*	
9.0. R & D OF A GENERAL NATURE	70	0,0	80	0,0	4.130	
9.1. R & D ON HARDWARE	0	0,0	0	0,0	0	
9.2. R & D ON SOFTWARE	0	0,0	0	0,0	0	
9.9. OTHER R & D	0	0,0	0	0,0	0	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)	
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	27.342*	3,6*	28.756*	3,3*	34.904*	
10.0. R & D OF A GENERAL NATURE	2.500	0,3	1.474	0,2	890	
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	8.045	1,1	8.743	1,0	12.256	
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(0)	(0,0)	(0)	
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(0)	
10.1.3. IN THE FIELD OF AGRICULTURE	(275)	(0,0)	(300)	(0,0)	(350)	
10.2. R & D ON BUSINESS ADMINISTRATION	26	0,0	46	0,0	24	
10.9. OTHER R & D (N)	16.771	2,2	18.493	2,1	21.734	
(OF WHICH: DEVELOPING COUNTRIES)	(2.490)	(0,3)	(1.474)	(0,2)	(890)	
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (O)	36.925*	4,9*	41.982*	4,8*	48.434*	
11.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0	
11.1. R & D IN THE NATURAL SCIENCES	33.718	4,5	37.982	4,3	43.922	
11.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(0)	
11.1.1. NATURAL SCIENCES	(15.257)	(2,0)	(17.099)	(1,9)	(19.619)	
11.1.2. ENGINEERING	(0)	(0,0)	(0)	(0,0)	(0)	
11.1.3. MEDICAL SCIENCES	(1.932)	(0,3)	(2.188)	(0,2)	(2.310)	
11.1.4. AGRICULTURAL SCIENCES	(0)	(0,0)	(0)	(0,0)	(0)	
11.1.9. OTHER FIELDS	(16.529)	(2,2)	(18.695)	(2,1)	(21.993)	
11.2. R & D IN THE SOCIAL SCIENCES	3.207	0,4	4.000	0,5	4.512	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)	
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)	351.128*	46,5*	411.607*	46,7*	454.450*	
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0	
12.1. R & D IN THE NATURAL SCIENCES	296.933	39,3	349.377	39,7	379.056	
12.1.0. R & D OF A GENERAL NATURE	(0)	(0,0)	(0)	(0,0)	(0)	
12.1.1. NATURAL SCIENCES	(111.530)	(14,8)	(128.697)	(14,6)	(146.656)	
12.1.2. ENGINEERING	(110.038)	(14,6)	(112.156)	(12,7)	(124.296)	
12.1.3. MEDICAL SCIENCES	(55.745)	(7,4)	(80.397)	(9,1)	(87.133)	
12.1.4. AGRICULTURAL SCIENCES	(19.620)	(2,6)	(28.127)	(3,2)	(30.971)	
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0)	
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	54.195	7,2	62.230	7,1	75.394	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)	
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	0*	0,0*	0*	0,0*	0*	
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)	
GRAND TOTAL	755.224*	100,0*	881.069*	100,0*	975.762*	
(OF WHICH: DEVELOPING COUNTRIES)	(3.291)	(0,4)	(1.957)	(0,2)	(2.754)	

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

Country: NETHERLANDS

1970			1971		OBJECTIVE
0/0	1000 FL	0/0	1000 FL	0/0	
6,6*	66.670*	6,0*	92.231*	7,3*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
3,5	37.318	3,4	40.384	3,2	8.0. R & D OF A GENERAL NATURE (L)
C,0	0	0,0	0	0,0	8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
3,1	29.352	2,6	51.847	4,1	8.2. PRODUCTS OF OTHER INDUSTRIES
(0,0)	(0)	(0,0)	(0)	(0,0)	8.2.1. CHEMICAL
(C,0)	(0)	(0,0)	(0)	(0,0)	8.2.2. METALLURGY
(0,0)	(0)	(0,0)	(0)	(0,0)	8.2.3. ELECTRONICS (M)
(1,2)	(14.243)	(1,3)*	(22.877)	(1,8)	8.2.4. CIVIL AERONAUTICS
(0,0)	(0)	(0,0)	(0)	(0,0)	8.2.5. OTHER MEANS OF TRANSPORT
(1,9)	(15.109)	(1,4)	(28.970)	(2,3)	8.2.9. MISCELLANEOUS INDUSTRIES
0,0	0	0,0	0	0,0	8.9. OTHER R & D
(C,0)	(300)	(0,0)	(660)	(0,1)	(OF WHICH: DEVELOPING COUNTRIES)
0,4*	5.850*	0,5*	6.700*	0,5*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
C,4	5.850	0,5	6.700	0,5	9.0. R & D OF A GENERAL NATURE
C,0	0	0,0	0	0,0	9.1. R & D ON HARDWARE
C,0	0	0,0	0	0,0	9.2. R & D ON SOFTWARE
0,0	0	0,0	0	0,0	9.9. OTHER R & D
(C,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
3,6*	43.304*	3,9*	56.627*	4,5*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
C,1	2.124	0,2	4.968	0,4	10.0. R & D OF A GENERAL NATURE
1,3	15.382	1,4	22.441	1,8	10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(0,0)	(0)	(0,0)	(0)	(0,0)	10.1.2. IN THE FIELD OF INDUSTRY
(0,0)	(475)	(0,0)	(500)	(0,0)	10.1.3. IN THE FIELD OF AGRICULTURE
0,0	24	0,0	24	0,0	10.2. R & D ON BUSINESS ADMINISTRATION
2,2	25.774	2,3	29.194	2,3	10.9. OTHER R & D (N)
(0,1)	(2.124)	(0,2)	(4.968)	(0,4)	(OF WHICH: DEVELOPING COUNTRIES)
5,0*	52.886*	4,7*	62.627*	5,0*	11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION) (0)
0,0	0	0,0	0	0,0	11.0. R & D OF A GENERAL NATURE
4,5	47.551	4,3	56.233	4,4	11.1. R & D IN THE NATURAL SCIENCES
(C,0)	(0)	(0,0)	(0)	(0,0)	11.1.0. R & D OF A GENERAL NATURE
(2,0)	(22.287)	(2,0)	(23.857)	(1,9)	11.1.1. NATURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	11.1.2. ENGINEERING
(0,2)	(2.476)	(0,2)	(2.807)	(0,2)	11.1.3. MEDICAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	11.1.4. AGRICULTURAL SCIENCES
(2,3)	(22.788)	(2,0)	(29.569)	(2,3)	11.1.9. OTHER FIELDS
C,5	5.335	0,5	6.394	0,5	11.2. R & D IN THE SOCIAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
46,6*	533.381*	47,9*	604.174*	47,8*	12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION) (P)
C,0	0	0,0	0	0,0	12.0. R & D OF A GENERAL NATURE
38,8	443.342	39,8	504.084	39,9	12.1. R & D IN THE NATURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	12.1.0. R & D OF A GENERAL NATURE
(15,0)	(174.731)	(15,7)	(193.801)	(15,3)	12.1.1. NATURAL SCIENCES
(12,7)	(139.290)	(12,5)	(147.547)	(11,7)	12.1.2. ENGINEERING
(7,9)	(92.067)	(8,3)	(121.596)	(9,6)	12.1.3. MEDICAL SCIENCES
(3,2)	(37.254)	(3,3)	(41.140)	(3,3)	12.1.4. AGRICULTURAL SCIENCES
(0,0)	(0)	(0,0)	(0)	(0,0)	12.1.9. OTHER FIELDS
7,7	90.039	8,1	100.090	7,9	12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(C,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
0,0*	5.219*	0,5*	7.500*	0,6*	MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
100,0*	1.113.529*	100,0*	1.264.390*	100,0*	GRAND TOTAL
(C,3)	(5.284)	(0,5)	(7.264)	(0,6)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective

COMMUNITY — Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 U.A.	0/0	1000 U.A.	0/0	1000 U.A.
1. NUCLEAR RESEARCH AND DEVELOPMENT (A)	690.296*	19,1*	663.179*	17,5*	658.367*
1.0. R & D OF A GENERAL NATURE	184.240	5,1	176.113	4,7	182.190
1.1. ENERGY R & D	470.053	13,0	454.297	12,0	444.045
1.9. OTHER RESEARCH	36.002	1,0	32.771	0,9	32.128
(OF WHICH: DEVELOPING COUNTRIES)	(C)	(0,0)	(0)	(0,0)	(0)
2. EXPLORATION AND EXPLOITATION OF SPACE (A)	204.680*	5,7*	218.154*	5,8*	229.478*
2.0. R & D OF A GENERAL NATURE (B)	36.410	1,0	39.053	1,0	47.613
2.1. R & D ON LAUNCHERS AND SATELLITES	168.110	4,7	178.633	4,7	181.273
2.1.1. LAUNCHING SYSTEMS (C)	(44.213)	(1,2)	(66.706)	(1,8)	(65.320)
2.1.2. SCIENTIFIC EXPLORATION (D)	(97.163)	(2,7)	(103.662)	(2,7)	(106.353)
2.1.3. SYSTEMS OF APPLICATION (E)	(2.715)	(0,1)	(3.817)	(0,1)	(6.993)
2.9. OTHER R & D	161	0,0	468	0,0	594
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
3. DEFENCE (A)	892.312*	24,7*	886.760*	23,4*	824.192*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE	52.156*	1,4*	54.177*	1,4*	66.075*
4.0. R & D OF A GENERAL NATURE	2.567	0,1	3.545	0,1	3.557
4.1. SOIL AND SUB-STRATUM (F)	26.034	0,7	26.238	0,7	27.463
4.1.3. PROSPECTING FOR MINES AND PETROLEUM	(3.973)	(0,1)	(3.468)	(0,1)	(3.551)
4.2. SEAS AND OCEANS (G)	16.535	0,5	16.578	0,4	25.212
4.3. ATMOSPHERE	4.609	0,1	5.405	0,1	6.943
4.3.3. METEOROLOGY	(3.731)	(0,1)	(4.378)	(0,1)	(5.079)
4.9. OTHER R & D	2.410	0,1	2.410	0,1	2.896
(OF WHICH: DEVELOPING COUNTRIES)	(5.307)	(0,1)	(5.935)	(0,2)	(6.121)
5. PROTECTION AND PROMOTION OF HUMAN HEALTH	84.481*	2,3*	95.856*	2,5*	103.191*
5.0. R & D OF A GENERAL NATURE	15.028	0,4	17.148	0,5	20.694
5.1. MEDICAL RESEARCH	45.396	1,3	52.671	1,4	54.926
5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION	5.044	0,1	5.150	0,1	6.073
5.3. R & D ON NOXIOUS PHENOMENA (H)	10.971	0,3	12.223	0,3	12.442
5.3.1. WATER POLLUTION	(2.602)	(0,1)	(3.217)	(0,1)	(3.377)
5.3.2. AIR POLLUTION	(4.411)	(0,1)	(4.569)	(0,1)	(4.616)
5.3.3. ACTION AGAINST NOISE	(191)	(0,0)	(671)	(0,0)	(680)
5.9. OTHER R & D	8.045	0,2	8.664	0,2	9.057
(OF WHICH: DEVELOPING COUNTRIES)	(547)	(0,0)	(608)	(0,0)	(618)
6. PLANNING OF HUMAN ENVIRONMENT	82.453*	2,3*	88.187*	2,3*	100.640*
6.0. R & D OF A GENERAL NATURE (I)	8.426	0,2	7.308	0,2	9.209
6.1. CONSTRUCTION AND PLANNING OF BUILDINGS	7.745	0,2	11.832	0,3	11.267
6.1.1. RESIDENTIAL	(899)	(0,0)	(1.075)	(0,0)	(2.356)
6.1.2. NON-RESIDENTIAL	(1.040)	(0,0)	(4.184)	(0,1)	(1.562)
6.2. CIVIL ENGINEERING (J)	15.052	0,4	14.875	0,4	17.083
6.3. TRANSPORT SYSTEMS	7.890	0,2	10.020	0,3	12.939
6.4. SYSTEMS OF TELECOMMUNICATIONS	37.830	1,0	40.603	1,1	46.530
6.9. OTHER R & D	5.509	0,2	3.549	0,1	3.614
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY	124.291*	3,4*	146.167*	3,9*	148.064*
7.0. R & D OF A GENERAL NATURE (K)	20.790	0,6	22.989	0,6	23.669
7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)	31.654	0,9	36.524	1,0	34.849
7.1.3. VETERINARY MEDICINE	(6.229)	(0,2)	(6.919)	(0,2)	(6.795)
7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES	59.777	1,7	68.285	1,8	69.836
7.3. PRODUCTS OF FISHING AND FISH BREEDING	6.823	0,2	7.229	0,2	9.380
7.9. OTHER R & D	5.247	0,1	11.143	0,3	10.331
(OF WHICH: DEVELOPING COUNTRIES)	(8.289)	(0,2)	(9.665)	(0,3)	(9.822)

Central Government R & D Expenditure by Objective

Appropriations 1967-1971 — COMMUNITY

1970 O/C	1970 1000 U.A.	1970 O/O	1971 1000 U.A.	1971 O/O	OBJECTIVE
16,5*	687.428*	15,7*	748.395*	15,1*	1. NUCLEAR RESEARCH AND DEVELOPMENT (A)
4,6	183.208	4,2			1.0. R & D OF A GENERAL NATURE
11,2	467.542	10,7			1.1. ENERGY R & D
0,8	36.676	0,8			1.9. OTHER RESEARCH
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
5,8*	232.054*	5,3*	307.172*	6,2*	2. EXPLORATION AND EXPLOITATION OF SPACE (A)
1,2	47.563	1,1			2.0. R & D OF A GENERAL NATURE (B)
4,6	183.892	4,2			2.1. R & D ON LAUNCHERS AND SATELLITES
(1,6)	(58.544)	(1,3)			2.1.1. LAUNCHING SYSTEMS (C)
(2,7)	(110.528)	(2,5)			2.1.2. SCIENTIFIC EXPLORATION (D)
(0,2)	(11.747)	(0,3)			2.1.3. SYSTEMS OF APPLICATION (E)
0,0	599	0,0			2.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
20,7*	853.381*	19,5*	877.963*	17,7*	3. DEFENCE (A)
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,7*	76.867*	1,8*	93.999*	1,9*	4. EXPLORATION AND EXPLOITATION OF THE EARTH AND ITS ATMOSPHERE
0,1	3.791	0,1			4.0. R & D OF A GENERAL NATURE
0,7	31.528	0,7			4.1. SOIL AND SUB-STRATUM (F)
(0,1)	(3.720)	(0,1)			4.1.3. PROSPECTING FOR MINES AND PETROLEUM
0,6	30.243	0,7			4.2. SEAS AND OCEANS (G)
0,2	8.264	0,2			4.3. ATMOSPHERE
(0,1)	(5.266)	(0,1)			4.3.3. METEOROLOGY
0,1	3.041	0,1			4.9. OTHER R & D
(0,2)	(5.905)	(0,1)	(6.734)	(0,1)	(OF WHICH: DEVELOPING COUNTRIES)
2,6*	122.267*	2,8*	147.542*	3,0*	5. PROTECTION AND PROMOTION OF HUMAN HEALTH
0,5	21.916	0,5			5.0. R & D OF A GENERAL NATURE
1,4	67.241	1,5			5.1. MEDICAL RESEARCH
0,2	7.966	0,2			5.2. R & D ON ALIMENTARY HYGIENE AND NUTRITION
0,3	15.228	0,3			5.3. R & D ON NOXIOUS PHENOMENA (H)
(0,1)	(3.648)	(0,1)			5.3.1. WATER POLLUTION
(0,1)	(5.092)	(0,1)			5.3.2. AIR POLLUTION
(0,0)	(381)	(0,0)			5.3.3. ACTION AGAINST NOISE
0,2	9.916	0,2			5.9. OTHER R & D
(0,0)	(630)	(0,0)	(684)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
2,5*	126.216*	2,9*	139.383*	2,8*	6. PLANNING OF HUMAN ENVIRONMENT
0,2	15.798	0,4			6.0. R & D OF A GENERAL NATURE (I)
0,3	11.308	0,3			6.1. CONSTRUCTION AND PLANNING OF BUILDINGS
(0,1)	(2.401)	(0,1)			6.1.1. RESIDENTIAL
(0,0)	(2.157)	(0,0)			6.1.2. NON-RESIDENTIAL
0,4	16.569	0,4			6.2. CIVIL ENGINEERING (J)
0,3	17.146	0,4			6.3. TRANSPORT SYSTEMS
1,2	61.959	1,4			6.4. SYSTEMS OF TELECOMMUNICATIONS
0,1	3.441	0,1			6.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
3,7*	159.692*	3,6*	180.827*	3,6*	7. PROMOTION OF AGRICULTURAL PRODUCTIVITY AND TECHNOLOGY
0,6	26.757	0,6			7.0. R & D OF A GENERAL NATURE (K)
0,9	37.200	0,8			7.1. ANIMAL PRODUCTS (AGRICULTURE AND HUNT)
(0,2)	(7.642)	(0,2)			7.1.3. VETERINARY MEDICINE
1,8	75.231	1,7			7.2. VEGETABLE PRODUCTS (INCLUDING FORESTS) AND WINES
0,2	11.014	0,3			7.3. PRODUCTS OF FISHING AND FISH BREEDING
0,3	9.494	0,2			7.9. OTHER R & D
(0,2)	(9.684)	(0,2)	(10.084)	(0,2)	(OF WHICH: DEVELOPING COUNTRIES)

ANNEX II

Central Government R & D Expenditure by Objective (continued)

COMMUNITY — Appropriations 1967-1971

OBJECTIVE	1967		1968		1969
	1000 U.A.	0/0	1000 U.A.	0/0	1000 U.A.
8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY	265.611*	7,4*	264.456*	7,0*	314.227*
8.0. R & D OF A GENERAL NATURE (L)	32.569	0,9	33.696	0,9	41.671
8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY	1.064	0,0	1.181	0,0	925
8.2. PRODUCTS OF OTHER INDUSTRIES	231.804	6,4	228.903	6,0	269.494
8.2.1. CHEMICAL	(7.546)	(0,2)	(8.101)	(0,2)	(9.333)
8.2.2. METALLURGY	(10.402)	(0,3)	(11.431)	(0,3)	(12.386)
8.2.3. ELECTRONICS (M)	(24.700)	(0,7)	(25.842)	(0,7)	(29.879)
8.2.4. CIVIL AERONAUTICS	(148.946)	(4,1)	(140.605)	(3,7)	(165.724)
8.2.5. OTHER MEANS OF TRANSPORT	(2.360)	(0,1)	(2.479)	(0,1)	(3.820)
8.2.9. MISCELLANEOUS INDUSTRIES	(30.186)	(0,8)	(32.564)	(0,9)	(39.169)
8.9. OTHER R & D	175	0,0	675	0,0	2.137
(OF WHICH: DEVELOPING COUNTRIES)	(135)	(0,0)	(50)	(0,0)	(0)
9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION	34.833*	1,0*	50.362*	1,3*	76.161*
9.0. R & D OF A GENERAL NATURE	5.453	0,2	6.564	0,2	13.787
9.1. R & D ON HARDWARE	22.470	0,6	32.664	0,9	43.837
9.2. R & D ON SOFTWARE	6.749	0,2	10.990	0,3	18.392
9.9. OTHER R & D	163	0,0	143	0,0	145
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES	49.741*	1,4*	58.370*	1,5*	64.058*
10.0. R & D OF A GENERAL NATURE	8.793	0,2	14.180	0,4	15.341
10.1. R & D ON EDUCATION, TRAINING AND READAPTATION	12.030	0,3	13.976	0,4	15.520
10.1.1. IN THE FIELD OF COMPUTER SCIENCE	(0)	(0,0)	(405)	(0,0)	(1.081)
10.1.2. IN THE FIELD OF INDUSTRY	(0)	(0,0)	(0)	(0,0)	(0)
10.1.3. IN THE FIELD OF AGRICULTURE	(2.628)	(0,1)	(3.040)	(0,1)	(2.998)
10.2. R & D ON BUSINESS ADMINISTRATION	1.383	0,0	1.355	0,0	1.422
10.9. OTHER R & D (N)	27.536	0,8	28.859	0,8	31.774
(OF WHICH: DEVELOPING COUNTRIES)	(1.802)	(0,0)	(1.663)	(0,0)	(1.540)
11. GENERAL PROMOTION OF KNOWLEDGE	281.019*	7,8*	314.401*	8,3*	378.144*
(EXCEPT HIGHER EDUCATION) (O)					
11.0. R & D OF A GENERAL NATURE	13.405	0,4	16.781	0,4	18.411
11.1. R & D IN THE NATURAL SCIENCES	238.282	6,6	263.722	7,0	319.024
11.1.0. R & D OF A GENERAL NATURE	(22.878)	(0,6)	(20.555)	(0,5)	(33.971)
11.1.1. NATURAL SCIENCES	(159.260)	(4,4)	(181.940)	(4,8)	(211.323)
11.1.2. ENGINEERING	(14.388)	(0,4)	(16.752)	(0,4)	(19.808)
11.1.3. MEDICAL SCIENCES	(26.374)	(0,7)	(29.522)	(0,8)	(34.778)
11.1.4. AGRICULTURAL SCIENCES	(5.965)	(0,2)	(6.275)	(0,2)	(6.475)
11.1.9. OTHER FIELDS	(9.421)	(0,3)	(8.677)	(0,2)	(12.671)
11.2. R & D IN THE SOCIAL SCIENCES	29.332	0,8	33.899	0,9	40.707
(OF WHICH: DEVELOPING COUNTRIES)	(1.488)	(0,0)	(1.737)	(0,0)	(1.785)
12. GENERAL PROMOTION OF KNOWLEDGE	838.564*	23,2*	939.672*	24,8*	1.011.819*
(HIGHER EDUCATION) (P)					
12.0. R & D OF A GENERAL NATURE	0	0,0	0	0,0	0
12.1. R & D IN THE NATURAL SCIENCES	715.889	19,8	803.085	21,2	861.535
12.1.0. R & D OF A GENERAL NATURE	(11.404)	(0,3)	(12.963)	(0,3)	(12.204)
12.1.1. NATURAL SCIENCES	(358.741)	(9,9)	(403.141)	(10,6)	(428.208)
12.1.2. ENGINEERING	(113.562)	(3,1)	(123.894)	(3,3)	(140.656)
12.1.3. MEDICAL SCIENCES	(188.092)	(5,2)	(211.479)	(5,6)	(221.804)
12.1.4. AGRICULTURAL SCIENCES	(44.058)	(1,2)	(51.606)	(1,4)	(58.664)
12.1.9. OTHER FIELDS	(0)	(0,0)	(0)	(0,0)	(0)
12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES	122.675	3,4	136.588	3,6	150.283
(OF WHICH: DEVELOPING COUNTRIES)	(2.708)	(0,1)	(3.091)	(0,1)	(3.024)
MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED	6.887*	0,2*	7.008*	0,2*	6.411*
(OF WHICH: DEVELOPING COUNTRIES)	(0)	(0,0)	(0)	(0,0)	(0)
GRAND TOTAL	3.607.324*	100,0*	3.786.749*	100,0*	3.980.827*
(OF WHICH: DEVELOPING COUNTRIES)	(20.276)	(0,6)	(22.749)	(0,6)	(22.910)

Central Government R & D Expenditure by Objective (continued)

Appropriations 1967-1971

COMMUNITY

1970		1971		OBJECTIVE
O/C	1000 U.A.	O/O	1000 U.A.	O/O	
7,9*	370.925*	8,5*	456.669*	9,2*	8. PROMOTION OF INDUSTRIAL PRODUCTIVITY AND TECHNOLOGY
1,0	51.335	1,2			8.0. R & D OF A GENERAL NATURE (L)
0,0	1.195	0,0			8.1. PRODUCTS OF THE NON-NUCLEAR FUEL INDUSTRY
6,8	315.042	7,2			8.2. PRODUCTS OF OTHER INDUSTRIES
(0,2)	(27.228)	(0,6)			8.2.1. CHEMICAL
(0,3)	(11.964)	(0,3)			8.2.2. METALLURGY
(0,8)	(56.647)	(1,3)			8.2.3. ELECTRONICS (M)
(4,2)	(146.271)	(3,3)			8.2.4. CIVIL AERONAUTICS
(0,1)	(2.709)	(0,1)			8.2.5. OTHER MEANS OF TRANSPORT
(1,0)	(55.856)	(1,3)			8.2.9. MISCELLANEOUS INDUSTRIES
0,1	3.352	0,1			8.9. OTHER R & D
(0,0)	(83)	(0,0)	(182)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,9*	92.044*	2,1*	128.807*	2,6*	9. PROMOTION OF COMPUTER SCIENCE AND OF AUTOMATION
0,3	16.923	0,4			9.0. R & D OF A GENERAL NATURE
1,1	55.543	1,3			9.1. R & D ON HARDWARE
0,5	19.422	0,4			9.2. R & D ON SOFTWARE
0,0	156	0,0			9.9. OTHER R & D
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
1,6*	73.806*	1,7*	88.101*	1,8*	10. PROMOTION OF RESEARCH IN THE SOCIAL SCIENCES AND HUMANITIES
0,4	16.306	0,4			10.0. R & D OF A GENERAL NATURE
0,4	18.206	0,4			10.1. R & D ON EDUCATION, TRAINING AND READAPTATION
(0,0)	(540)	(0,0)			10.1.1. IN THE FIELD OF COMPUTER SCIENCE
(0,0)	(61)	(0,0)			10.1.2. IN THE FIELD OF INDUSTRY
(0,1)	(3.217)	(0,1)			10.1.3. IN THE FIELD OF AGRICULTURE
0,0	1.445	0,0			10.2. R & D ON BUSINESS ADMINISTRATION
0,8	37.850	0,9			10.9. OTHER R & D (N)
(0,0)	(1.829)	(0,0)	(2.794)	(0,1)	(OF WHICH: DEVELOPING COUNTRIES)
9,5*	392.401*	9,0*	453.542*	9,1*	11. GENERAL PROMOTION OF KNOWLEDGE
0,5	31.618	0,7			(EXCEPT HIGHER EDUCATION) (O)
8,0	316.604	7,2			11.0. R & D OF A GENERAL NATURE
(0,9)	(27.926)	(0,6)			11.1. R & D IN THE NATURAL SCIENCES
(5,3)	(218.354)	(5,0)			11.1.0. R & D OF A GENERAL NATURE
(0,5)	(22.641)	(0,5)			11.1.1. NATURAL SCIENCES
(0,9)	(34.005)	(0,8)			11.1.2. ENGINEERING
(0,2)	(7.210)	(0,2)			11.1.3. MEDICAL SCIENCES
(0,3)	(6.468)	(0,1)			11.1.4. AGRICULTURAL SCIENCES
1,0	44.178	1,0			11.1.9. OTHER FIELDS
(0,0)	(1.764)	(0,0)	(2.032)	(0,0)	11.2. R & D IN THE SOCIAL SCIENCES
25,4*	1.183.898*	27,0*	1.339.394*	27,0*	(OF WHICH: DEVELOPING COUNTRIES)
0,0	8.197	0,2			12. GENERAL PROMOTION OF KNOWLEDGE
21,6	1.000.269	22,8			(HIGHER EDUCATION) (P)
(0,3)	(11.037)	(0,3)			12.0. R & D OF A GENERAL NATURE
(10,8)	(487.454)	(11,1)			12.1. R & D IN THE NATURAL SCIENCES
(3,5)	(170.789)	(3,9)			12.1.0. R & D OF A GENERAL NATURE
(5,6)	(258.172)	(5,9)			12.1.1. NATURAL SCIENCES
(1,5)	(72.816)	(1,7)			12.1.2. ENGINEERING
(0,0)	(0)	(0,0)			12.1.3. MEDICAL SCIENCES
3,8	175.434	4,0			12.1.4. AGRICULTURAL SCIENCES
(0,1)	(2.970)	(0,1)	(3.072)	(0,1)	12.1.9. OTHER FIELDS
0,2*	6.951*	0,2*	8.049*	0,2*	12.2. R & D IN THE SOCIAL SCIENCES AND HUMANITIES
(0,0)	(0)	(0,0)	(0)	(0,0)	(OF WHICH: DEVELOPING COUNTRIES)
					MEMORANDUM ONLY: EXPENDITURE NOT ITEMIZED
					(OF WHICH: DEVELOPING COUNTRIES)
100,0*	4.377.930*	100,0*	4.969.843*	100,0*	GRAND TOTAL
(0,6)	(22.865)	(0,5)	(25.582)	(0,5)	(OF WHICH: DEVELOPING COUNTRIES)

NOTES

(A) Nuclear and space R &D undertaken for defence purposes is classified under 3.

(B) This sub-group includes, in particular, research in astronomy undertaken for the study of space which cannot be distributed among separately 2.1. or 2.9. ; it excludes R &D in astronomy for defence purposes (classified in 3) or whith a very general aim (classified under 11.1.1. or 12.1.1.).

(C) Including participation in the CECLES/ELDO programmes.

(D) Including participation in the CERS/ESRO programmes.

(E) Including participation in bilateral and other international programmes.

(F) Excluding the exploration of undersea plateaux and the study of soils for agricultural purposes.

(G) Including the exploration of undersea plateaux and the exploitation of underwater biological resources, but excluding fishing.

(H) Excluding research for other than sanitary purposes, classified under 6 and 7.

(I) Including general research on urbanism and planning of national parks.

(J) Including property improvement (dams, aqueducts, irrigation, drainage, the construction of wells, etc).

(K) Including R &D on the environment (bioclimatology, the study of soils, etc); the study and preparation of soils excludes property improvement, classified under 6.2.

(L) Including research in metrology, general automation and technological forecasting.

(M) Excluding computers (classified under 9.1.), but including electronic components.

(N) Not elsewhere specified, i.e., in major goals 1-9.

(O) This major goal includes credits allocated to R &D with a very general aim, which cannot be classified in major goals 1-10, as well as credits accorded to large research establishments and to distributing bodies whose mission is very diversified.

(P) This major goal includes credits for research allocated globally or by field of science to institutions of higher education, in the context of their broad vocation.

ANNEX III

Statistical Indicators

Introduction

This Annex presents in the form of tables a number of indicators concerning state backing for R & D. These indicators have been calculated from the statistical tables in Annex II.

The documentation includes the following items :

— *Tables 1* : *Central Government R & D expenditure* by NASB major goal, expressed in round figures, in units of account for the whole of the Community (current exchange rates) and in national currency by country, with the annual rates of variation and the proportion accounted for by each category in the total expenditure.

— *Table 2a*: comparison for the year 1970 of the *per capita Central Government R & D expenditure*, expressed in units of account (current exchange rates), showing the ranking for the various countries and the ratio between the unit expenditure of the country with the highest expenditure and that of the country with the lowest expenditure.

— *Table 2b*: comparison for the year 1970 of the *Central Government R & D expenditure per 10 000 u.a. of GDP*, expressed in the same way as in Table 2a.

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: GERMANY

OBJECTIVE	MIO DM				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	942,5	923,5	930,8	1.036,1	1.224,4
2. SPACE	301,7	341,5	361,6	344,6	515,9
3. DEFENCE	1.043,8	986,0	1.070,7	1.151,0	1.173,1
4. EARTH AND ITS ATMOSPHERE	88,5	79,3	90,3	110,8	148,9
5. HEALTH	99,5	111,6	111,2	158,8	209,2
6. HUMAN ENVIRONMENT	39,5	42,0	59,0	66,5	76,2
7. AGRICULTURAL PRODUCTIVITY	109,0	108,4	114,2	137,3	162,3
8. INDUSTRIAL PRODUCTIVITY	194,4	193,3	289,1	360,8	528,4
9. COMPUTER SCIENCE AND AUTOMATION	67,8	73,7	117,2	126,0	248,7
10. SOCIAL SCIENCES	82,9	88,3	93,7	115,7	137,4
SUB-TOTAL (1-10)	2.969,5	2.947,6	3.237,8	3.607,6	4.424,6
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	325,4	355,8	406,4	534,9	612,4
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	1.585,3	1.775,6	1.982,5	2.359,8	2.793,5
TOTAL (EXCLUDING DEFENCE)	3.836,4	4.093,0	4.616,0	5.351,4	6.657,4
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0
T O T A L	4.880,2	5.079,0	5.686,7	6.502,3	7.830,5

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: GERMANY

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
19,3	18,2	16,4	15,9	15,6	- 2,0	+ 0,7	+ 11,3	+ 18,1
6,2	6,7	6,4	5,3	6,6	+ 13,2	+ 5,8	- 4,7	+ 49,7
21,4	19,4	18,8	17,7	15,0	- 5,5	+ 8,5	+ 7,4	+ 1,9
1,8	1,6	1,6	1,7	1,9	- 10,3	+ 13,9	+ 22,6	+ 34,3
2,0	2,2	2,0	2,4	2,7	+ 12,1	- 0,3	+ 42,8	+ 31,7
0,8	0,8	1,0	1,0	1,0	+ 6,3	+ 40,6	+ 12,6	+ 14,6
2,2	2,1	2,0	2,1	2,1	- 0,6	+ 5,3	+ 20,2	+ 18,2
4,0	3,8	5,1	5,5	6,7	- 0,5	+ 49,5	+ 24,3	+ 46,4
1,4	1,5	2,1	1,9	3,2	+ 8,7	+ 58,9	+ 7,5	+ 97,3
1,7	1,7	1,6	1,8	1,8	+ 6,5	+ 6,0	+ 23,5	+ 18,7
60,8	58,0	56,9	55,5	56,5	- 0,7	+ 9,8	+ 11,4	+ 22,6
6,7	7,0	8,2	8,2	7,8	+ 9,3	+ 31,0	+ 14,6	+ 14,4
32,5	35,0	34,9	36,3	35,7	+ 12,0	+ 11,6	+ 19,0	+ 18,3
78,6	80,6	81,2	82,3	85,0	+ 6,6	+ 12,7	+ 15,9	+ 24,4
0,0	0,0	0,0	0,0	0,0	+ 0,0	+ 0,0	+ 0,0	+ 0,0
100,0	100,0	100,0	100,0	100,0	+ 4,0	+ 11,9	+ 14,3	+ 20,4

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: BELGIUM

OBJECTIVE	MIO BFR				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	1.054,3	1.188,4	1.284,6	1.571,7	1.747,0
2. SPACE	349,8	338,2	357,5	382,9	501,1
3. DEFENCE	55,0	56,4	125,7	138,6	123,3
4. EARTH AND ITS ATMOSPHERE	119,4	117,7	130,5	150,9	182,5
5. HEALTH	149,5	159,1	184,7	220,9	246,6
6. HUMAN ENVIRONMENT	100,1	76,5	95,8	86,7	130,4
7. AGRICULTURAL PRODUCTIVITY	224,9	294,0	330,9	357,1	385,0
8. INDUSTRIAL PRODUCTIVITY	579,6	483,9	570,4	720,6	879,1
9. COMPUTER SCIENCE AND AUTOMATION	0,0	12,0	4,3	5,2	3,0
10. SOCIAL SCIENCES	36,4	41,8	42,8	46,6	56,0
SUB-TOTAL (1-10)	2.669,1	2.767,9	3.097,3	3.681,3	4.254,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	576,1	570,1	705,2	716,6	873,9
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	1.903,6	1.949,6	2.161,6	2.793,1	3.129,0
TOTAL (EXCLUDING DEFENCE)	5.093,9	5.231,3	5.838,3	7.052,4	8.133,6
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0
T O T A L	5.148,9	5.287,7	5.964,0	7.191,0	8.256,9

Trends and Structure of Central Government R & D Expenditure by Objective

Country: BELGIUM

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
20,5	22,5	21,5	21,9	21,2	+ 12,7	+ 8,0	+ 22,3	+ 11,1
6,8	6,4	6,0	5,3	6,1	- 3,3	+ 5,7	+ 7,1	+ 30,8
1,1	1,1	2,1	1,9	1,5	+ 2,4	+123,0	+ 10,2	- 11,0
2,3	2,2	2,2	2,1	2,2	- 1,4	+ 10,9	+ 15,5	+ 20,9
2,9	3,0	3,1	3,1	3,0	+ 6,4	+ 16,0	+ 19,6	+ 11,6
1,9	1,4	1,6	1,2	1,6	- 23,5	+ 25,2	- 9,4	+ 50,3
4,4	5,6	5,0	5,0	4,7	+ 30,7	+ 2,3	+ 18,6	+ 7,8
11,3	9,2	9,6	10,0	10,6	- 16,5	+ 17,8	+ 26,3	+ 21,9
0,0	0,2	0,1	0,1	0,0	+ 0,0	- 64,1	+ 21,3	- 43,3
0,7	0,8	0,7	0,6	0,7	+ 14,6	+ 2,4	+ 8,8	+ 20,1
51,8	52,3	51,9	51,2	51,5	+ 3,7	+ 11,8	+ 18,8	+ 15,5
11,2	10,8	11,8	10,0	10,6	- 1,0	+ 23,6	+ 1,6	+ 21,9
37,0	36,9	36,2	38,8	37,9	+ 2,4	+ 10,8	+ 29,2	+ 12,0
98,9	98,9	97,9	98,1	98,5	+ 2,6	+ 11,6	+ 20,7	+ 15,3
0,0	0,0	0,0	0,0	0,0	+ 0,0	+ 0,0	+ 0,0	+ 0,0
100,0	100,0	100,0	100,0	100,0	+ 2,6	+ 12,7	+ 20,5	+ 14,8

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: FRANCE

OBJECTIVE	MIO FFR				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	1.540,9	1.416,9	1.392,5	1.369,4	1.362,9
2. SPACE	467,5	491,8	534,6	604,1	638,4
3. DEFENCE	2.994,0	3.023,0	2.700,0	2.800,0	2.900,0
4. EARTH AND ITS ATMOSPHERE	106,0	119,4	161,5	179,5	212,6
5. HEALTH.	220,5	244,2	264,3	269,9	315,0
6. HUMAN ENVIRONMENT	292,1	304,9	353,9	461,5	537,8
7. AGRICULTURAL PRODUCTIVITY	330,3	389,2	390,0	394,4	450,6
8. INDUSTRIAL PRODUCTIVITY	911,3	869,6	1.010,1	898,9	889,6
9. COMPUTER SCIENCE AND AUTOMATION	84,3	147,0	221,4	303,9	314,0
10. SOCIAL SCIENCES	76,6	113,6	132,6	143,3	165,5
SUB-TOTAL (1-10)	7.023,5	7.119,6	7.160,9	7.424,9	7.786,4
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	699,5	812,8	1.005,9	939,2	1.103,9
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	1.079,0	1.220,0	1.200,0	1.205,3	1.176,5
TOTAL (EXCLUDING DEFENCE)	5.808,0	6.129,4	6.666,8	6.769,4	7.166,8
NOT ITEMIZED	34,0	34,6	33,2	30,6	33,2
T O T A L	8.836,0	9.187,0	9.400,0	9.600,0	10.100,0

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: FRANCE

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
17,4	15,4	14,8	14,3	13,5	- 8,0	- 1,7	- 1,6	- 0,4
5,3	5,4	5,7	6,3	6,3	+ 5,1	+ 8,7	+ 13,0	+ 5,6
33,9	32,9	28,7	29,2	28,7	+ 0,9	- 10,6	+ 3,7	+ 3,5
1,2	1,3	1,7	1,9	2,1	+ 12,6	+ 35,2	+ 11,1	+ 18,4
2,5	2,7	2,8	2,8	3,1	+ 10,7	+ 8,2	+ 2,1	+ 16,7
3,3	3,3	3,8	4,8	5,3	+ 4,3	+ 16,0	+ 30,4	+ 16,5
3,7	4,2	4,1	4,1	4,5	+ 17,8	+ 0,2	+ 1,1	+ 14,2
10,3	9,5	10,7	9,4	8,8	- 4,5	+ 16,1	- 11,0	- 1,0
1,0	1,6	2,4	3,2	3,1	+ 74,3	+ 50,6	+ 37,2	+ 3,3
0,9	1,2	1,4	1,5	1,6	+ 48,3	+ 16,7	+ 8,0	+ 15,4
79,5	77,5	76,2	77,3	77,1	+ 1,3	+ 0,5	+ 3,6	+ 4,8
7,9	8,8	10,7	9,8	10,9	+ 16,1	+ 23,7	- 6,6	+ 17,5
12,2	13,3	12,8	12,6	11,6	+ 13,0	- 1,6	+ 0,4	- 2,3
65,7	66,7	70,9	70,5	71,0	+ 5,5	+ 8,7	+ 1,5	+ 5,8
0,4	0,4	0,4	0,3	0,3	+ 1,7	- 4,0	- 7,8	+ 8,4
100,0	100,0	100,0	100,0	100,0	+ 3,9	+ 2,3	+ 2,1	+ 5,2

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: ITALY

OBJECTIVE	MRD LIT				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	61,9	59,7	62,5	58,7	64,8
2. SPACE	13,3	10,6	10,4	7,8	18,0
3. DEFENCE	9,0	8,9	8,6	11,3	11,0
4. EARTH AND ITS ATMOSPHERE	1,3	3,0	3,1	3,9	4,0
5. HEALTH	2,6	4,2	5,9	8,4	9,1
6. HUMAN ENVIRONMENT	3,5	4,6	4,3	8,0	4,8
7. AGRICULTURAL PRODUCTIVITY	2,8	7,1	7,6	9,3	9,8
8. INDUSTRIAL PRODUCTIVITY	2,6	6,2	10,3	48,5	68,2
9. COMPUTER SCIENCE AND AUTOMATION	0,5	1,2	1,5	0,7	1,5
10. SOCIAL SCIENCES	3,3	2,8	2,6	2,2	2,5
SUB-TOTAL (1-10)	100,7	108,3	116,9	159,0	193,7
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	22,7	23,6	23,8	30,1	32,9
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	55,4	60,0	67,5	74,3	84,3
TOTAL (EXCLUDING DEFENCE)	169,8	183,0	199,5	252,1	299,9
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0
T O T A L	178,7	191,9	208,2	263,4	310,9

Trends and Structure of Central Government R & D Expenditure by Objective

Country: ITALY

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
34,6	31,1	30,0	22,3	20,8	- 3,5	+ 4,7	- 6,0	+ 10,3
7,4	5,5	5,0	3,0	5,8	- 20,3	- 1,7	- 24,5	+130,1
5,0	4,7	4,1	4,3	3,5	- 0,1	- 3,4	+ 30,8	- 2,5
0,7	1,6	1,5	1,5	1,3	+135,2	+ 2,8	+ 25,9	+ 2,4
1,5	2,2	2,8	3,2	2,9	+ 57,7	+ 41,8	+ 43,0	+ 8,2
2,0	2,4	2,1	3,0	1,5	+ 31,8	- 7,0	+ 86,9	- 40,4
1,6	3,7	3,7	3,5	3,2	+157,4	+ 6,5	+ 21,8	+ 5,7
1,5	3,2	5,0	18,4	21,9	+135,2	+ 67,8	+369,3	+ 40,4
0,3	0,6	0,7	0,3	0,5	+139,1	+ 27,9	- 51,7	+104,6
1,8	1,5	1,3	0,8	0,8	- 13,8	- 7,2	- 16,2	+ 14,4
56,3	56,4	56,2	60,3	62,3	+ 7,5	+ 7,9	+ 35,9	+ 21,8
12,7	12,3	11,4	11,4	10,6	+ 4,3	+ 0,4	+ 26,8	+ 9,2
31,0	31,3	32,4	28,2	27,1	+ 8,2	+ 12,5	+ 10,1	+ 13,3
95,0	95,3	95,9	95,7	96,5	+ 7,7	+ 9,0	+ 26,3	+ 18,9
0,0	0,0	0,0	0,0	0,0	+ 0,0	+ 0,0	+ 0,0	+ 0,0
100,0	100,0	100,0	100,0	100,0	+ 7,3	+ 8,4	+ 26,5	+ 18,0

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

Country: NETHERLANDS

OBJECTIVE	MIO FL				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	81,4	94,3	99,3	117,2	108,1
2. SPACE	23,0	34,3	38,6	32,4	44,8
3. DEFENCE	34,4	45,3	53,0	50,5	55,2
4. EARTH AND ITS ATMOSPHERE	14,9	10,8	15,9	18,1	18,1
5. HEALTH	28,0	31,3	39,0	44,7	51,1
6. HUMAN ENVIRONMENT	21,1	25,4	30,9	37,6	41,5
7. AGRICULTURAL PRODUCTIVITY	76,7	83,0	92,6	105,7	115,7
8. INDUSTRIAL PRODUCTIVITY	60,3	74,1	64,5	66,7	92,2
9. COMPUTER SCIENCE AND AUTOMATION	0,1	0,1	4,1	5,9	6,7
10. SOCIAL SCIENCES	27,3	28,8	34,9	43,3	56,6
SUB-TOTAL (1-10)	367,2	427,5	472,9	522,0	590,1
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	36,9	42,0	48,4	52,9	62,6
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	351,1	411,6	454,5	533,4	604,2
TOTAL (EXCLUDING DEFENCE)	720,8	835,7	922,7	1.057,8	1.201,7
NOT ITEMIZED	0,0	0,0	0,0	5,2	7,5
TOTAL	755,2	881,1	975,8	1.113,5	1.264,4

Trends and Structure of Central Government R & D Expenditure by Objective

Country: NETHERLANDS

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
10,8	10,7	10,2	10,5	8,5	+ 15,8	+ 5,2	+ 18,0	- 7,7
3,0	3,9	4,0	2,9	3,5	+ 49,4	+ 12,4	- 16,1	+ 38,4
4,6	5,1	5,4	4,5	4,4	+ 31,8	+ 16,9	- 4,8	+ 9,3
2,0	1,2	1,6	1,6	1,4	- 27,4	+ 46,3	+ 14,2	+ 0,0
3,7	3,6	4,0	4,0	4,0	+ 11,8	+ 24,6	+ 14,5	+ 14,2
2,8	2,9	3,2	3,4	3,3	+ 20,6	+ 21,5	+ 21,7	+ 10,3
10,2	9,4	9,5	9,5	9,2	+ 8,2	+ 11,5	+ 14,1	+ 9,4
8,0	8,4	6,6	6,0	7,3	+ 22,9	- 12,8	+ 3,3	+ 38,3
0,0	0,0	0,4	0,5	0,5	+ 14,2	+ 0,0	+ 41,6	+ 14,5
3,6	3,3	3,6	3,9	4,5	+ 5,1	+ 21,3	+ 24,0	+ 30,7
48,6	48,5	48,5	46,9	46,7	+ 16,4	+ 10,6	+ 10,3	+ 13,0
4,9	4,8	5,0	4,7	5,0	+ 13,6	+ 15,3	+ 9,1	+ 18,4
46,5	46,7	46,6	47,9	47,8	+ 17,2	+ 10,4	+ 17,3	+ 13,2
95,4	94,9	94,6	95,0	95,0	+ 15,9	+ 10,4	+ 14,6	+ 13,5
0,0	0,0	0,0	0,5	0,6	+ 0,0	+ 0,0	+ 0,0	+ 43,7
100,0	100,0	100,0	100,0	100,0	+ 16,6	+ 10,7	+ 14,1	+ 13,5

ANNEX III — TABLE 1

Trends and Structure of Central Government R & D Expenditure by Objective

COMMUNITY

OBJECTIVE	MIO U.A.				
	1967	1968	1969	1970	1971
1. NUCLEAR R & D	690,3	663,2	658,4	687,4	748,4
2. SPACE	204,7	218,2	229,5	232,1	307,2
3. DEFENCE	892,3	886,8	824,2	853,4	878,0
4. EARTH AND ITS ATMOSPHERE	52,2	54,2	66,1	76,9	94,0
5. HEALTH	84,5	95,9	103,2	122,3	147,5
6. HUMAN ENVIRONMENT	82,5	88,2	100,6	126,2	139,4
7. AGRICULTURAL PRODUCTIVITY	124,3	146,2	148,1	159,7	180,8
8. INDUSTRIAL PRODUCTIVITY	265,6	264,5	314,2	370,9	456,7
9. COMPUTER SCIENCE AND AUTOMATION	34,8	50,4	76,2	92,0	128,8
10. SOCIAL SCIENCES	49,7	58,4	64,1	73,8	88,1
SUB-TOTAL (1-10)	2.480,9	2.525,7	2.584,5	2.794,7	3.168,9
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	281,0	314,4	378,1	392,4	453,5
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	838,6	939,7	1.011,8	1.183,9	1.339,4
TOTAL (EXCLUDING DEFENCE)	2.708,1	2.893,0	3.150,2	3.517,6	4.083,8
NOT ITEMIZED	6,9	7,0	6,4	7,0	8,0
T O T A L	3.607,3	3.786,7	3.980,8	4.377,9	4.969,8

Trends and Structure of Central Government R & D Expenditure by Objective

COMMUNITY

IN % OF GRAND TOTAL					ANNUAL RATE OF VARIATION (%)			
1967	1968	1969	1970	1971	1968/67	1969/68	1970/69	1971/70
19,1	17,5	16,5	15,7	15,1	- 3,9	+ 0,7	+ 4,1	+ 8,9
5,7	5,8	5,8	5,3	6,2	+ 6,5	+ 6,8	+ 1,7	+ 32,3
24,7	23,4	20,7	19,5	17,7	- 0,6	- 4,7	+ 5,3	+ 2,8
1,4	1,4	1,7	1,8	1,9	+ 3,9	+ 24,1	+ 16,6	+ 22,3
2,3	2,5	2,6	2,8	3,0	+ 13,4	+ 9,8	+ 18,9	+ 20,6
2,3	2,3	2,5	2,9	2,8	+ 6,9	+ 17,6	+ 30,1	+ 10,4
3,4	3,9	3,7	3,6	3,6	+ 17,6	+ 3,5	+ 9,5	+ 13,2
7,4	7,0	7,9	8,5	9,2	- 0,3	+ 22,0	+ 19,7	+ 23,1
1,0	1,3	1,9	2,1	2,6	+ 43,8	+ 52,2	+ 22,8	+ 39,9
1,4	1,5	1,6	1,7	1,8	+ 17,3	+ 11,2	+ 14,6	+ 19,3
68,8	66,7	64,9	63,8	63,8	+ 1,8	+ 4,5	+ 9,1	+ 13,3
7,8	8,3	9,5	9,0	9,1	+ 11,8	+ 22,7	+ 4,2	+ 15,5
23,2	24,8	25,4	27,0	27,0	+ 12,0	+ 8,0	+ 14,0	+ 13,1
75,1	76,4	79,1	80,3	82,2	+ 6,8	+ 10,4	+ 11,1	+ 16,1
0,2	0,2	0,2	0,2	0,2	+ 1,7	- 4,0	- 7,8	+ 15,7
100,0	100,0	100,0	100,0	100,0	+ 4,9	+ 6,8	+ 9,9	+ 13,5

ANNEX III — TABLE 2

a) **Per capita R & D Expenditure in u.a.; comparative table of rank; ratios between highest and lowest values**

1970

OBJECTIVE	GERMANY		BELGIUM		FRANCE		ITALY		NETHERLANDS		COMMUNITY	
POPULATION (MILLIONS)	61,4	R	9,7	R	50,6	R	54,4	R	13,0	R	189,1	MAX./ MIN.
1. NUCLEAR R & D	4,61	2	3,24	3	4,67	1	1,73	5	2,49	4	3,63	2,8
2. SPACE	1,53	2	0,79	3	2,15	1	0,23	5	0,69	4	1,23	9,3
3. DEFENCE	5,12	2	0,29	5	9,96	1	0,33	4	1,07	3	4,51	34,3
4. EARTH AND ITS ATMOSPHERE	0,49	2	0,31	4	0,64	1	0,11	5	0,38	3	0,41	5,8
5. HEALTH	0,71	3	0,46	4	0,96	1	0,25	5	0,95	2	0,65	3,8
6. HUMAN ENVIRONMENT	0,30	3	0,18	5	1,64	1	0,24	4	0,80	2	0,67	9,1
7. AGRICULTURAL PRODUCTIVITY	0,61	4	0,74	3	1,40	2	0,27	5	2,24	1	0,84	8,2
8. INDUSTRIAL PRODUCTIVITY	1,60	2	1,48	3	3,20	1	1,43	4	1,41	5	1,96	2,2
9. COMPUTER SCIENCE AND AUTOMATION	0,56	2	0,01	5	1,08	1	0,02	4	0,12	3	0,49	108,0
10. SOCIAL SCIENCES	0,51	2	0,10	4	0,51	2	0,06	5	0,92	1	0,39	15,3
SUB-TOTAL (1-10)	16,04	2	7,58	4	26,41	1	4,68	5	11,08	3	14,78	5,6
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	2,38	2	1,48	3	3,34	1	0,89	5	1,12	4	2,07	3,7
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	10,49	2	5,75	3	4,29	4	2,19	5	11,32	1	6,26	5,1
TOTAL (EXCLUDING DEFENCE)	23,80	2	14,53	4	24,08	1	7,42	5	22,44	3	18,60	3,2
TOTAL	28,92	2	14,81	4	34,15	1	7,75	5	23,62	3	23,15	4,4

ANNEX III — TABLE 2

b) R & D Expenditure in u.a. per 10.000 u.a. of GDP; comparative table of rank; ratios between highest and lowest values

1970

OBJECTIVE	GERMANY		BELGIUM		FRANCE		ITALY		NETHERLANDS		COMMUNITY	
GDP (MRD U.A.)	186,2	R	25,0	R	146,2	R	92,8	R	31,4	R	481,6	MAX./ MIN.
1. NUCLEAR R & D	15,20	2	12,57	3	16,86	1	10,13	5	10,31	4	14,27	1,6
2. SPACE	5,06	2	3,06	3	7,44	1	1,35	5	2,85	4	4,82	5,5
3. DEFENCE	16,89	2	1,11	5	34,48	1	1,95	4	4,44	3	17,72	31,0
4. EARTH AND ITS ATMOSPHERE	1,63	2	1,21	4	2,21	1	0,67	5	1,59	3	1,60	3,2
5. HEALTH	2,33	3	1,77	4	3,32	2	1,46	5	3,93	1	2,54	2,6
6. HUMAN ENVIRONMENT	0,98	4	0,69	5	5,68	1	1,38	3	3,31	2	2,62	8,2
7. AGRICULTURAL PRODUCTIVITY	2,01	4	2,86	3	4,86	2	1,60	5	9,30	1	3,32	5,8
8. INDUSTRIAL PRODUCTIVITY	5,29	5	5,76	4	11,07	1	8,37	2	5,86	3	7,70	2,0
9. COMPUTER SCIENCE AND AUTOMATION	1,85	2	0,04	5	3,74	1	0,13	4	0,51	3	1,91	93,5
10. SOCIAL SCIENCES	1,70	3	0,37	5	1,76	2	0,38	4	3,81	1	1,53	10,2
SUB-TOTAL (1-10)	52,93	2	29,45	4	91,44	1	27,40	5	45,91	3	58,02	3,3
11. GENERAL PROMOTION OF KNOWLEDGE (EXCEPT HIGHER EDUCATION)	7,85	2	5,73	3	11,57	1	5,19	4	4,65	5	8,15	2,4
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	34,62	2	22,34	3	14,84	4	12,81	5	46,91	1	24,58	3,6
TOTAL (EXCLUDING DEFENCE)	78,52	3	56,41	4	83,37	2	43,46	5	93,04	1	73,03	2,1
TOTAL	95,41	3	57,52	4	118,23	1	45,41	5	97,93	2	90,90	2,6

ANNEX IV

National Projects and Contributions to Multilateral and Bilateral Projects

Introduction

This Annex sets out various data on the Community countries' contributions to *multilateral and bilateral projects*. The central governments' total R &D expenditure, broken down by major goals, is subdivided for the purpose into, on the one hand, appropriations earmarked for strictly national projects, and, on the other hand, the amounts assigned to international projects.

The latter sums comprise the financial contributions to international organizations (e.g., institutions under the sponsorship of the United Nations) and Community institutions (e.g., Euratom) and participations in particular bilateral and multilateral projects (1). The research worker exchange programmes have been disregarded.

These two categories of expenditure are shown generally in all the Annex tables against the initial letters N (national expenditure) and I (contributions to multilateral and bilateral projects). The letter T (total) relates to the sum of the two categories, i.e., the total R &D expenditure by the central governments.

The first set of tables *(Tables a)* shows the categories of expenditure (N, I and T) per country, expressed in units of account for each year.

The second set *(Tables b)* gives a horizontal analysis by country of the various expenditure categories in the entire Community for each year, the figures being expressed in percentages.

The third set *(Table c)* gives a vertical breakdown by country of each expenditure category for each year, the figures being expressed in percentages.

The fourth set *(Table d)* shows for each country the breakdown by year under the various major goals of the national projects and the contributions to multilateral and bilateral projects, the figures here being expressed in national currencies and in percentages.

The fifth set *(Tables e)* summarizes the findings, giving by year and by country a horizontal analysis and a vertical breakdown of the total public R &D appropriations, divided into expenditure categories (N, I and T), together with their annual rates of variation.

(1) The flows in question usually relate to extramural expenditure assigned to the rest of the world and exclude what are known as counterperformance contracts ("contrats-retour"), i.e., expenditure relating to R &D carried out on the country's own territory and financed by other countries. Nevertheless, for certain bilateral projects (defence, aeronautics), the financing by the countries themselves of research carried out on their own territory has been taken into consideration.

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) In 1000 u.a.

1967

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	178.894	6.683	267.143	57.757	13.303	523.780
	I	56.725	14.404	44.966	41.234	9.188	166.517
	T	235.619	21.087	312.109	98.990	22.491	690.296
2. SPACE	N	37.666	649	70.427	5.342	1.591	115.675
	I	37.750	6.346	24.265	15.891	4.751	89.003
	T	75.416	6.996	94.692	21.234	6.342	204.680
3. DEFENCE	N	217.169	1.041	576.051	14.331	9.441	818.033
	I	43.775	60	30.382	0	61	74.278
	T	260.944	1.101	606.434	14.331	9.502	892.312
4. EARTH AND ITS ATMOSPHERE	N	21.873	2.262	20.721	2.002	4.088	50.946
	I	250	126	749	48	36	1.209
	T	22.123	2.389	21.470	2.050	4.124	52.156
5. HEALTH	N	24.724	2.991	44.419	3.219	7.735	83.088
	I	150	0	243	1.000	0	1.393
	T	24.874	2.991	44.662	4.219	7.735	84.481
6. HUMAN ENVIRONMENT	N	9.868	1.990	53.291	5.478	5.820	76.447
	I	0	12	5.874	120	0	6.006
	T	9.868	2.002	59.165	5.598	5.820	82.453
7. AGRICULTURAL PRODUCTIVITY	N	27.262	4.497	58.456	4.251	21.194	115.660
	I	0	1	8.446	184	0	8.631
	T	27.262	4.498	66.902	4.435	21.194	124.291
8. INDUSTRIAL PRODUCTIVITY	N	48.594	11.489	67.105	4.192	16.648	148.028
	I	0	104	117.479	0	0	117.583
	T	48.594	11.593	184.584	4.192	16.648	265.611
9. COMPUTER SCIENCE AND AUTOMATION	N	16.945	0	17.075	794	19	34.833
	I	0	0	0	0	0	0
	T	16.945	0	17.075	794	19	34.833
10. SOCIAL SCIENCES	N	20.719	655	15.515	4.357	7.535	48.781
	I	0	74	0	869	18	961
	T	20.719	728	15.515	5.226	7.553	49.741
SUB-TOTAL (1-10)	N	603.714	32.257	1.190.203	101.723	87.374	2.015.271
	I	138.650	21.127	232.404	59.346	14.054	465.581
	T	742.364	53.385	1.422.608	161.069	101.428	2.480.854
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	81.185	11.498	141.481	35.962	9.879	280.005
	I	175	24	203	291	321	1.014
	T	81.360	11.522	141.684	36.253	10.200	281.019
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	396.325	38.073	216.931	88.618	96.997	836.944
	I	0	0	1.620	0	0	1.620
	T	396.325	38.073	218.551	88.618	96.997	838.564
NOT ITEMIZED	N	0	0	3.848	0	0	3.848
	I	0	0	3.038	0	0	3.038
	T	0	0	6.887	0	0	6.887
TOTAL	N	1.081.224	81.828	1.552.463	226.303	194.250	3.136.068
	I	138.825	21.151	237.265	59.637	14.375	471.253
	T	1.220.049	102.980	1.789.730	285.940	208.625	3.607.324

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) **In 1000 u.a.**

1968

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	172.354	13.625	250.129	52.866	15.534	504.508
	I	58.525	10.144	36.864	42.629	10.511	158.673
	T	230.879	23.768	286.993	95.494	26.045	663.179
2. SPACE	N	41.182	930	75.652	2.526	2.631	122.921
	I	44.200	5.834	23.962	14.386	6.851	95.233
	T	85.382	6.765	99.614	16.912	9.481	218.154
3. DEFENCE	N	200.289	1.066	581.723	14.309	12.455	809.842
	I	46.200	62	30.585	0	72	76.919
	T	246.489	1.127	612.308	14.309	12.527	886.760
4. EARTH AND ITS ATMOSPHERE	N	19.625	2.284	23.577	4.760	2.955	53.201
	I	200	70	608	62	36	976
	T	19.825	2.354	24.184	4.822	2.992	54.177
5. HEALTH	N	27.753	3.182	43.260	5.216	8.652	94.063
	I	150	0	203	1.440	0	1.793
	T	27.903	3.182	49.463	6.656	8.652	95.856
6. HUMAN ENVIRONMENT	N	10.495	1.518	56.025	7.264	7.021	82.323
	I	0	12	5.732	120	0	5.864
	T	10.495	1.530	61.757	7.384	7.021	88.187
7. AGRICULTURAL PRODUCTIVITY	N	27.097	5.879	69.049	11.234	22.941	136.200
	I	0	1	9.783	184	0	9.968
	T	27.097	5.879	78.832	11.418	22.941	146.167
8. INDUSTRIAL PRODUCTIVITY	N	48.315	9.598	66.355	9.861	20.464	154.593
	I	0	81	109.782	0	0	109.863
	T	48.315	9.679	176.137	9.861	20.464	264.456
9. COMPUTER SCIENCE AND AUTOMATION	N	18.427	240	29.775	1.898	22	50.362
	I	0	0	0	0	0	0
	T	18.427	240	29.775	1.898	22	50.362
10. SOCIAL SCIENCES	N	22.080	686	23.010	3.699	7.929	57.404
	I	0	149	0	802	14	965
	T	22.080	835	23.010	4.501	7.944	58.370
SUB-TOTAL (1-10)	N	587.617	39.008	1.224.555	113.633	100.604	2.065.417
	I	149.275	16.353	217.519	59.623	17.484	460.254
	T	736.892	55.359	1.442.073	173.255	118.089	2.525.668
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	88.828	11.378	164.430	37.784	11.297	313.717
	I	125	25	203	32	301	686
	T	88.953	11.403	164.632	37.816	11.597	314.401
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	443.900	38.992	245.288	95.965	113.704	937.849
	I	0	0	1.823	0	0	1.823
	T	443.900	38.992	247.111	95.965	113.704	939.672
NOT ITEMIZED	N	0	0	3.970	0	0	3.970
	I	0	0	3.038	0	0	3.038
	T	0	0	7.008	0	0	7.008
TOTAL	N	1.120.345	89.378	1.638.243	247.382	225.605	3.320.953
	I	149.400	16.378	222.583	59.655	17.785	465.801
	T	1.269.745	105.754	1.860.824	307.036	243.390	3.786.749

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) **In 1000 u.a.**

1969

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	189.729	17.164	237.795	68.424	18.675	531.787
	I	46.591	8.528	31.088	31.629	8.743	126.579
	T	236.320	25.693	268.883	100.053	27.418	658.367
2. SPACE	N	46.012	1.072	77.701	1.582	3.701	130.068
	I	45.804	6.078	25.527	15.040	6.901	99.410
	T	91.816	7.150	103.228	16.622	10.662	229.478
3. DEFENCE	N	222.376	2.450	495.285	13.810	14.582	748.503
	I	49.486	65	26.068	0	72	75.691
	T	271.861	2.515	521.352	13.810	14.654	824.192
4. EARTH AND ITS ATMOSPHERE	N	22.684	2.479	30.412	4.896	4.342	64.813
	I	254	132	772	66	36	1.260
	T	22.938	2.611	31.185	4.962	4.379	66.075
5. HEALTH	N	28.083	3.694	50.842	7.691	10.783	101.093
	I	152	0	193	1.752	0	2.097
	T	28.236	3.694	51.035	9.443	10.783	103.191
6. HUMAN ENVIRONMENT	N	14.991	1.902	62.155	6.752	8.534	94.374
	I	0	13	6.140	112	0	6.265
	T	14.991	1.915	68.336	6.864	8.534	100.640
7. AGRICULTURAL PRODUCTIVITY	N	28.986	6.018	65.826	11.941	25.591	138.362
	I	0	1	9.481	222	0	9.704
	T	28.986	6.018	75.306	12.163	25.591	148.064
8. INDUSTRIAL PRODUCTIVITY	N	73.401	11.355	73.395	16.549	17.825	192.525
	I	0	53	121.649	0	0	121.702
	T	73.401	11.408	195.044	16.549	17.825	314.227
9. COMPUTER SCIENCE AND AUTOMATION	N	29.754	86	42.751	2.429	1.141	76.161
	I	0	0	0	0	0	0
	T	29.754	86	42.751	2.429	1.141	76.161
10. SOCIAL SCIENCES	N	23.784	728	25.604	3.363	9.631	63.110
	I	0	128	0	810	11	949
	T	23.784	855	25.604	4.173	9.642	64.058
SUB-TOTAL (1-10)	N	679.800	46.948	1.161.806	137.437	114.805	2.140.796
	I	142.287	14.998	220.918	49.631	15.823	443.657
	T	822.087	61.945	1.382.724	187.068	130.629	2.584.453
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	118.122	14.077	194.001	37.958	12.987	377.145
	I	305	27	232	43	393	1.000
	T	118.426	14.103	194.233	38.002	13.380	378.144
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	503.362	43.232	229.974	107.974	125.539	1.010.081
	I	0	0	1.738	0	0	1.738
	T	503.362	43.232	231.712	107.974	125.539	1.011.819
NOT ITEMIZED	N	0	0	3.514	0	0	3.514
	I	0	0	2.896	0	0	2.896
	T	0	0	6.411	0	0	6.411
TOTAL	N	1.301.284	104.257	1.589.295	283.369	253.331	3.531.536
	I	142.592	15.025	225.784	49.674	16.216	449.291
	T	1.443.875	119.280	1.815.080	333.044	269.548	3.980.827

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) **In 1000 u.a.**

1970

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	237.420	19.252	220.014	60.891	23.629	561.206
	I	45.656	12.182	26.539	33.094	8.750	126.221
	T	283.076	31.434	246.553	93.986	32.379	687.428
2. SPACE	N	43.353	1.069	84.549	1.432	4.822	135.225
	I	50.792	6.590	24.216	11.114	4.116	96.828
	T	94.146	7.659	108.765	12.546	8.938	232.054
3. DEFENCE	N	229.776	2.703	478.918	18.066	13.872	743.335
	I	84.699	69	25.206	0	72	110.046
	T	314.475	2.772	504.124	18.066	13.944	853.381
4. EARTH AND ITS ATMOSPHERE	N	30.009	2.919	31.598	6.176	4.904	75.666
	I	273	99	720	72	36	1.200
	T	30.282	3.018	32.318	6.248	5.001	76.867
5. HEALTH	N	43.259	4.278	48.414	11.034	12.354	119.339
	I	137	140	180	2.472	0	2.929
	T	43.395	4.418	48.594	13.506	12.354	122.267
6. HUMAN ENVIRONMENT	N	18.167	1.721	77.329	12.715	10.390	120.322
	I	0	13	5.761	120	0	5.894
	T	18.167	1.734	83.090	12.835	10.390	126.216
7. AGRICULTURAL PRODUCTIVITY	N	37.508	7.124	62.007	14.602	29.209	150.450
	I	0	18	9.002	222	0	9.242
	T	37.508	7.142	71.009	14.824	29.209	159.692
8. INDUSTRIAL PRODUCTIVITY	N	98.586	14.354	67.859	77.667	18.417	276.883
	I	0	59	93.983	0	0	94.042
	T	98.586	14.413	161.842	77.667	18.417	370.925
9. COMPUTER SCIENCE AND AUTOMATION	N	34.436	104	54.715	1.173	1.616	92.044
	I	0	0	0	0	0	0
	T	34.436	104	54.715	1.173	1.616	92.044
10. SOCIAL SCIENCES	N	31.617	786	25.800	2.635	11.947	72.785
	I	0	145	0	861	15	1.021
	T	31.617	931	25.800	3.496	11.962	73.806
SUB-TOTAL (1-10)	N	804.131	54.310	1.151.203	206.391	131.220	2.347.255
	I	181.557	19.315	185.607	47.955	12.989	447.423
	T	985.688	73.625	1.336.810	254.347	144.210	2.794.680
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	145.770	14.303	168.846	48.171	14.157	391.247
	I	383	28	252	38	453	1.154
	T	146.153	14.331	169.098	48.210	14.609	392.401
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	644.754	55.863	215.387	118.931	147.343	1.182.278
	I	0	0	1.620	0	0	1.620
	T	644.754	55.863	217.007	118.931	147.343	1.183.898
NOT ITEMIZED	N	0	0	3.349	0	1.442	4.791
	I	0	0	2.161	0	0	2.161
	T	0	0	5.509	0	1.442	6.951
TOTAL	N	1.594.655	124.476	1.538.785	373.493	294.162	3.925.571
	I	181.940	19.343	189.640	47.993	13.442	452.358
	T	1.776.595	143.819	1.728.424	421.488	307.604	4.377.930

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) **In 1000 u.a.**

1971

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	300.569	25.099	225.307	70.133	20.925	642.033
	I	33.962	9.842	20.075	33.547	8.936	106.362
	T	334.530	34.941	245.382	103.680	29.862	748.395
2. SPACE	N	64.351	2.059	85.629	17.760	7.647	177.446
	I	76.612	7.963	29.311	11.114	4.727	129.727
	T	140.963	10.021	114.940	28.874	12.374	307.172
3. DEFENCE	N	235.630	2.391	496.022	17.600	14.874	766.517
	I	84.891	75	26.100	0	376	111.448
	T	320.520	2.465	522.128	17.600	15.250	877.963
4. EARTH AND ITS ATMOSPHERE	N	40.401	3.546	37.503	6.320	4.961	92.731
	I	273	104	774	80	36	1.267
	T	40.674	3.650	38.277	6.400	4.998	93.999
5. HEALTH	N	56.939	4.751	56.534	11.912	14.114	144.250
	I	219	182	180	2.712	0	3.293
	T	57.157	4.933	56.714	14.624	14.114	147.542
6. HUMAN ENVIRONMENT	N	20.830	2.595	89.806	7.517	11.469	132.217
	I	0	14	7.022	131	0	7.167
	T	20.830	2.608	96.828	7.648	11.469	139.383
7. AGRICULTURAL PRODUCTIVITY	N	44.349	7.700	71.406	15.458	31.970	170.883
	I	0	1	9.722	222	0	9.945
	T	44.349	7.700	81.128	15.680	31.970	180.827
8. INDUSTRIAL PRODUCTIVITY	N	144.380	17.503	79.147	109.062	25.478	375.570
	I	0	79	81.020	0	0	81.099
	T	144.380	17.582	160.167	109.062	25.478	456.669
9. COMPUTER SCIENCE AND AUTOMATION	N	67.963	59	56.534	2.400	1.851	128.807
	I	0	0	0	0	0	0
	T	67.963	59	56.534	2.400	1.851	128.807
10. SOCIAL SCIENCES	N	37.542	978	29.797	3.083	15.627	87.027
	I	0	141	0	917	15	1.073
	T	37.542	1.119	29.797	4.000	15.643	88.101
SUB-TOTAL (1-10)	N	1.012.954	66.681	1.227.685	261.245	148.916	2.717.481
	I	195.957	18.401	174.210	48.723	14.090	451.381
	T	1.208.908	85.078	1.401.895	309.968	163.009	3.168.858
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	166.887	17.449	198.463	52.650	16.800	452.249
	I	437	30	288	38	500	1.293
	T	167.324	17.479	198.751	52.688	17.300	453.542
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	763.251	62.580	210.202	134.842	166.899	1.337.774
	I	0	0	1.620	0	0	1.620
	T	763.251	62.580	211.822	134.842	166.899	1.339.394
NOT ITEMIZED	N	0	0	3.637	0	2.072	5.709
	I	0	0	2.341	0	0	2.341
	T	0	0	5.977	0	2.072	8.049
TOTAL	N	1.943.092	146.710	1.639.987	448.737	334.687	4.513.213
	I	196.394	18.431	178.459	48.761	14.590	456.635
	T	2.139.483	165.137	1.818.445	497.498	349.280	4.969.843

ANNEX IV

National projects and contributions to multilateral and bilateral projects
b) In % in the Community

1967

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	34,2	1,3	51,C	11,0	2,5	100,0
	I	34,1	8,7	27,0	24,8	5,5	100,0
	T	34,1	3,1	45,2	14,3	3,3	100,0
2. SPACE	N	32,6	C,6	6C,9	4,6	1,4	100,0
	I	42,4	7,1	27,3	17,9	5,3	100,0
	T	36,8	3,4	46,3	10,4	3,1	100,0
3. DEFENCE	N	26,5	0,1	7C,4	1,8	1,2	100,0
	I	58,9	0,1	40,9	0,0	0,1	100,0
	T	29,2	0,1	68,0	1,o	1,1	100,0
4. EARTH AND ITS ATMOSPHERE	N	42,9	4,4	40,7	3,9	8,0	100,0
	I	20,7	10,4	62,0	4,0	3,0	100,0
	T	42,4	4,6	41,2	3,9	7,9	100,0
5. HEALTH	N	29,8	3,6	53,5	3,9	9,3	100,0
	I	10,8	0,0	17,4	71,8	0,0	100,0
	T	29,4	3,5	52,9	5,0	9,2	100,0
6. HUMAN ENVIRONMENT	N	12,9	2,6	69,7	7,2	7,6	100,0
	I	0,0	0,2	97,8	2,0	0,0	100,0
	T	12,0	2,4	71,8	6,8	7,1	100,0
7. AGRICULTURAL PRODUCTIVITY	N	23,6	3,9	50,5	3,7	18,3	100,0
	I	0,0	0,0	97,9	2,1	0,0	100,0
	T	21,9	3,6	53,8	3,6	17,1	100,0
8. INDUSTRIAL PRODUCTIVITY	N	32,8	7,8	45,3	2,8	11,2	100,0
	I	0,0	0,1	99,9	0,0	0,0	100,0
	T	18,3	4,4	69,5	1,o	6,3	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	48,6	0,0	49,0	2,3	0,1	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0
	T	48,6	0,0	49,0	2,3	0,1	100,0
10. SOCIAL SCIENCES	N	42,5	1,3	31,8	8,9	15,4	100,0
	I	0,0	7,7	0,0	90,4	1,9	100,0
	T	41,7	1,5	31,2	10,5	15,2	100,0
SUB-TOTAL (1-10)	N	30,0	1,6	59,1	5,0	4,3	100,0
	I	29,8	4,5	49,9	12,7	3,0	100,0
	T	29,9	2,2	57,3	6,5	4,1	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	29,0	4,1	5C,5	12,8	3,5	100,0
	I	17,3	2,4	20,0	28,7	31,7	100,0
	T	29,0	4,1	50,4	12,9	3,6	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	47,4	4,5	25,9	10,6	11,6	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	47,3	4,5	26,1	10,6	11,6	100,0
NOT ITEMIZED	N	0,0	0,0	100,0	0,0	0,0	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	0,0	0,0	100,C	0,0	0,0	100,0
TOTAL	N	34,5	2,6	49,5	7,2	6,2	100,0
	I	29,5	4,5	50,3	12,7	3,1	100,0
	T	33,8	2,9	49,6	7,9	5,8	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
b) In % in the Community

1968

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	34,2	2,7	49,6	10,5	3,1	100,0
	I	36,9	6,4	23,2	26,9	6,6	100,0
	T	34,8	3,6	43,3	14,4	3,9	100,0
2. SPACE	N	33,5	0,8	61,5	2,1	2,1	100,0
	I	46,4	6,1	25,2	15,1	7,2	100,0
	T	39,1	3,1	45,7	7,8	4,3	100,0
3. DEFENCE	N	24,7	0,1	71,8	1,8	1,5	100,0
	I	60,1	0,1	39,8	0,0	0,1	100,0
	T	27,8	0,1	69,1	1,6	1,4	100,0
4. EARTH AND ITS ATMOSPHERE	N	36,9	4,3	44,3	8,9	5,6	100,0
	I	20,5	7,2	62,3	6,4	3,7	100,0
	T	36,6	4,3	44,6	8,9	5,5	100,0
5. HEALTH	N	29,5	3,4	52,4	5,5	9,2	100,0
	I	8,4	0,0	11,3	80,3	0,0	100,0
	T	29,1	3,3	51,6	6,9	9,0	100,0
6. HUMAN ENVIRONMENT	N	12,7	1,8	68,1	8,8	8,5	100,0
	I	0,0	0,2	97,7	2,0	0,0	100,0
	T	11,9	1,7	76,0	8,4	8,0	100,0
7. AGRICULTURAL PRODUCTIVITY	N	19,9	4,3	50,7	8,2	16,8	100,0
	I	0,0	0,0	98,1	1,8	0,0	100,0
	T	18,5	4,0	53,9	7,8	15,7	100,0
8. INDUSTRIAL PRODUCTIVITY	N	31,3	6,2	42,9	6,4	13,2	100,0
	I	0,0	0,1	99,9	0,0	0,0	100,0
	T	18,3	3,7	66,6	3,7	7,7	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	36,6	0,5	59,1	3,8	0,0	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0
	T	36,6	0,5	59,1	3,8	0,0	100,0
10. SOCIAL SCIENCES	N	38,5	1,2	40,1	6,4	13,8	100,0
	I	0,0	15,4	0,0	83,1	1,5	100,0
	T	37,8	1,4	39,4	7,7	13,6	100,0
SUB-TOTAL (1-10)	N	28,5	1,9	59,3	5,5	4,9	100,0
	I	32,4	3,6	47,3	13,0	3,8	100,0
	T	29,2	2,2	57,1	6,9	4,7	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	28,3	3,6	52,4	12,0	3,6	100,0
	I	18,2	3,6	29,6	4,7	43,9	100,0
	T	28,3	3,6	52,4	12,0	3,7	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	47,3	4,2	26,2	10,2	12,1	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	47,2	4,1	26,3	10,2	12,1	100,0
NOT ITEMIZED	N	0,0	0,0	100,0	0,0	0,0	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	0,0	0,0	100,0	0,0	0,0	100,0
TOTAL	N	33,7	2,7	49,3	7,4	6,8	100,0
	I	32,1	3,5	47,8	12,8	3,8	100,0
	T	33,5	2,8	49,1	8,1	6,4	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
b) In % in the Community

1969

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	35,7	3,2	44,7	12,9	3,5	100,0
	I	36,8	6,7	24,6	25,0	6,9	100,0
	T	35,9	3,9	40,8	15,2	4,2	100,0
2. SPACE	N	35,4	0,8	59,7	1,2	2,8	100,0
	I	46,1	6,1	25,7	15,1	7,0	100,0
	T	40,0	3,1	45,0	7,2	4,6	100,0
3. DEFENCE	N	29,7	0,3	66,2	1,8	1,9	100,0
	I	65,4	0,1	34,4	0,0	0,1	100,0
	T	33,0	0,3	63,3	1,7	1,8	100,0
4. EARTH AND ITS ATMOSPHERE	N	35,0	3,8	46,9	7,6	6,7	100,0
	I	20,2	10,5	61,3	5,2	2,9	100,0
	T	34,7	4,0	47,2	7,5	6,6	100,0
5. HEALTH	N	27,8	3,7	50,3	7,6	10,7	100,0
	I	7,2	0,0	9,2	83,5	0,0	100,0
	T	27,4	3,6	49,5	9,2	10,4	100,0
6. HUMAN ENVIRONMENT	N	15,9	2,0	65,9	7,2	9,0	100,0
	I	0,0	0,2	98,0	1,8	0,0	100,0
	T	14,9	1,9	67,9	6,8	8,5	100,0
7. AGRICULTURAL PRODUCTIVITY	N	20,9	4,3	47,6	8,6	18,5	100,0
	I	0,0	0,0	97,7	2,3	0,0	100,0
	T	19,6	4,1	50,9	8,2	17,3	100,0
8. INDUSTRIAL PRODUCTIVITY	N	38,1	5,9	38,1	8,6	9,3	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	23,4	3,6	62,1	5,3	5,7	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	39,1	0,1	56,1	3,2	1,5	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0
	T	39,1	0,1	56,1	3,2	1,5	100,0
10. SOCIAL SCIENCES	N	37,7	1,2	40,6	5,3	15,3	100,0
	I	0,0	13,5	0,0	85,4	1,2	100,0
	T	37,1	1,3	40,0	6,5	15,1	100,0
SUB-TOTAL (1-10)	N	31,8	2,2	54,3	6,4	5,4	100,0
	I	32,1	3,4	49,8	11,2	3,6	100,0
	T	31,8	2,4	53,5	7,2	5,1	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	31,3	3,7	51,4	10,1	3,4	100,0
	I	30,5	2,7	23,2	4,3	39,3	100,0
	T	31,3	3,7	51,4	10,0	3,5	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	49,8	4,3	22,8	10,7	12,4	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	49,7	4,3	22,9	10,7	12,4	100,0
NOT ITEMIZED	N	0,0	0,0	100,0	0,0	0,0	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	0,0	0,0	100,0	0,0	0,0	100,0
TOTAL	N	36,8	3,0	45,0	8,0	7,2	100,0
	I	31,7	3,3	50,3	11,1	3,6	100,0
	T	36,3	3,0	45,6	8,4	6,8	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

b) In % in the Community

1970

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	42,3	3,4	39,2	10,9	4,2	100,0
	I	36,2	9,7	21,0	26,2	6,9	100,0
	T	41,2	4,6	35,9	13,7	4,7	100,0
2. SPACE	N	32,1	0,8	62,5	1,1	3,6	100,0
	I	52,5	6,8	25,0	11,5	4,3	100,0
	T	40,6	3,3	46,9	5,4	3,9	100,0
3. DEFENCE	N	30,9	0,4	64,4	2,4	1,9	100,0
	I	77,0	0,1	22,9	0,0	0,1	100,0
	T	36,9	0,3	59,1	2,1	1,6	100,0
4. EARTH AND ITS ATMOSPHERE	N	39,7	3,9	41,8	8,2	6,6	100,0
	I	22,8	8,3	60,0	6,0	3,0	100,0
	T	39,4	3,9	42,0	8,1	6,5	100,0
5. HEALTH	N	36,2	3,6	40,6	9,2	10,4	100,0
	I	4,7	4,8	6,1	84,4	0,0	100,0
	T	35,5	3,6	39,7	11,0	10,2	100,0
6. HUMAN ENVIRONMENT	N	15,1	1,4	64,3	10,6	8,6	100,0
	I	0,0	0,2	97,7	2,0	0,0	100,0
	T	14,4	1,4	65,8	10,2	8,2	100,0
7. AGRICULTURAL PRODUCTIVITY	N	24,9	4,7	41,2	9,7	19,4	100,0
	I	0,0	0,2	97,4	2,4	0,0	100,0
	T	23,5	4,5	44,5	9,3	18,3	100,0
8. INDUSTRIAL PRODUCTIVITY	N	35,6	5,2	24,5	28,1	6,7	100,0
	I	0,0	0,1	99,9	0,0	0,0	100,0
	T	26,6	3,9	43,6	20,9	5,0	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	37,4	0,1	59,4	1,3	1,8	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0
	T	37,4	0,1	59,4	1,3	1,8	100,0
10. SOCIAL SCIENCES	N	43,4	1,1	35,4	3,6	16,4	100,0
	I	0,0	14,2	0,0	84,3	1,5	100,0
	T	42,8	1,3	35,0	4,7	16,2	100,0
SUB-TOTAL (1-10)	N	34,3	2,3	49,0	8,8	5,6	100,0
	I	40,6	4,3	41,5	10,7	2,9	100,0
	T	35,3	2,6	47,8	9,1	5,2	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	37,3	3,7	43,2	12,3	3,6	100,0
	I	33,2	2,4	21,8	3,3	39,3	100,0
	T	37,2	3,7	43,1	12,3	3,7	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	54,5	4,7	18,2	10,1	12,5	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	54,5	4,7	18,3	10,0	12,4	100,0
NOT ITEMIZED	N	0,0	0,0	69,9	0,0	30,1	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	0,0	0,0	79,3	0,0	20,7	100,0
TOTAL	N	40,6	3,2	39,2	9,5	7,5	100,0
	I	40,2	4,3	41,9	10,6	3,0	100,0
	T	40,6	3,3	39,5	9,6	7,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
b) In % in the Community

1971

OBJECTIVE		GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1. NUCLEAR R & D	N	46,8	3,9	35,1	10,9	3,3	100,0
	I	31,9	9,3	18,9	31,5	8,4	100,0
	T	44,7	4,7	32,8	13,9	4,0	100,0
2. SPACE	N	36,3	1,2	48,3	10,0	4,3	100,0
	I	59,1	6,1	22,6	8,6	3,6	100,0
	T	45,9	3,3	37,4	9,4	4,0	100,0
3. DEFENCE	N	30,7	0,3	64,7	2,3	1,9	100,0
	I	76,2	0,1	23,4	0,0	0,3	100,0
	T	36,5	0,3	59,5	2,0	1,7	100,0
4. EARTH AND ITS ATMOSPHERE	N	43,6	3,8	40,4	6,8	5,3	100,0
	I	21,5	8,2	61,1	6,3	2,8	100,0
	T	43,3	3,9	40,7	6,8	5,3	100,0
5. HEALTH	N	39,5	3,3	39,2	8,3	9,8	100,0
	I	6,7	5,5	5,5	82,4	0,0	100,0
	T	38,7	3,3	38,4	9,9	9,6	100,0
6. HUMAN ENVIRONMENT	N	15,8	2,0	67,9	5,7	8,7	100,0
	I	0,0	0,2	98,0	1,8	0,0	100,0
	T	14,9	1,9	69,5	5,5	8,2	100,0
7. AGRICULTURAL PRODUCTIVITY	N	26,0	4,5	41,8	9,0	18,7	100,0
	I	0,0	0,0	97,8	2,2	0,0	100,0
	T	24,5	4,3	44,9	8,7	17,7	100,0
8. INDUSTRIAL PRODUCTIVITY	N	38,4	4,7	21,1	29,0	6,8	100,0
	I	0,0	0,1	99,9	0,0	0,0	100,0
	T	31,6	3,9	35,1	23,9	5,6	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	52,8	0,0	43,9	1,9	1,4	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0
	T	52,8	0,0	43,9	1,9	1,4	100,0
10. SOCIAL SCIENCES	N	43,1	1,1	34,2	3,5	18,0	100,0
	I	0,0	13,1	0,0	85,5	1,4	100,0
	T	42,6	1,3	33,8	4,5	17,8	100,0
SUB-TOTAL (1-10)	N	37,3	2,5	45,2	9,6	5,5	100,0
	I	43,4	4,1	38,6	10,8	3,1	100,0
	T	38,1	2,7	44,2	9,8	5,1	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	36,9	3,9	43,9	11,6	3,7	100,0
	I	33,8	2,3	22,3	2,9	38,7	100,0
	T	36,9	3,9	43,8	11,6	3,8	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	57,1	4,7	15,7	10,1	12,5	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	57,0	4,7	15,8	10,1	12,5	100,0
NOT ITEMIZED	N	0,0	0,0	63,7	0,0	36,3	100,0
	I	0,0	0,0	100,0	0,0	0,0	100,0
	T	0,0	0,0	74,3	0,0	25,7	100,0
TOTAL	N	43,1	3,3	36,3	9,9	7,4	100,0
	I	43,0	4,0	39,1	10,7	3,2	100,0
	T	43,0	3,3	36,6	10,0	7,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

1967 c) **In % of total project expenditure**

OBJECTIVE	GERMANY			BELGIUM		
	N	I	T	N	I	T
1. NUCLEAR R & D	16,5	40,9	19,3	8,2	68,1	20,5
2. SPACE	3,5	27,2	6,2	0,8	30,0	6,8
3. DEFENCE	20,1	31,5	21,4	1,3	0,3	1,1
4. EARTH AND ITS ATMOSPHERE	2,0	0,2	1,8	2,8	0,6	2,3
5. HEALTH	2,3	0,1	2,0	3,7	0,0	2,9
6. HUMAN ENVIRONMENT	0,9	0,0	0,8	2,4	0,1	1,9
7. AGRICULTURAL PRODUCTIVITY	2,5	0,0	2,2	5,5	0,0	4,4
8. INDUSTRIAL PRODUCTIVITY	4,5	0,0	4,0	14,0	0,5	11,3
9. COMPUTER SCIENCE AND AUTOMATION	1,6	0,0	1,4	0,C	0,0	C,C
10. SOCIAL SCIENCES	1,9	0,0	1,7	0,8	0,3	C,7
SUB-TOTAL (1-10)	55,8	99,9	60,8	39,4	99,9	51,8
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	7,5	0,1	6,7	14,1	0,1	11,2
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	36,7	0,0	32,5	46,5	0,0	37,C
NOT-ITEMIZED	0,0	0,0	0,0	0,C	0,0	0,C
T O T A L	100,0	100,0	100,0	100,0	1C0,0	100,0

National projects and contributions to multilateral and bilateral projects

c) In % of total project expenditure 1967

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
N	I	T	N	I	T	N	I	T	N	I	T
17,2	19,0	17,4	25,5	69,1	34,6	6,8	63,9	10,8	16,7	35,3	19,1
4,5	10,2	5,3	2,4	26,6	7,4	0,8	33,1	3,0	3,7	18,9	5,7
37,1	12,8	33,9	6,3	0,0	5,0	4,9	0,4	4,6	26,1	15,8	24,7
1,3	0,3	1,2	0,9	0,1	0,7	2,1	0,3	2,0	1,6	0,3	1,4
2,9	0,1	2,5	1,4	1,7	1,5	4,0	0,0	3,7	2,6	0,3	2,3
3,4	2,5	3,3	2,4	0,2	2,0	3,0	0,0	2,8	2,4	1,3	2,3
3,8	3,6	3,7	1,9	0,3	1,6	10,9	0,0	10,2	3,7	1,8	3,4
4,3	49,5	10,3	1,9	0,0	1,5	8,6	0,0	8,0	4,7	25,0	7,4
1,1	0,0	1,0	0,4	0,0	0,3	0,0	0,0	0,0	1,1	0,0	1,0
1,0	0,0	0,9	1,9	1,5	1,8	3,9	0,1	3,6	1,6	0,2	1,4
76,7	98,0	79,5	44,9	99,5	56,3	45,0	97,8	48,6	64,3	98,8	68,8
9,1	0,1	7,9	15,9	0,5	12,7	5,1	2,2	4,9	8,9	0,2	7,8
14,0	0,7	12,2	39,2	0,0	31,0	49,9	0,0	46,5	26,7	0,3	23,2
0,2	1,3	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,6	0,2
100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

1968 **c) In % of total project expenditure**

OBJECTIVE	GERMANY			BELGIUM		
	N	I	T	N	I	T
1. NUCLEAR R & D	15,4	39,2	18,2	15,2	61,9	22,5
2. SPACE	3,7	29,6	6,7	1,0	35,6	6,4
3. DEFENCE	17,9	30,9	19,4	1,2	0,4	1,1
4. EARTH AND ITS ATMOSPHERE	1,8	0,1	1,6	2,6	0,4	2,2
5. HEALTH	2,5	0,1	2,2	3,6	0,0	3,0
6. HUMAN ENVIRONMENT	0,9	0,0	0,8	1,7	0,1	1,4
7. AGRICULTURAL PRODUCTIVITY	2,4	0,0	2,1	6,6	0,0	5,6
8. INDUSTRIAL PRODUCTIVITY	4,3	0,0	3,8	10,7	0,5	9,2
9. COMPUTER SCIENCE AND AUTOMATION	1,6	0,0	1,5	0,3	0,0	0,2
10. SOCIAL SCIENCES	2,0	0,0	1,7	0,8	0,9	0,8
SUB-TOTAL (1-10)	52,4	99,9	58,0	43,6	99,8	52,3
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	7,9	0,1	7,0	12,7	0,2	10,8
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	39,6	0,0	35,0	43,6	0,0	36,9
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0	0,0
T O T A L	100,0	100,0	100,0	100,0	100,0	100,0

National projects and contributions to multilateral and bilateral projects

c) **In % of total project expenditure** 1968

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
N	I	T	N	I	T	N	I	T	N	I	T
15,3	16,6	15,4	21,4	71,5	31,1	6,9	59,1	10,7	15,2	34,1	17,5
4,6	10,8	5,4	1,0	24,1	5,5	1,2	38,5	3,9	3,7	20,4	5,8
35,5	13,7	32,9	5,8	0,0	4,7	5,5	0,4	5,1	24,4	16,5	23,4
1,4	0,3	1,3	1,9	0,1	1,6	1,3	0,2	1,2	1,6	0,2	1,4
3,0	0,1	2,7	2,1	2,4	2,2	3,8	0,0	3,6	2,8	0,4	2,5
3,4	2,6	3,3	2,9	0,2	2,4	3,1	0,0	2,9	2,5	1,3	2,3
4,2	4,4	4,2	4,5	0,3	3,7	10,2	0,0	9,4	4,1	2,1	3,9
4,1	49,3	9,5	4,0	0,0	3,2	9,1	0,0	8,4	4,7	23,6	7,0
1,8	0,0	1,6	0,8	0,0	0,6	0,0	0,0	0,0	1,5	0,0	1,3
1,4	0,0	1,2	1,5	1,3	1,5	3,5	0,1	3,3	1,7	0,2	1,5
74,7	97,7	77,5	45,9	99,9	56,4	44,6	98,3	48,5	62,2	98,8	66,7
10,0	0,1	8,8	15,3	0,1	12,3	5,0	1,7	4,8	9,4	0,1	8,3
15,0	0,8	13,3	38,8	0,0	31,3	50,4	0,0	46,7	28,2	0,4	24,8
0,2	1,4	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,7	0,2
100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

1969 — **c) In % of total project expenditure**

OBJECTIVE	GERMANY			BELGIUM		
	N	I	T	N	I	T
1. NUCLEAR R & D	14,6	32,7	16,4	16,5	56,8	21,5
2. SPACE	3,5	32,1	6,4	1,0	40,5	6,0
3. DEFENCE	17,1	34,7	18,8	2,3	0,4	2,1
4. EARTH AND ITS ATMOSPHERE	1,7	0,2	1,6	2,4	0,9	2,2
5. HEALTH	2,2	0,1	2,0	3,5	0,0	3,1
6. HUMAN ENVIRONMENT	1,2	0,0	1,0	1,8	0,1	1,6
7. AGRICULTURAL PRODUCTIVITY	2,2	0,0	2,0	5,8	0,0	5,0
8. INDUSTRIAL PRODUCTIVITY	5,6	0,0	5,1	10,9	0,4	9,6
9. COMPUTER SCIENCE AND AUTOMATION	2,3	0,0	2,1	0,1	0,0	0,1
10. SOCIAL SCIENCES	1,8	0,0	1,6	0,7	0,9	0,7
SUB-TOTAL (1-10)	52,2	99,8	56,9	45,0	99,8	51,9
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	9,1	0,2	8,2	13,5	0,2	11,8
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	38,7	0,0	34,9	41,5	0,0	36,2
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0	0,0
T O T A L	100,0	100,0	100,0	100,0	100,0	100,0

National projects and contributions to multilateral and bilateral projects

c) In % of total project expenditure

1969

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
N	I	T	N	I	T	N	I	T	N	I	T
15,0	13,8	14,8	24,1	63,7	30,0	7,4	53,9	10,2	15,1	28,2	16,5
4,9	11,3	5,7	0,6	30,3	5,0	1,5	42,9	4,0	3,7	22,1	5,8
31,2	11,5	28,7	4,9	0,0	4,1	5,8	0,4	5,4	21,2	16,8	20,7
1,9	0,3	1,7	1,7	0,1	1,5	1,7	0,2	1,6	1,8	0,3	1,7
3,2	0,1	2,8	2,7	3,5	2,8	4,3	0,0	4,0	2,9	0,5	2,6
3,9	2,7	3,8	2,4	0,2	2,1	3,4	0,0	3,2	2,7	1,4	2,5
4,1	4,2	4,1	4,2	0,4	3,7	10,1	0,0	9,5	3,9	2,2	3,7
4,6	53,9	10,7	5,8	0,0	5,0	7,0	0,0	6,6	5,5	27,1	7,9
2,7	0,0	2,4	0,9	0,0	0,7	0,5	0,0	0,4	2,2	0,0	1,9
1,6	0,0	1,4	1,2	1,6	1,3	3,8	0,1	3,6	1,8	0,2	1,6
73,1	97,8	76,2	48,5	99,9	56,2	45,3	97,6	48,5	60,6	98,7	64,9
12,2	0,1	10,7	13,4	0,1	11,4	5,1	2,4	5,0	10,7	0,2	9,5
14,5	0,8	12,8	38,1	0,0	32,4	49,6	0,0	46,6	28,6	0,4	25,4
0,2	1,3	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,6	0,2
100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

1970 c) **In % of total project expenditure**

OBJECTIVE	GERMANY			BELGIUM		
	N	I	T	N	I	T
1. NUCLEAR R & D	14,9	25,1	15,9	15,5	63,0	21,9
2. SPACE	2,7	27,9	5,3	0,9	34,1	5,3
3. DEFENCE	14,4	46,6	17,7	2,2	0,4	1,9
4. EARTH AND ITS ATMOSPHERE	1,9	0,2	1,7	2,3	0,5	2,1
5. HEALTH	2,7	0,1	2,4	3,4	0,7	3,1
6. HUMAN ENVIRONMENT	1,1	0,0	1,0	1,4	0,1	1,2
7. AGRICULTURAL PRODUCTIVITY	2,4	0,0	2,1	5,7	0,1	5,0
8. INDUSTRIAL PRODUCTIVITY	6,2	0,0	5,5	11,5	0,3	10,0
9. COMPUTER SCIENCE AND AUTOMATION	2,2	0,0	1,9	0,1	0,0	0,1
10. SOCIAL SCIENCES	2,0	0,0	1,8	0,6	0,7	0,6
SUB-TOTAL (1-10)	50,4	99,8	55,5	43,6	99,9	51,2
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	9,1	0,2	8,2	11,5	0,1	10,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	40,4	0,0	36,3	44,9	0,0	38,8
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0	0,0
T O T A L	100,0	100,0	100,0	100,0	100,0	100,0

National projects and contributions to multilateral and bilateral projects

c) In % of total project expenditure

1970

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
N	I	T	N	I	T	N	I	T	N	I	T
14,3	14,0	14,3	16,3	69,0	22,3	8,0	65,1	10,5	14,3	27,9	15,7
5,5	12,8	6,3	0,4	23,2	3,0	1,6	30,6	2,9	3,4	21,4	5,3
31,1	13,3	29,2	4,8	0,0	4,3	4,7	0,5	4,5	18,9	24,3	19,5
2,1	0,4	1,9	1,7	0,2	1,5	1,7	0,3	1,6	1,9	0,3	1,8
3,1	0,1	2,8	3,0	5,2	3,2	4,2	0,0	4,0	3,0	0,6	2,8
5,0	3,0	4,8	3,4	0,3	3,0	3,5	0,0	3,4	3,1	1,3	2,9
4,0	4,7	4,1	3,9	0,5	3,5	9,9	0,0	9,5	3,8	2,0	3,6
4,4	49,6	9,4	20,8	0,0	18,4	6,3	0,0	6,0	7,1	20,8	8,5
3,6	0,0	3,2	0,3	0,0	0,3	0,5	0,0	0,5	2,3	0,0	2,1
1,7	0,0	1,5	0,7	1,8	0,8	4,1	0,1	3,9	1,9	0,2	1,7
74,8	97,9	77,3	55,3	99,9	60,3	44,6	96,6	46,9	59,8	98,9	63,8
11,0	0,1	9,8	12,9	0,1	11,4	4,8	3,4	4,7	10,0	0,3	9,0
14,0	0,9	12,6	31,8	0,0	28,2	50,1	0,0	47,9	30,1	0,4	27,0
0,2	1,1	0,3	0,0	0,0	0,0	0,5	0,0	0,5	0,1	0,5	0,2
100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

1971 **c) In % of total project expenditure**

OBJECTIVE	GERMANY			BELGIUM		
	N	I	T	N	I	T
1. NUCLEAR R & D	15,5	17,3	15,6	17,1	53,4	21,2
2. SPACE	3,3	39,0	6,6	1,4	43,2	6,1
3. DEFENCE	12,1	43,2	15,0	1,6	0,4	1,5
4. EARTH AND ITS ATMOSPHERE	2,1	0,1	1,9	2,4	0,6	2,2
5. HEALTH	2,9	0,1	2,7	3,2	1,0	3,0
6. HUMAN ENVIRONMENT	1,1	0,0	1,0	1,8	0,1	1,6
7. AGRICULTURAL PRODUCTIVITY	2,3	0,0	2,1	5,2	0,0	4,7
8. INDUSTRIAL PRODUCTIVITY	7,4	0,0	6,7	11,9	0,4	10,6
9. COMPUTER SCIENCE AND AUTOMATION	3,5	0,0	3,2	0,0	0,0	0,0
10. SOCIAL SCIENCES	1,9	0,0	1,8	0,7	0,8	0,7
SUB-TOTAL (1-10)	52,1	99,8	56,5	45,5	99,8	51,5
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	8,6	0,2	7,8	11,9	0,2	10,6
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	39,3	0,0	35,7	42,7	0,0	37,9
NOT ITEMIZED	0,0	0,0	0,0	0,0	0,0	0,0
T O T A L	100,0	100,0	100,0	100,0	100,0	100,0

National projects and contributions to multilateral and bilateral projects
c) In % of total project expenditure . 1971

FRANCE			ITALY			NETHERLANDS			COMMUNITY		
N	I	T	N	I	T	N	I	T	N	I	T
13,7	11,2	13,5	15,6	68,8	20,8	6,3	61,2	8,5	14,2	23,3	15,1
5,2	16,4	6,3	4,0	22,8	5,8	2,3	32,4	3,5	3,9	28,4	6,2
30,2	14,6	28,7	3,9	0,0	3,5	4,4	2,6	4,4	17,0	24,4	17,7
2,3	0,4	2,1	1,4	0,2	1,3	1,5	0,2	1,4	2,1	0,3	1,9
3,4	0,1	3,1	2,7	5,6	2,9	4,2	0,0	4,0	3,2	0,7	3,0
5,5	3,9	5,3	1,7	0,3	1,5	3,4	0,0	3,3	2,9	1,6	2,8
4,4	5,4	4,5	3,4	0,5	3,2	9,6	0,0	9,2	3,8	2,2	3,6
4,8	45,4	8,8	24,3	0,0	21,9	7,6	0,0	7,3	8,3	17,8	9,2
3,4	0,0	3,1	0,5	0,0	0,5	0,6	0,0	0,5	2,9	0,0	2,6
1,8	0,0	1,6	0,7	1,9	0,8	4,7	0,1	4,5	1,9	0,2	1,8
74,9	97,6	77,1	58,2	99,9	62,3	44,5	96,6	46,7	60,2	98,8	63,8
12,1	0,2	10,9	11,7	0,1	10,6	5,0	3,4	5,0	10,0	0,3	9,1
12,8	0,9	11,6	30,0	0,0	27,1	49,9	0,0	47,8	29,6	0,4	27,0
0,2	1,3	0,3	0,0	0,0	0,0	0,6	0,0	0,6	0,1	0,5	0,2
00,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

GERMANY

OBJECTIVE		1967		1968		1969		1970		1971	
		MIO DM	0/0	MIO DM	0/0	MIO DM	0/0	MIO DM	0/0	MIO DM	0/0
1. NUCLEAR R & D	N	715,6	75,9	689,4	74,7	747,3	80,3	869,0	83,9	1.100,1	89,8
	I	226,9	24,1	234,1	25,3	183,5	19,7	167,1	16,1	124,3	10,2
	T	942,5	100,0	923,5	100,0	930,8	100,0	1.036,1	100,0	1.224,4	100,0
2. SPACE	N	150,7	49,9	164,7	48,2	181,2	50,1	158,7	46,0	235,5	45,7
	I	151,0	50,1	176,8	51,8	180,4	49,9	185,9	54,0	280,4	54,3
	T	301,7	100,0	341,5	100,0	361,6	100,0	344,6	100,0	515,9	100,0
3. DEFENCE	N	868,7	83,2	801,2	81,3	815,8	81,8	841,0	73,1	862,4	73,5
	I	175,1	16,8	184,8	18,7	194,9	18,2	310,0	26,9	310,7	26,5
	T	1.043,8	100,0	986,0	100,0	1.070,7	100,0	1.151,0	100,0	1.173,1	100,0
4. EARTH AND ITS ATMOSPHERE	N	87,5	98,9	78,5	99,0	89,3	98,9	109,8	99,1	147,9	99,3
	I	1,0	1,1	0,8	1,0	1,0	1,1	1,0	0,9	1,0	0,7
	T	88,5	100,0	79,3	100,0	90,3	100,0	110,8	100,0	148,9	100,0
5. HEALTH	N	98,9	99,4	111,0	99,5	110,6	99,5	158,3	99,7	208,4	99,6
	I	0,6	0,6	0,6	0,5	0,6	0,5	0,5	0,3	0,8	0,4
	T	99,5	100,0	111,6	100,0	111,2	100,0	158,8	100,0	209,2	100,0
6. HUMAN ENVIRONMENT	N	39,5	100,0	42,0	100,0	59,0	100,0	66,5	100,0	76,2	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	39,5	100,0	42,0	100,0	59,0	100,0	66,5	100,0	76,2	100,0
7. AGRICULTURAL PRODUCTIVITY	N	109,0	100,0	108,4	100,0	114,2	100,0	137,3	100,0	162,3	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	109,0	100,0	108,4	100,0	114,2	100,0	137,3	100,0	162,3	100,0
8. INDUSTRIAL PRODUCTIVITY	N	194,4	100,0	193,3	100,0	289,1	100,0	360,8	100,0	528,4	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	194,4	100,0	193,3	100,0	289,1	100,0	360,8	100,0	528,4	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	67,8	100,0	73,7	100,0	117,2	100,0	126,0	100,0	248,7	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	67,8	100,0	73,7	100,0	117,2	100,0	126,0	100,0	248,7	100,0
10. SOCIAL SCIENCES	N	82,9	100,0	88,3	100,0	93,7	100,0	115,7	100,0	137,4	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	82,9	100,0	88,3	100,0	93,7	100,0	115,7	100,0	137,4	100,0
SUB-TOTAL (1-10)	N	2.414,9	81,3	2.350,5	79,7	2.677,4	82,7	2.943,1	81,6	3.707,4	83,8
	I	554,6	18,7	597,1	20,3	560,4	17,3	664,5	18,4	717,2	16,2
	T	2.969,5	100,0	2.947,6	100,0	3.237,8	100,0	3.607,6	100,0	4.424,6	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	324,7	99,8	355,3	99,9	465,2	99,7	533,5	99,7	610,8	99,7
	I	0,7	0,2	0,5	0,1	1,2	0,3	1,4	0,3	1,6	0,3
	T	325,4	100,0	355,8	100,0	466,4	100,0	534,9	100,0	612,4	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	1.585,3	100,0	1.775,6	100,0	1.982,5	100,0	2.359,8	100,0	2.793,5	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	1.585,3	100,0	1.775,6	100,0	1.982,5	100,0	2.359,8	100,0	2.793,5	100,0
NOT ITEMIZED	N	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	0,0	100,0	0,0	100,0	0,0	100,0	0,0	100,0	0,0	100,0
TOTAL	N	4.324,9	88,6	4.481,4	88,2	5.125,1	90,1	5.836,4	89,8	7.111,7	90,8
	I	555,3	11,4	597,6	11,8	561,6	9,9	665,9	10,2	718,8	9,2
	T	4.880,2	100,0	5.079,0	100,0	5.686,7	100,0	6.502,3	100,0	7.830,5	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

BELGIUM

OBJECTIVE		1967		1968		1969		1970		1971	
		MIO BFR	O/O	MIO BFR	O/C	MIO BFR	O/O	MIO BFR	O/O	MIO BFR	O/O
1. NUCLEAR R & D	N	334,1	31,7	681,2	57,3	858,2	66,8	962,6	61,2	1.254,9	71,8
	I	720,2	68,3	507,2	42,7	426,4	33,2	609,1	38,8	492,1	28,2
	T	1.054,3	100,0	1.188,4	100,0	1.284,6	100,C	1.571,7	100,0	1.747,0	100,0
2. SPACE	N	32,5	9,3	46,5	13,7	53,6	15,0	53,5	14,0	102,9	20,5
	I	317,3	90,7	291,7	86,2	303,9	85,0	329,5	86,0	398,1	79,5
	T	349,8	100,0	338,2	100,0	357,5	100,0	382,9	100,0	501,1	100,0
3. DEFENCE	N	52,0	94,6	53,3	94,6	122,5	97,4	135,2	97,5	119,5	97,0
	I	3,0	5,4	3,1	5,5	3,2	2,6	3,5	2,5	3,7	3,0
	T	55,0	100,0	56,4	100,0	125,7	100,0	138,6	100,0	123,3	100,0
4. EARTH AND ITS ATMOSPHERE	N	113,1	94,7	114,2	97,0	123,9	94,9	145,9	96,7	177,3	97,2
	I	6,3	5,3	3,5	3,0	6,6	5,1	4,9	3,3	5,2	2,8
	T	119,4	100,0	117,7	100,0	130,5	100,0	150,9	100,0	182,5	100,0
5. HEALTH	N	149,5	100,0	159,1	100,0	184,7	100,0	213,9	96,8	237,5	96,3
	I	0,0	0,0	0,0	0,0	0,0	0,C	7,0	3,2	9,1	3,7
	T	149,5	100,0	159,1	100,0	184,7	100,C	220,9	100,0	246,6	100,0
6. HUMAN ENVIRONMENT	N	99,5	99,4	75,9	99,2	95,1	99,3	86,0	99,3	129,7	99,5
	I	0,6	0,6	0,6	0,8	0,7	0,7	0,7	0,7	0,7	0,5
	T	100,1	100,0	76,5	100,0	95,8	100,0	86,7	100,0	130,4	100,0
7. AGRICULTURAL PRODUCTIVITY	N	224,9	100,0	293,9	100,0	300,9	100,C	356,2	99,7	385,0	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,C	0,9	0,3	0,0	0,0
	T	224,9	100,0	294,0	100,0	300,9	100,0	357,1	100,0	385,0	100,0
8. INDUSTRIAL PRODUCTIVITY	N	574,4	99,1	479,9	99,2	567,8	99,5	717,7	99,6	875,2	99,6
	I	5,2	0,9	4,0	0,8	2,6	0,5	2,9	0,4	3,9	0,4
	T	579,6	100,0	483,9	100,0	570,4	100,0	720,6	100,0	879,1	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	0,0	0,0	12,0	100,C	4,3	100,C	5,2	100,0	3,0	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	0,0	100,0	12,0	100,0	4,3	100,C	5,2	100,0	3,0	100,0
10. SOCIAL SCIENCES	N	32,7	90,0	34,3	82,2	36,4	85,1	39,3	84,4	48,9	87,4
	I	3,7	10,2	7,5	17,8	6,4	15,0	7,2	15,6	7,1	12,6
	T	36,4	100,0	41,8	100,0	42,8	100,0	46,6	100,0	56,0	100,0
SUB-TOTAL (1-10)	N	1.612,8	60,4	1.950,4	70,5	2.347,4	75,8	2.715,6	73,8	3.334,0	78,4
	I	1.056,4	39,6	817,6	29,5	749,9	24,2	965,7	26,2	920,0	21,6
	T	2.669,1	100,0	2.767,9	100,0	3.097,3	100,0	3.681,3	100,0	4.254,0	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	574,9	99,8	568,9	99,8	703,8	99,8	715,1	99,8	872,4	99,8
	I	1,2	0,2	1,3	0,2	1,3	0,2	1,4	0,2	1,5	0,2
	T	576,1	100,0	570,1	100,0	705,2	100,C	716,6	100,0	873,9	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	1.903,6	100,0	1.949,6	100,0	2.161,6	100,0	2.793,1	100,0	3.129,0	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	1.903,6	100,0	1.949,6	100,0	2.161,6	100,C	2.793,1	100,0	3.129,0	100,0
NOT ITEMIZED	N	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	I	0,0	0,0	0,0	0,0	0,0	0,C	0,0	0,0	0,0	0,0
	T	0,0	100,0	0,0	100,0	0,0	100,C	0,0	100,0	0,0	100,0
TOTAL	N	4.091,3	79,5	4.468,9	84,5	5.212,8	87,4	6.223,9	86,6	7.335,4	88,8
	I	1.057,6	20,5	818,8	15,5	751,2	12,6	967,1	13,4	921,5	11,2
	T	5.148,9	100,0	5.287,7	100,0	5.964,0	100,C	7.191,0	100,0	8.256,9	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

FRANCE

OBJECTIVE		1967		1968		1969		1970		1971	
		MIO FFR	O/O	MIO FFR	O/O	MIO FFR	O/O	MIO FFR	O/O	MIO FFR	O/O
1. NUCLEAR R & D	N	1.318,9	85,6	1.234,9	87,2	1.231,5	88,4	1.222,0	89,2	1.251,4	91,8
	I	222,0	14,4	182,0	12,8	161,0	11,6	147,4	10,8	111,5	8,2
	T	1.540,9	100,0	1.416,9	100,0	1.392,5	100,0	1.369,4	100,0	1.362,9	100,0
2. SPACE	N	347,7	74,4	373,5	75,9	402,4	75,3	469,6	77,7	475,6	74,5
	I	119,8	25,6	118,3	24,1	132,2	24,7	134,5	22,3	162,8	25,5
	T	467,5	100,0	491,8	100,0	534,6	100,0	604,1	100,0	638,4	100,0
3. DEFENCE	N	2.844,0	95,0	2.872,0	95,0	2.565,0	95,0	2.660,0	95,0	2.755,0	95,0
	I	150,0	5,0	151,0	5,0	135,0	5,0	140,0	5,0	145,0	5,0
	T	2.994,0	100,0	3.023,0	100,0	2.700,0	100,0	2.800,0	100,0	2.900,0	100,0
4. EARTH AND ITS ATMOSPHERE	N	102,3	96,5	116,4	97,5	157,5	97,5	175,5	97,8	208,3	98,0
	I	3,7	3,5	3,0	2,5	4,0	2,5	4,0	2,2	4,3	2,0
	T	106,0	100,0	119,4	100,0	161,5	100,0	179,5	100,0	212,6	100,0
5. HEALTH	N	219,3	99,5	243,2	99,6	263,3	99,6	268,9	99,6	314,0	99,7
	I	1,2	0,5	1,0	0,4	1,0	0,4	1,0	0,4	1,0	0,3
	T	220,5	100,0	244,2	100,0	264,3	100,0	269,9	100,0	315,0	100,0
6. HUMAN ENVIRONMENT	N	263,1	90,1	276,6	90,7	322,1	91,0	429,5	93,1	498,8	92,7
	I	29,0	9,9	28,3	9,3	31,8	9,0	32,0	6,9	39,0	7,3
	T	292,1	100,0	304,9	100,0	353,9	100,0	461,5	100,0	537,8	100,0
7. AGRICULTURAL PRODUCTIVITY	N	288,6	87,4	340,9	87,6	340,9	87,4	344,4	87,3	396,6	88,0
	I	41,7	12,6	48,3	12,4	49,1	12,6	50,0	12,7	54,0	12,0
	T	330,3	100,0	389,2	100,0	390,0	100,0	394,4	100,0	450,6	100,0
8. INDUSTRIAL PRODUCTIVITY	N	331,3	36,4	327,6	37,7	380,1	37,6	376,9	41,9	439,6	49,4
	I	580,0	63,6	542,0	62,3	630,0	62,4	522,0	58,1	450,0	50,6
	T	911,3	100,0	869,6	100,0	1.010,1	100,0	898,9	100,0	889,6	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	84,3	100,0	147,0	100,0	221,4	100,0	303,9	100,0	314,0	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	84,3	100,0	147,0	100,0	221,4	100,0	303,9	100,0	314,0	100,0
10. SOCIAL SCIENCES	N	76,6	100,0	113,6	100,0	132,6	100,0	143,3	100,0	165,5	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	76,6	100,0	113,6	100,0	132,6	100,0	143,3	100,0	165,5	100,0
SUB-TOTAL (1-10)	N	5.876,1	83,7	6.045,7	84,9	6.016,8	84,0	6.394,0	86,1	6.818,8	87,6
	I	1.147,4	16,3	1.073,9	15,1	1.144,1	16,0	1.030,9	13,9	967,6	12,4
	T	7.023,5	100,0	7.119,6	100,0	7.160,9	100,0	7.424,9	100,0	7.786,4	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	698,5	99,9	811,8	99,9	1.004,7	99,9	937,8	99,9	1.102,3	99,9
	I	1,0	0,1	1,0	0,1	1,2	0,1	1,4	0,1	1,6	0,1
	T	699,5	100,0	812,8	100,0	1.005,9	100,0	939,2	100,0	1.103,9	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	1.071,0	99,3	1.211,0	99,3	1.191,0	99,2	1.196,3	99,3	1.167,5	99,2
	I	8,0	0,7	9,0	0,7	9,0	0,8	9,0	0,7	9,0	0,8
	T	1.079,0	100,0	1.220,0	100,0	1.200,0	100,0	1.205,3	100,0	1.176,5	100,0
NOT ITEMIZED	N	19,0	55,9	19,6	56,6	18,2	54,8	18,6	60,8	20,2	60,8
	I	15,0	44,1	15,0	43,4	15,0	45,2	12,0	39,2	13,0	39,2
	T	34,0	100,0	34,6	100,0	33,2	100,0	30,6	100,0	33,2	100,0
TOTAL	N	7.664,6	86,7	8.038,1	88,0	8.230,7	87,6	8.546,7	89,0	9.108,8	90,2
	I	1.171,4	13,3	1.098,9	12,0	1.169,3	12,4	1.053,3	11,0	991,2	9,8
	T	8.836,0	100,0	9.187,0	100,0	9.400,0	100,0	9.600,0	100,0	10.100,0	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

ITALY

OBJECTIVE		1967			1968			1969			1970			1971		
		MRD	LIT	O/O	MRD	LIT	O/O	MRD	LIT	O/O	MRD	LIT	O/O	MRD	LIT	O/O
1. NUCLEAR R & D	N	36,1	58,3		33,0	55,4		42,8	68,4		38,1	64,8		43,8	67,6	
	I	25,8	41,7		26,6	44,6		19,8	31,6		20,7	35,2		21,0	32,4	
	T	61,9	100,0		59,7	100,0		62,5	100,0		58,7	100,0		64,8	100,0	
2. SPACE	N	3,3	25,2		1,6	14,9		1,0	9,5		0,9	11,4		11,1	61,5	
	I	9,9	74,8		9,0	85,1		9,4	90,5		6,9	88,6		6,9	38,5	
	T	13,3	100,0		10,6	100,0		10,4	100,0		7,8	100,0		18,0	100,0	
3. DEFENCE	N	9,0	100,0		8,9	100,0		8,6	100,0		11,3	100,0		11,0	100,0	
	I	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	T	9,0	100,0		8,9	100,0		8,6	100,0		11,3	100,0		11,0	100,0	
4. EARTH AND ITS ATMOSPHERE	N	1,3	97,7		3,0	98,7		3,1	98,7		3,9	98,8		4,0	98,8	
	I	0,0	2,3		0,0	1,3		0,0	1,3		0,0	1,2		0,1	1,3	
	T	1,3	100,0		3,0	100,0		3,1	100,0		3,9	100,0		4,0	100,0	
5. HEALTH	N	2,0	76,3		3,3	78,4		4,8	81,4		6,9	81,7		7,4	81,5	
	I	0,6	23,7		0,9	21,6		1,1	18,6		1,5	18,3		1,7	18,5	
	T	2,6	100,0		4,2	100,0		5,9	100,0		8,4	100,0		9,1	100,0	
6. HUMAN ENVIRONMENT	N	3,4	97,9		4,5	98,4		4,2	98,4		7,9	99,1		4,7	98,3	
	I	0,1	2,1		0,1	1,6		0,1	1,6		0,1	0,9		0,1	1,7	
	T	3,5	100,0		4,6	100,0		4,3	100,0		8,0	100,0		4,8	100,0	
7. AGRICULTURAL PRODUCTIVITY	N	2,7	95,9		7,0	98,4		7,5	98,2		9,1	98,5		9,7	98,6	
	I	0,1	4,1		0,1	1,6		0,1	1,8		0,1	1,5		0,1	1,4	
	T	2,8	100,0		7,1	100,0		7,6	100,0		9,3	100,0		9,8	100,0	
8. INDUSTRIAL PRODUCTIVITY	N	2,6	100,0		6,2	100,0		10,3	100,0		48,5	100,0		68,2	100,0	
	I	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	T	2,6	100,0		6,2	100,0		10,3	100,0		48,5	100,0		68,2	100,0	
9. COMPUTER SCIENCE AND AUTOMATION	N	0,5	100,0		1,2	100,0		1,5	100,0		0,7	100,0		1,5	100,0	
	I	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	T	0,5	100,0		1,2	100,0		1,5	100,0		0,7	100,0		1,5	100,0	
10. SOCIAL SCIENCES	N	2,7	83,4		2,3	82,2		2,1	80,6		1,6	75,4		1,9	77,1	
	I	0,5	16,6		0,5	17,8		0,5	19,4		0,5	24,6		0,6	22,9	
	T	3,3	100,0		2,8	100,0		2,6	100,0		2,2	100,0		2,5	100,0	
SUB-TOTAL (1-10)	N	63,6	63,2		71,0	65,6		85,9	73,5		129,0	81,1		163,3	84,3	
	I	37,1	36,8		37,3	34,4		31,0	26,5		30,0	18,9		30,5	15,7	
	T	100,7	100,0		108,3	100,0		116,9	100,0		159,0	100,0		193,7	100,0	
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	22,5	99,2		23,6	99,9		23,7	99,9		30,1	99,9		32,9	99,9	
	I	0,2	0,8		0,0	0,1		0,0	0,1		0,0	0,1		0,0	0,1	
	T	22,7	100,0		23,6	100,0		23,8	100,0		30,1	100,0		32,9	100,0	
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	55,4	100,0		60,0	100,0		67,5	100,0		74,3	100,0		84,3	100,0	
	I	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	T	55,4	100,0		60,0	100,0		67,5	100,0		74,3	100,0		84,3	100,0	
NOT ITEMIZED	N	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	I	0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0		0,0	0,0	
	T	0,0	100,0		0,0	100,0		0,0	100,0		0,0	100,0		0,0	100,0	
TOTAL	N	141,4	79,1		154,6	80,6		177,1	85,1		233,4	88,6		280,5	90,2	
	I	37,3	20,9		37,3	19,4		31,0	14,9		30,0	11,4		30,5	9,8	
	T	178,7	100,0		191,9	100,0		208,2	100,0		263,4	100,0		310,9	100,0	

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

NETHERLANDS

OBJECTIVE		1967		1968		1969		1970		1971	
		MIO FL	O/O	MIO FL	O/O	MIO FL	O/O	MIO FL	O/O	MIO FL	O/O
1. NUCLEAR R & D	N	48,2	59,1	56,2	59,6	67,6	68,1	85,5	73,0	75,8	70,1
	I	33,3	40,9	38,1	40,4	31,7	31,9	31,7	27,0	32,4	29,9
	T	81,4	100,0	94,3	100,0	99,3	100,0	117,2	100,0	108,1	100,0
2. SPACE	N	5,8	25,1	9,5	27,8	13,4	34,7	17,5	53,9	27,7	61,8
	I	17,2	74,9	24,8	72,3	25,2	65,3	14,9	46,1	17,1	38,2
	T	23,0	100,0	34,3	100,0	38,6	100,0	32,4	100,0	44,8	100,0
3. DEFENCE	N	34,2	99,4	45,1	99,4	52,8	99,5	50,2	99,5	53,8	97,5
	I	0,2	0,6	0,3	0,6	0,3	0,5	0,3	0,5	1,4	2,5
	T	34,4	100,0	45,3	100,0	53,0	100,0	50,5	100,0	55,2	100,0
4. EARTH AND ITS ATMOSPHERE	N	14,8	99,1	10,7	98,8	15,7	99,2	18,0	99,3	18,0	99,3
	I	0,1	0,9	0,1	1,2	0,1	0,8	0,1	0,7	0,1	0,7
	T	14,9	100,0	10,8	100,0	15,9	100,0	18,1	100,0	18,1	100,0
5. HEALTH	N	28,0	100,0	31,3	100,0	39,0	100,0	44,7	100,0	51,1	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	28,0	100,0	31,3	100,0	39,0	100,0	44,7	100,0	51,1	100,0
6. HUMAN ENVIRONMENT	N	21,1	100,0	25,4	100,0	30,9	100,0	37,6	100,0	41,5	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	21,1	100,0	25,4	100,0	30,9	100,0	37,6	100,0	41,5	100,0
7. AGRICULTURAL PRODUCTIVITY	N	76,7	100,0	83,0	100,0	92,6	100,0	105,7	100,0	115,7	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	76,7	100,0	83,0	100,0	92,6	100,0	105,7	100,0	115,7	100,0
8. INDUSTRIAL PRODUCTIVITY	N	60,3	100,0	74,1	100,0	64,5	100,0	66,7	100,0	92,2	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	60,3	100,0	74,1	100,0	64,5	100,0	66,7	100,0	92,2	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	0,1	100,0	0,1	100,0	4,1	100,0	5,9	100,0	6,7	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	0,1	100,0	0,1	100,0	4,1	100,0	5,9	100,0	6,7	100,0
10. SOCIAL SCIENCES	N	27,3	99,8	28,7	99,8	34,9	99,9	43,2	99,9	56,6	99,9
	I	0,1	0,2	0,1	0,2	0,0	0,1	0,1	0,1	0,1	0,1
	T	27,3	100,0	28,8	100,0	34,9	100,0	43,3	100,0	56,6	100,0
SUB-TOTAL (1-10)	N	316,3	86,1	364,2	85,2	415,6	87,9	475,0	91,0	539,1	91,4
	I	50,9	13,9	63,3	14,8	57,3	12,1	47,0	9,0	51,0	8,6
	T	367,2	100,0	427,5	100,0	472,9	100,0	522,0	100,0	590,1	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	35,8	96,9	40,9	97,4	47,0	97,1	51,2	96,9	60,8	97,1
	I	1,2	3,1	1,1	2,6	1,4	2,9	1,6	3,1	1,8	2,9
	T	36,9	100,0	42,0	100,0	48,4	100,0	52,9	100,0	62,6	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	351,1	100,0	411,6	100,0	454,5	100,0	533,4	100,0	604,2	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	351,1	100,0	411,6	100,0	454,5	100,0	533,4	100,0	604,2	100,0
NOT ITEMIZED	N	0,0	0,0	0,0	0,0	0,0	0,0	5,2	100,0	7,5	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	0,0	100,0	0,0	100,0	0,0	100,0	5,2	100,0	7,5	100,0
TOTAL	N	703,2	93,1	816,7	92,7	917,1	94,0	1.064,9	95,6	1.211,6	95,8
	I	52,0	6,9	64,4	7,3	58,7	6,0	48,7	4,4	52,8	4,2
	T	755,2	100,0	881,1	100,0	975,8	100,0	1.113,5	100,0	1.264,4	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects
d) Breakdown within the Objective

COMMUNITY

OBJECTIVE		1967	0/0	1968	0/0	1969	0/0	1970	0/0	1971	0/0
1. NUCLEAR R & D	N	523,8	75,9	504,5	76,1	531,8	80,8	561,2	81,6	642,0	85,8
	I	166,5	24,1	158,7	23,9	126,6	19,2	126,2	18,4	106,4	14,2
	T	690,3	100,0	663,2	100,0	658,4	100,0	687,4	100,0	748,4	100,0
2. SPACE	N	115,7	56,5	122,9	56,3	130,1	56,7	135,2	58,3	177,4	57,8
	I	89,0	43,5	95,2	43,7	99,4	43,3	96,8	41,7	129,7	42,2
	T	204,7	100,0	218,2	100,0	229,5	100,0	232,1	100,0	307,2	100,0
3. DEFENCE	N	818,0	91,7	809,8	91,3	748,5	90,8	743,3	87,1	766,5	87,3
	I	74,3	8,3	76,9	8,7	75,7	9,2	110,0	12,9	111,4	12,7
	T	892,3	100,0	886,8	100,0	824,2	100,0	853,4	100,0	878,0	100,0
4. EARTH AND ITS ATMOSPHERE	N	50,9	97,7	53,2	98,2	64,8	98,1	75,7	98,4	92,7	98,7
	I	1,2	2,3	1,0	1,8	1,3	1,9	1,2	1,6	1,3	1,3
	T	52,2	100,0	54,2	100,0	66,1	100,0	76,9	100,0	94,0	100,0
5. HEALTH	N	83,1	98,4	94,1	98,1	101,1	98,0	119,3	97,6	144,3	97,8
	I	1,4	1,6	1,8	1,9	2,1	2,0	2,9	2,4	3,3	2,2
	T	84,5	100,0	95,9	100,0	103,2	100,0	122,3	100,0	147,5	100,0
6. HUMAN ENVIRONMENT	N	76,4	92,7	82,3	93,4	94,4	93,8	120,3	95,3	132,2	94,9
	I	6,0	7,3	5,9	6,6	6,3	6,2	5,9	4,7	7,2	5,1
	T	82,5	100,0	88,2	100,0	100,6	100,0	126,2	100,0	139,4	100,0
7. AGRICULTURAL PRODUCTIVITY	N	115,7	93,1	136,2	93,2	138,4	93,4	150,5	94,2	170,9	94,5
	I	8,6	6,9	10,0	6,8	9,7	6,6	9,2	5,8	9,9	5,5
	T	124,3	100,0	146,2	100,0	148,1	100,0	159,7	100,0	180,8	100,0
8. INDUSTRIAL PRODUCTIVITY	N	148,0	55,7	154,6	58,5	192,5	61,3	276,9	74,6	375,6	82,2
	I	117,6	44,3	109,9	41,5	121,7	38,7	94,0	25,4	81,1	17,8
	T	265,6	100,0	264,5	100,0	314,2	100,0	370,9	100,0	456,7	100,0
9. COMPUTER SCIENCE AND AUTOMATION	N	34,8	100,0	50,4	100,0	76,2	100,0	92,0	100,0	128,8	100,0
	I	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	T	34,8	100,0	50,4	100,0	76,2	100,0	92,0	100,0	128,8	100,0
10. SOCIAL SCIENCES	N	48,8	98,1	57,4	98,3	63,1	98,5	72,8	98,6	87,0	98,8
	I	1,0	1,9	1,0	1,7	0,9	1,5	1,0	1,4	1,1	1,2
	T	49,7	100,0	58,4	100,0	64,1	100,0	73,8	100,0	88,1	100,0
SUB-TOTAL (1-10)	N	2.015,3	81,2	2.065,4	81,8	2.140,8	82,8	2.347,3	84,0	2.717,5	85,8
	I	465,6	18,8	460,3	18,2	443,7	17,2	447,4	16,0	451,4	14,2
	T	2.480,9	100,0	2.525,7	100,0	2.584,5	100,0	2.794,7	100,0	3.168,9	100,0
11. GENERAL PROMOTION OF KNOWLEDGE (EXCLUDING HIGHER EDUCATION)	N	280,0	99,6	313,7	99,8	377,1	99,7	391,2	99,7	452,2	99,7
	I	1,0	0,4	0,7	0,2	1,0	0,3	1,2	0,3	1,3	0,3
	T	281,0	100,0	314,4	100,0	378,1	100,0	392,4	100,0	453,5	100,0
12. GENERAL PROMOTION OF KNOWLEDGE (HIGHER EDUCATION)	N	836,9	99,8	937,8	99,8	1.010,1	99,8	1.182,3	99,9	1.337,8	99,9
	I	1,6	0,2	1,8	0,2	1,7	0,2	1,6	0,1	1,6	0,1
	T	838,6	100,0	939,7	100,0	1.011,8	100,0	1.183,9	100,0	1.339,4	100,0
NOT ITEMIZED	N	3,8	55,9	4,0	56,6	3,5	54,8	4,8	68,9	5,7	70,9
	I	3,0	44,1	3,0	43,4	2,9	45,2	2,2	31,1	2,3	29,1
	T	6,9	100,0	7,0	100,0	6,4	100,0	7,0	100,0	8,0	100,0
TOTAL	N	3.136,1	86,9	3.321,0	87,7	3.531,5	88,7	3.925,6	89,7	4.513,2	90,8
	I	471,3	13,1	465,8	12,3	449,3	11,3	452,4	10,3	456,6	9,2
	T	3.607,3	100,0	3.786,7	100,0	3.980,8	100,0	4.377,9	100,0	4.969,8	100,0

ANNEX IV

National projects and contributions to multilateral and bilateral projects

a) Summary tables

1. In 1000 u.a. and in % in the Community

YEAR	GERMANY	%	BELGIUM	%	FRANCE	%	ITALY	%	NETHERLANDS	%	COMMUNITY	%
1967 N	1.081.224	34,5	81.828	2,6	1.552.463	49,5	226.303	7,2	194.250	6,2	3.136.068	100,0
I	138.825	29,5	21.151	4,5	237.265	50,3	59.637	12,7	14.375	3,1	471.253	100,0
T	1.220.049	33,8	102.980	2,9	1.789.730	49,6	285.940	7,9	208.625	5,8	3.607.324	100,0
1968 N	1.120.345	33,7	89.378	2,7	1.638.243	49,3	247.382	7,4	225.605	6,8	3.320.953	100,0
I	149.400	32,1	16.378	3,5	222.583	47,8	59.655	12,8	17.785	3,8	465.801	100,0
T	1.269.745	33,5	105.754	2,8	1.860.824	49,1	307.036	8,1	243.390	6,4	3.786.749	100,0
1969 N	1.301.284	36,8	104.257	3,0	1.589.295	45,0	283.369	8,0	253.381	7,2	3.531.536	100,0
I	142.592	31,7	15.025	3,3	225.784	50,3	49.674	11,1	16.216	3,6	449.291	100,0
T	1.443.875	36,3	119.280	3,0	1.815.080	45,6	333.044	8,4	269.548	6,8	3.980.827	100,0
1970 N	1.594.655	40,6	124.476	3,2	1.538.785	39,2	373.493	9,5	294.162	7,5	3.925.571	100,0
I	181.940	40,2	19.343	4,3	189.640	41,9	47.993	10,6	13.442	3,0	452.358	100,0
T	1.776.595	40,6	143.819	3,3	1.728.424	39,5	421.488	9,6	307.604	7,0	4.377.930	100,0
1971 N	1.943.092	43,1	146.710	3,3	1.639.987	36,3	448.737	9,9	334.687	7,4	4.513.213	100,0
I	196.394	43,0	18.431	4,0	178.459	39,1	48.761	10,7	14.590	3,2	456.635	100,0
T	2.139.483	43,0	165.137	3,3	1.818.445	36,6	497.498	10,0	349.280	7,0	4.969.843	100,0

2. In national currencies and in % of total expenditures

YEAR	GERMANY		BELGIUM		FRANCE		ITALY		NETHERLANDS		COMMUNITY	
	MIO DM	%	MIO BFR	%	MIO FFR	%	MRD LIT	%	MIO FL	%		%
1967 NAT	4.324,9	88,6	4.091,3	79,5	7.664,6	86,7	141,4	79,1	703,2	93,1	3.136,1	86,9
INT	559,3	11,4	1.057,6	20,5	1.171,4	13,3	37,3	20,9	52,0	6,9	471,3	13,1
TOT	4.880,2	100,0	5.148,9	100,0	8.836,0	100,0	178,7	100,0	755,2	100,0	3.607,3	100,0
1968 N	4.481,4	88,2	4.468,9	84,5	8.088,1	88,0	154,6	80,6	816,7	92,7	3.321,0	87,7
I	597,6	11,8	818,8	15,5	1.098,9	12,0	37,3	19,4	64,4	7,3	465,8	12,3
T	5.079,0	100,0	5.287,7	100,0	9.187,0	100,0	191,9	100,0	881,1	100,0	3.786,7	100,0
1969 N	5.125,1	90,1	5.212,8	87,4	8.230,7	87,6	177,1	85,1	917,1	94,0	3.531,5	88,7
I	561,6	9,9	751,2	12,6	1.169,3	12,4	31,0	14,9	58,7	6,0	449,3	11,3
T	5.686,7	100,0	5.964,0	100,0	9.400,0	100,0	208,2	100,0	975,8	100,0	3.980,8	100,0
1970 N	5.836,4	89,8	6.223,9	86,6	8.546,7	89,0	233,4	88,6	1.064,9	95,6	3.925,6	89,7
I	668,9	10,2	967,1	13,4	1.053,3	11,0	30,0	11,4	48,7	4,4	452,4	10,3
T	6.502,3	100,0	7.191,0	100,0	9.600,0	100,0	263,4	100,0	1.113,5	100,0	4.377,9	100,0
1971 N	7.111,7	90,8	7.335,4	88,8	9.108,8	90,2	280,5	90,2	1.211,6	95,8	4.513,2	90,8
I	718,8	9,2	921,5	11,2	991,2	9,8	30,5	9,8	52,8	4,2	456,6	9,2
T	7.830,5	100,0	8.256,9	100,0	10.100,0	100,0	310,9	100,0	1.264,4	100,0	4.969,8	100,0

3. Rate of variation (on the basis of the data expressed in national currencies)

PERIOD	EXPENDITURE	GERMANY	BELGIUM	FRANCE	ITALY	NETHERLANDS	COMMUNITY
1968/1967	NAT	+ 3,6	+ 9,2	+ 5,5	+ 9,3	+ 16,1	+ 5,9
	INT	+ 7,6	- 22,5	- 6,1	+ 0,0	+ 23,7	- 1,1
	TOT	+ 4,0	+ 2,6	+ 3,9	+ 7,3	+ 16,6	+ 4,9
1969/1968	NAT	+ 14,3	+ 16,6	+ 1,7	+ 14,5	+ 12,2	+ 8,0
	INT	- 6,0	- 8,2	+ 6,4	- 16,7	- 8,8	- 1,6
	TOT	+ 11,9	+ 12,7	+ 2,3	+ 8,4	+ 10,7	+ 6,8
1970/1969	NAT	+ 13,8	+ 19,3	+ 3,8	+ 31,8	+ 16,1	+ 11,1
	INT	+ 18,5	+ 28,7	- 9,9	- 3,3	- 17,1	+ 0,9
	TOT	+ 14,3	+ 20,5	+ 2,1	+ 26,5	+ 14,1	+ 9,9
1971/1970	NAT	+ 21,8	+ 17,8	+ 6,5	+ 20,1	+ 13,7	+ 14,9
	INT	+ 7,9	- 4,7	- 5,8	+ 1,6	+ 8,5	+ 1,0
	TOT	+ 20,4	+ 14,8	+ 5,2	+ 18,0	+ 13,5	+ 13,5
1971/1967	NAT	+ 64,4	+ 79,2	+ 18,8	+ 98,2	+ 72,2	+ 45,1
	INT	+ 29,4	- 12,8	- 15,3	- 18,2	+ 1,4	- 1,9
	TOT	+ 60,4	+ 60,3	+ 14,3	+ 73,9	+ 67,4	+ 39,0

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