EUROPEAN
COAL AND STEEL COMMUNITY

COMMISSION

Investment in the Community Coalmining and Iron and Steel Industries

First Part
Iron and Steel Industry

REPORT ON THE 1970 SURVEY
Position as at January 1, 1970

JULY 1970

CONTENTS

ANNEXES

I—GENERAL REMARKS

It is the annual practice of the Commission of the European Communities to conduct a survey of past and future investment by ECSC enterprises as at January 1 of the year concerned, and its effects on production potential. The annual survey covers all but a few very small enterprises, whose combined share of total production has in any case never amounted to more than 1% for crude steel and about 2,2% for rolled products.

The figures from the previous surveys for the years 1954-1964 are recapitulated in a Summary Report issued in August 1966 entitled "Investment in the Community Coalmining and Iron and Steel Industries: Recapitulative Report on the 1956-1965 Surveys". The statistical annexes to the present publication therefore show only the figures from 1965 onwards.

The report on the 1970 survey is of a partial nature covering only the iron and steel industry and giving the position as at January 1, 1970. It contains chapters on the iron-ore mines, coking plants and the steel industry proper. The data referring to the collieries and pithead power stations will be published at a later date owing to changes in recent months in the colliery structure of Federal Germany. The graphs in Figs. 1 and 2 containing as usual figures for the coal industry, do not add anything to the data contained in the previous report.

Annex I to the Report sets forth the basic definitions adopted. In particular, it specifies that investment projects have been classified in three categories, according as they were on January 1 (1970 in this case) of that year already completed or in progress (Category A), approved (Category B), or merely planned (Category C). Since, in the case of the iron and steel industry projects, merely "planned" can as a rule be quite easily dropped or deferred if necessary, Category C is not covered in this report for the steel industry proper. On the other hand, having regard to the different nature of the investments in the other sectors dealt with, Category C is included for both coking plants and iron-ore mines.

Annex II in the report gives a breakdown according to regions of past and future **investments** and trends in **production potential.**

a) Capital expenditure

Capital expenditure entered by Community enterprises from January 1, 1954 onwards is recorded for the purposes of the annual surveys in European Monetary Agreement (EMA) units of account,

the unit of account being to date equal in value to the United States dollar (see Annex I,1). It is true that computation in dollars does not reflect changes over a period in the cost of capital goods and in the wage costs involved by their installation; nevertheless, some general observations hold good.

Since the first annual investment survey, actual annual expenditure in the iron and steel industry and iron ore mines has been, on average, some 891 million dollar units of account. At 1,037 million, the 1969 investment figure is appreciably above this average.

Capital expenditure in the **iron-ore mines** was 20m. dollars in 1969 and was estimated at 23m. for 1970. It was thus approximately at the same level as for 1963 and the years immediately following, but considerably below that for the beginning of the sixties.

Capital expenditure in the **iron and steel industry** went up almost steadily from 1954 to 1963 during which period the total annual expenditure showed a threefold increase from 453m. to 1,480m. On the other hand, from 1963 to 1967 capital expenditure gradually felt back to 730m., or a 50% reduction in four years. The 1968 survey already forecast a distinct recovery in capital spending which was estimated at 1,017m. in 1969. This level will also be substantially exceeded in 1970 and, in view of the incomplete nature of statements submitted by enterprises for the subsequent two years, no doubt even more, as from 1971; estimated in dollar units of account, the nominal investment expenditure would already appear to exceed 1,600m. in 1970, viz. the maximum level recorded to date. To explain these figures, Annexe I,1d gives a price index for capital goods from 1960 to 1968.

TABLE 1

Capital Expenditure in the Community iron ore mines and iron and steel industry 1954—1971

'000,000 dollars (EMA units of account)

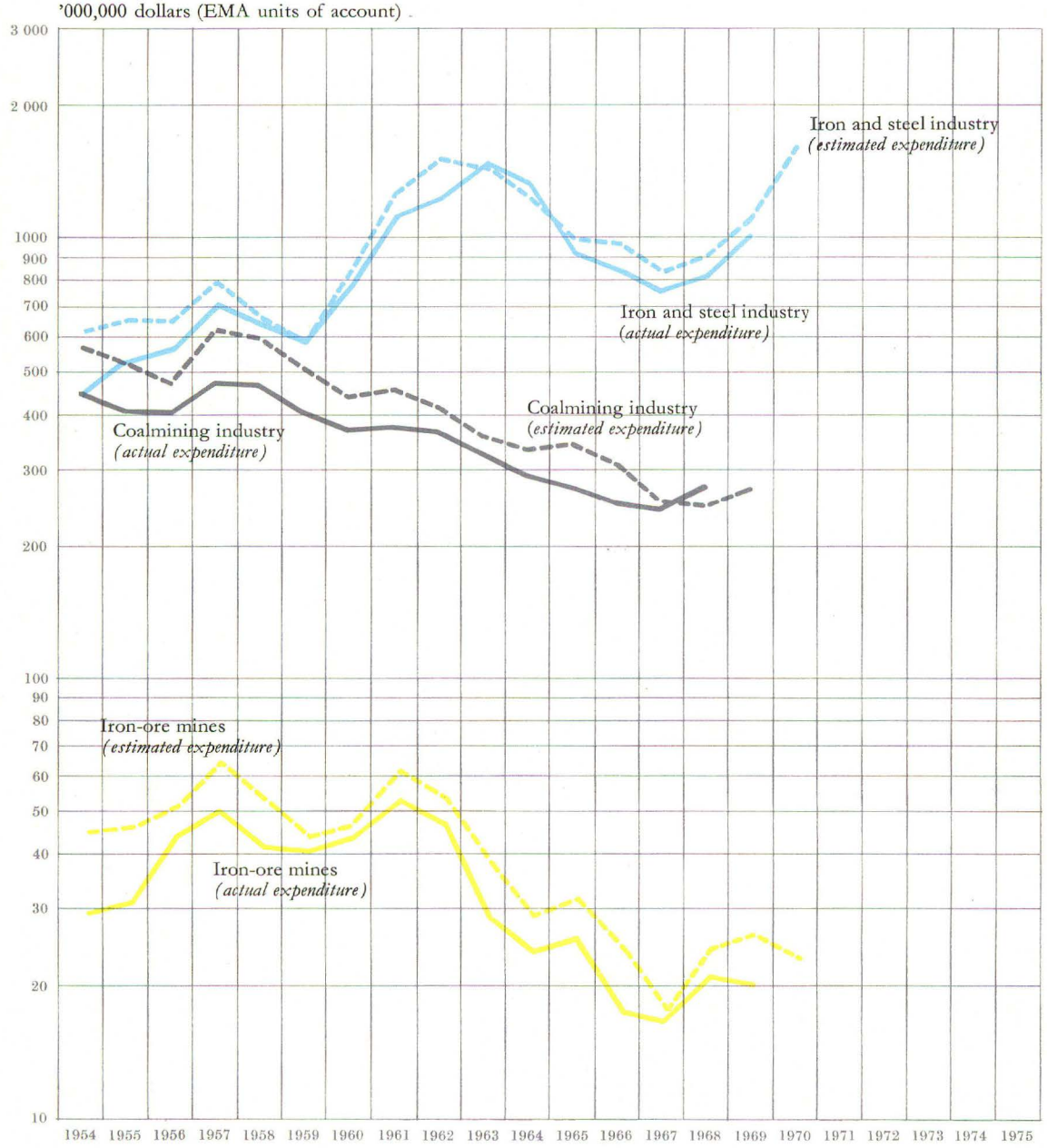
Sector	Actual expenditure											Estimated expenditure (1)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 (2)
Iron-ore mines	39	43	52	47	28	24	25	17	16	21	20	23	16
Iron and steel industry	581	775	1,123	1,230	1,480	1,315	932	848	730	802	1,017	1,623	1,320
Total	**620**	**818**	**1,175**	**1,277**	**1,508**	**1,339**	**957**	**865**	**746**	**823**	**1,037**	**1,646**	**1,336**

(1) The estimates for the iron and steel industry relate only to expenditure on projects already in progress (A) or approved (B) at January 1, 1970, not to those merely contemplated (C). For the iron ore mines, however, Category C projects are covered.

(2) On January 1, 1970 the enterprises were still unable to give a complete estimate of their actual expenditure in 1971. Accordingly, the estimates shown in all tables of this Report are less accurate for 1971 than for 1970.

FIGURE 1

Comparison of Actual Capital Expenditure and Estimated Capital Expenditure as at the Beginning of Each Year



The figures for the years 1968 and 1969 do not altogether tally with those given in last year's Report, inasmuch as it is normally the case that

(a) for 1968 the expenditure figures returned before the balance-sheets were closed are corrected when the next survey is drawn up;

(b) for the past year (1969) actual expenditure differs to varying extents from the estimates submitted on January 1; the 1969 survey had suggested that capital expenditure in that year would total 26m. dollars for the iron-ore mines and 1,099m. for the iron and steel industry, but the figures were only 20m. and 1,017m. respectively. The estimates therefore proved to be 77% correct for iron-ore and 92% correct for steel (see Fig. 1). This rate was affected by social unrest in Italy. It reached, and even exceeded 100% in the 5 other countries of the Community.

TABLE 2

General Trend in Investment in Recent Years

Indices

Sector	Projects effected											Projects planned for 1970
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
Iron-ore mines	100	110	133	121	72	62	64	44	41	54	51	59
Iron and steel industry	100	133	193	212	255	226	160	146	126	138	175	279
Total	**100**	**132**	**189**	**206**	**243**	**216**	**154**	**139**	**120**	**133**	**167**	**265**

b) Production potential

Iron-ore production potential, which had shown a marked reduction since 1962, appears to have levelled off at 80m. tons since 1968. This stabilization seems largely due to productivity investment applied in Lorraine.

The Community **iron and steel industry,** encouraged by the improved economic situation, continues its rapid rate of development. After an expansion of 22.1m. tons between 1961 and 1965 and 18.9m. tons between 1965 and 1969, the increase of production potential of crude steel will probably reach 25.9m. tons for the whole of the four succeeding years and total 146.8m. tons in 1973.

TABLE 3

Actual Production and Production Potential in the Community Iron Ore Mines and Steel Industry

Product	Actual Production			Production potential				
	1952 ('000,000 metric tons)	Average cumulative annual movement (%)	1969 ('000,000 metric tons)	1965 ('000,000 metric tons)	Average cumulative annual movement (%)	1969 ('000,000 metric tons)	Average cumulative annual movement (%)	1973 ('000.000 metric tons)
Iron ore	65.3	+0.5	71.0	90.5	—2.9	80.2	—0,2	79,5
Pig-iron	34.7	+5.0	79.3	75.4	+4.0	88.4	+5,3	108,9
Crude steel	41.8	+5.7	107.3	102.0	+4.3	120.9	+5,0	146,8

In 1969, the utilization rate of production potential rose in relation to 1968, thus reaching levels in all the main sectors of production which, with the sole exception of 1964, had not been reported since 1961.

In fact, the utilization rate in the Community has hitherto never been 100%. Indeed, in order to interpret the production potential declared by the individual plants is bound to be slightly above the maximum production actually achievable in the Community by reason of unforeseeable incidents or circumstances, which in the course of any one year may make it impossible for some of them to attain their maximum even when their sales position is satisfactory.

Thus, even during the best years (for example 1960), actual production has never been in excess of around 96%, of the sum of individual production potentials declared. It would even appear, quite apart from the economic situation in general, that this maximum rate is in decline and attain hardly 92% or 94%. This trend may be attributed in particular to the following reasons:

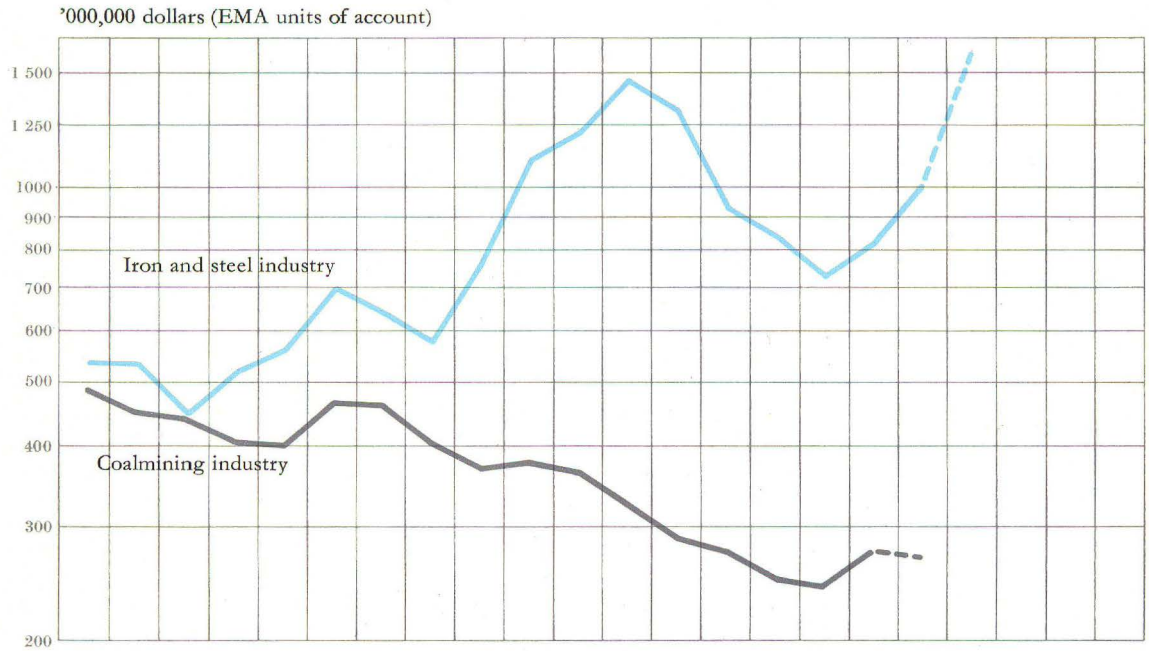
a. the increase in average size of plants, for the closure of any one plant, for whatever reasons, has more serious effects on the level of production than in the past;

b. miscellaneous reasons, especially those of a social or a regional nature, may cause a number of firms to maintain obsolete capacity which can in fact only be fully utilized during boom conditions and for limited periods.

FIGURE 2

Investment in the Coalmining and Iron and Steel Industries

A—Capital expenditure



B—Actual production and production potential

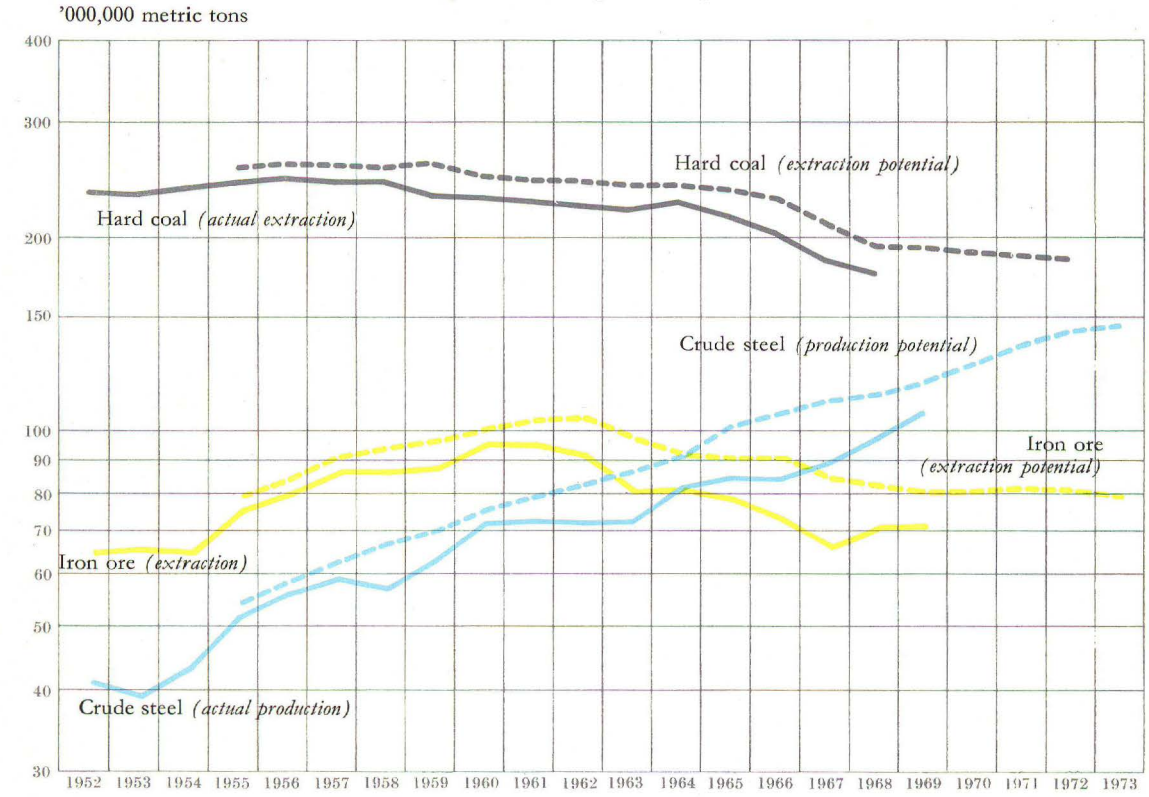
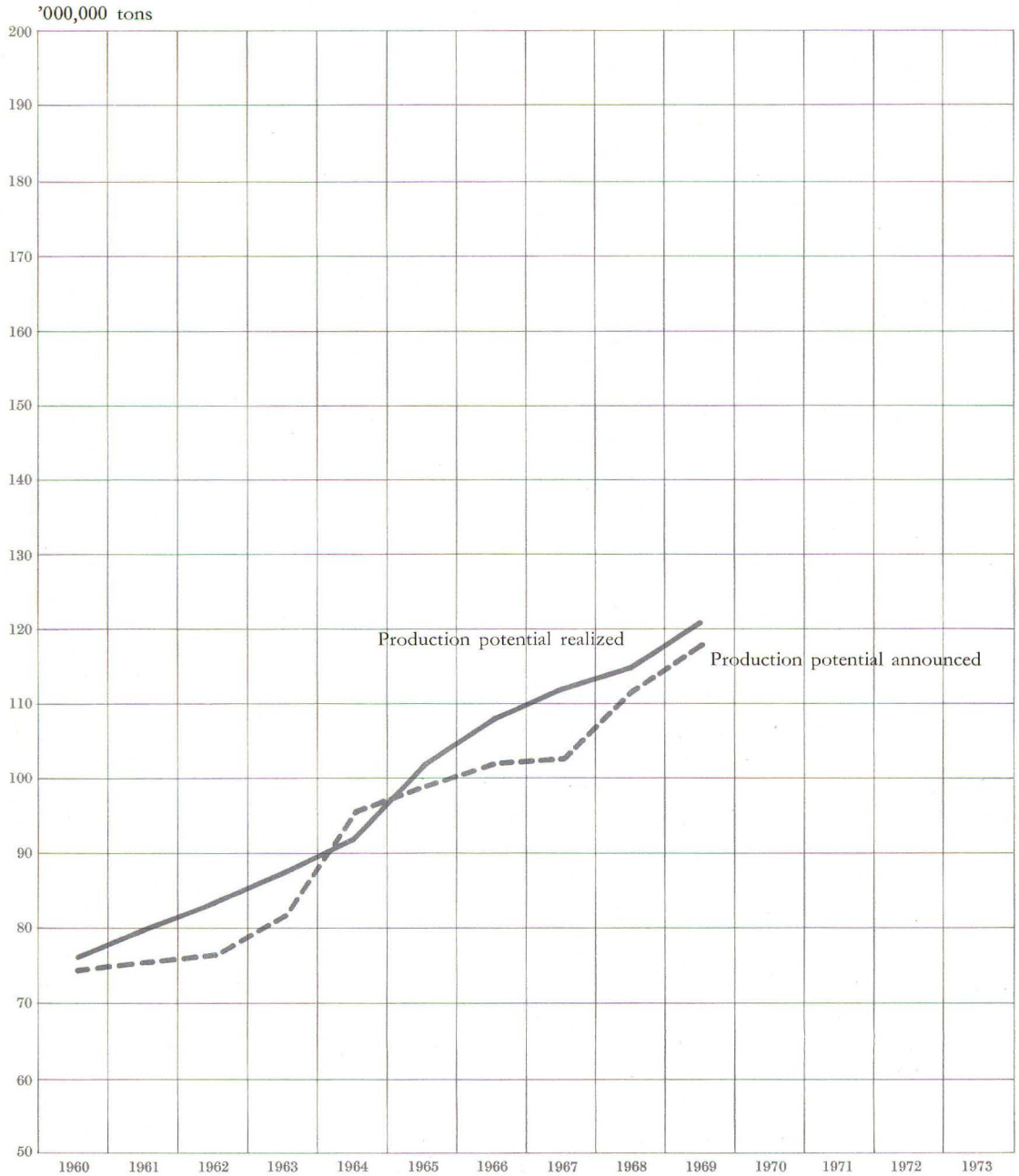


FIGURE 3

Community Crude Steel Production Potential Announced (1) and Realized



(1) i. e. production potential announced by the enterprises four years in advance in connection with the annual surveys.

TABLE 4

Community Ratios of Actual Production to Production Potential

%

Product	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Coke	93,2	96.5	96.1	92.2	84.3	85.7	85.3	85.0	84.2	90.2	92.7	88.9	87.1	92.0	96.7
Iron-ore ...	95.4	95.1	94.9	91.3	90.9	94.6	91.7	87.6	81.9	88.3	87.0	80.7	78.2	86.9	88.5
Pig-iron ...	96.3	96.0	94.7	87.9	88.3	94.3	90.9	85.5	81.0	88.2	83.8	77.0	79.2	84.8	89.7
Crude steel .	95.8	96.1	94.1	85.7	89.6	95.6	91.7	87.3	83.4	90.0	84.3	78.7	80.0	85.9 (1)	88.8 (1)

(1) These two figures were influenced by industrial unrest in France in 1968 and in Italy in 1969. Leaving aside France for 1968 and Italy for 1969, these rates would have been 86.2% and 90.4% respectively.

In the past, production potential actually recorded has generally exceeded that originally declared four years in advance by firms responding to annual surveys on capital investment.

This may be attributed to various reasons;

1. firms often tend not do declare projects for fairly rapid completion in cases where they do not seem to be immediately required. In these circumstances the declared rates of growth have in the long term frequently proved to be lower than those recorded subsequently;

2. firms have often succeeded in increasing the production potential of some of their plants beyond the levels forecast. In the absence of major new investments, it has been possible to ascribe such developments to a better knowlegde of production equipment, improvements in operating techniques, specialization of production programmes between works or between firms etc.

Figure 3 gives an illustration of these observations.

II—THE IRON-ORE MINES

Capital spending in the Community **iron-ore industry** fell steadily between 1962 and 1967, and has since maintained a level at around 20m. dollars. According to producers' forecasts, expenditure will probably go up slightly in 1970. Only in Lorraine is further expenditure being planned on a considerable scale.

TABLE 5

Capital Expenditure in the Iron-Ore Industry, 1954—1971

'000,000 dollars (EMA units of account

Type of installation	Actual expenditure											Estimated expenditure (Categories A+B+C)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Mining of ore	21.3	26.1	30.8	26.1	19.6	18.2	17.8	12.4	11.8	13.2	15.2	13.4	9.8
Preparation of ore at mine	8.9	7.5	9.6	8.1	3.9	2.3	2.1	2.2	1.6	4.5	1.5	2.4	1.0
Various surface installations	9.0	9.6	12.0	12.4	4.7	3.4	5.7	2.7	2.6	3.0	3.5	7.5	4.7
Total	**39.2**	**43.2**	**52.4**	**46.6**	**28.2**	**23.9**	**25.6**	**17.3**	**16.0**	**20.7**	**20.2**	**23.3**	**15.5**

From 1952 to 1960 Community production of crude ore rose progressively from 65.3m. to 95.9m. tons.

From 1960 to 1967, as a result from competition from overseas ores, the Community's production went down by 30m. tons. In 1968, extraction rose by 5m. tons. In 1969, it remained at the level attained in the preceding year.

Lorraine producers' combined share of Community potential gradually rose from 65% in 1960 to 76% in 1969, closures in other ore producing areas also taken into account.

Community potential reached its peak in 1962 with 105.5m. tons. Over the next seven years it fell by 25.3m. per year, in all: 2.4m. in Lorraine, 6.1m. in Lower Saxony, 1.0m. in Luxembourg and 15.8m. in the various minor orefields. The extraction potential should show a tendency towards stabilisation in most of the orefields, at least for the next few years.

TABLE 6

Movement of Crude-Ore Extraction Potential

'000,000 metric tons

Actual extraction		Extraction potential					
1952	1969	1965	1969	1970	1971	1972	1973
65.3	71.0	90.5	80.2	80.4	81.6	80.7	79.5

III—COKING PLANTS

Investments in coking plants recorded at the beginning of 1970 continue to show a modest upswing in the mine-owned and independent coke plants but a rapid expansion in the steelworks coking plants.

In the mine-owned coking plants, with regard to the past two years and the forecasts for the next few years, expenditure is not precisely known owing to the reorganisation in progress in the German collieries.

In the steelworks coking plants, on the other hand, expenditure, which has been in decline since 1963, shows an upswing whereby it will increase from less than 14m. dollars in 1968 to nearly 61m. dollars in 1970.

An important proportion of the expenditure declared concerns the Community's seaboard areas

TABLE 7

Capital Expenditure on Mine-Owned, Independent and Steelworks-Owned Coking Plants, 1954—1968

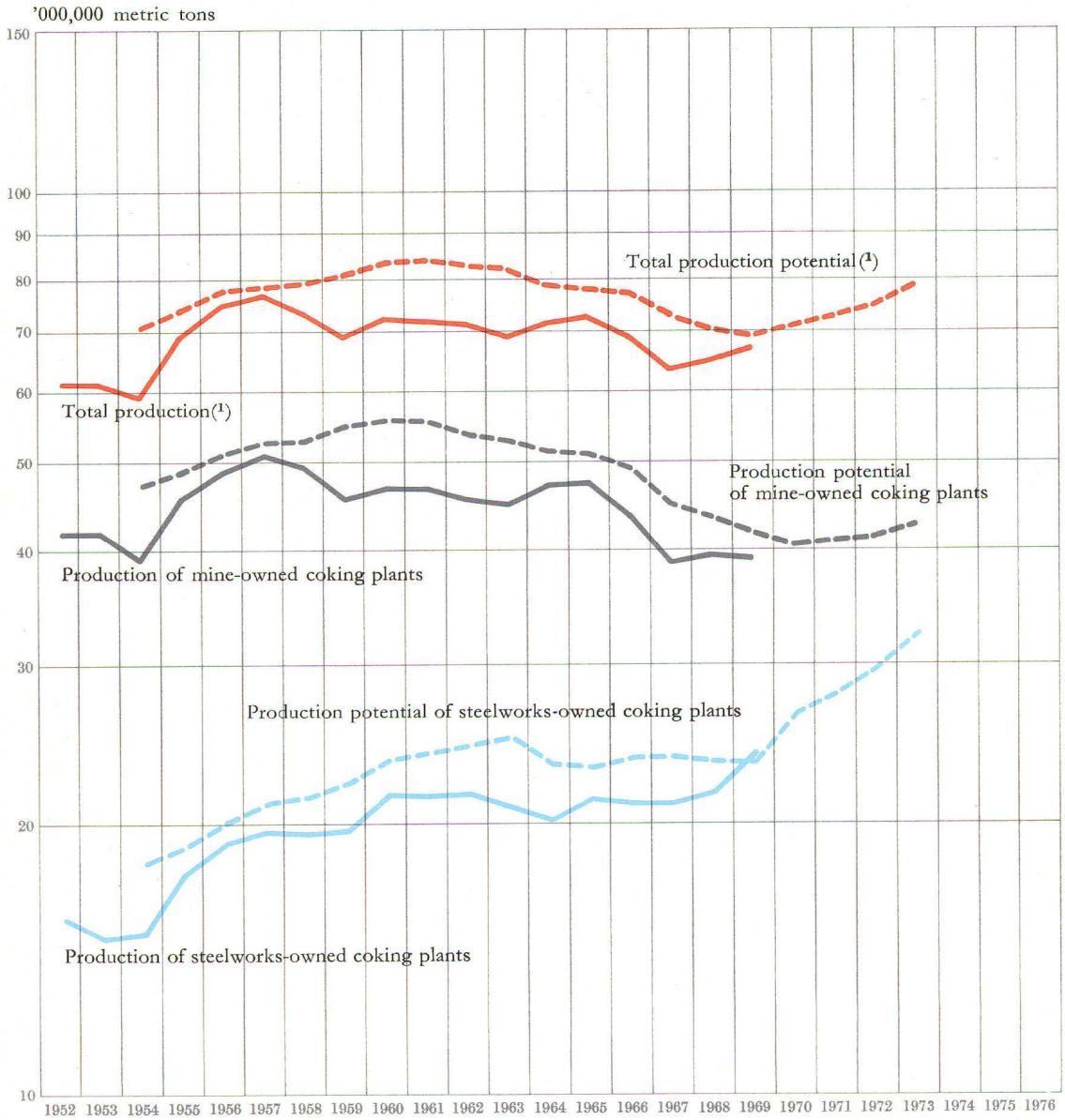
'000,000 dollars (EMA units of account)

Coking plants	Actual expenditure											Estimated expenditure			
	1954–1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970		1971	
												Categ. A+B	Categ. A+B+C	Categ. A+B	Categ. A+B+C
Mine-owned	57.5	33.7	43.1	35.9½	19.0	17.3	15.8	13.2	10.2	.	.	.	.	.	.
Indepedent	10.8	1.6	1.4	5.1	3.5	5.9	5.1	5.2	3.8	4.6	3.4	3.1	3.1	0.8	0.8
Steelworks .	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	13.7	30.6	60.8	63.7	69.9	89.8
Total	91.2	46.8	62.8	66.0	56.3	52.9	38.1	28.8	25.5	.	.	.	.	.	.

Under the pressure of demand, which was reflected in 1969 in the exceptionally high utilization rate of 96.7%, the declining trend in overall production potential observed since 1960 began to be reversed. The firms' forecasts show a total of 78.8m. tons for 1973, as compared with 69.2m. for 1969.

FIGURE 4

Production and Production Potential of Coking Plants



(1) Mine-owned, steelworks-owned and independent coking plants.

The movement forecast for the period from 1969 to 1973 varies according to sector: the average cumulative rate of growth is 3.2% per year overall, whereas in the mine-owned coking plants it is +0.5%, —1.3% in the independent coking plants and +8.4% in the steelworks coking plants.

According to provisional information submitted by the collieries, production potential from the mine-owned coking plants should increase slightly starting in 1970; the increase forecast in the Ruhr is expected to do no more than offset the reductions expected in most of the other areas. At around 43m. tons in 1973, production potential here will nevertheless, according to this provisional information, remain more than 20% below the 1960 level.

In the independent coking plants, production potential has fluctuated somewhat since 1968, owing to the transfer of several coking plants to steel companies. According to information available at January 1, 1970 it will remain below 3.5m. tons per year.

Production potential in the steelworks coking plants, which has remained since 1964 at about 23m. tons per year, should increase by more than 9m. tons or 40%, between now and 1973. Two thirds of additional capacity installed would be located on the Community seaboard.

TABLE 8

Movement of Coke Production Potential

'000.000 metric tons

Category	Actual production		Production potential					
	1952	1969	1965	1969	1970	1971	1972	1973
Mine-owned plants	42.2	39.4	51.4	42.0	40.7	41.2	41.5	42.8
Independent plants	3.2	3.4	3.8	3.7	3.5	3.5	3.5	3.5
Steelworks-owned plants(1) .	15.8	24.1	23.1	23.5	26.6	27.9	29.8	32.5
Total	**61.2**	**66.9**	**78.3**	**69.2**	**70.8**	**72.6**	**74.8**	**78.8**

(1) Cf. Table 12 of the chapter on the steel industry. The production potential in the steelworks coking plants is calculated in the above table in the same way as for the other coking plants i.e. including investments merely envisaged (Category C), as well as investment already undertaken or decided (Categories A + B).

IV—THE IRON AND STEEL INDUSTRY

The spectacular upsurge during the period 1960-1963 (during which capital expenditure more than doubled) was followed by a downward trend which continued until 1967. This trend then reversed and expenditure for 1969 exceeded that for 1967 by close on 40%. Current forecasts for 1970 even expect a considerably higher figure than the peak recorded in 1963, and, for 1971, indicate a value which suggests a continuation of this upward trend.

This upward movement applies to all sectors. In 1969, the shares of the four categories of plant—general services, pig-iron production, crude steel production and rolled steel production—in total expenditure were 15%, 18%, 18% and 49% respectively, as compared with 17%, 16%, 18% and 49% in 1968.

TABLE 9

Capital Expenditure in the Iron and Steel Industry, 1954—1971

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure											Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Plant for production of:													
pig-iron	143.3	172.2	218.8	233.2	258.4	222.7	160.4	132.5	130.6	124.3	186.6	326.9	368.3
crude steel	84.1	95.4	162.8	152.4	175.0	158.3	124.7	122.1	143.8	148.1	183.9	205.3	136.0
rolled products	249.8	350.3	532.4	597.6	726.4	634.3	425.5	405.0	317.7	391.1	496.3	865.2	670.2
General services	103.8	157.3	209.1	247.1	319.7	300.0	221.7	188.5	138.1	138.6	150.3	225.3	145.6
Total	**581.0**	**775.2**	**1,123.1**	**1,230.3**	**1,479.5**	**1,315.3**	**932.3**	**848.1**	**730.2**	**802.1**	**1,017.1**	**1,622.7**	**1,320.1**

This survey compared with that for the previous year shows the effect of the trend reversal on production potential.

FIGURE 5

Capital Expenditure in the Iron and Steel Industry

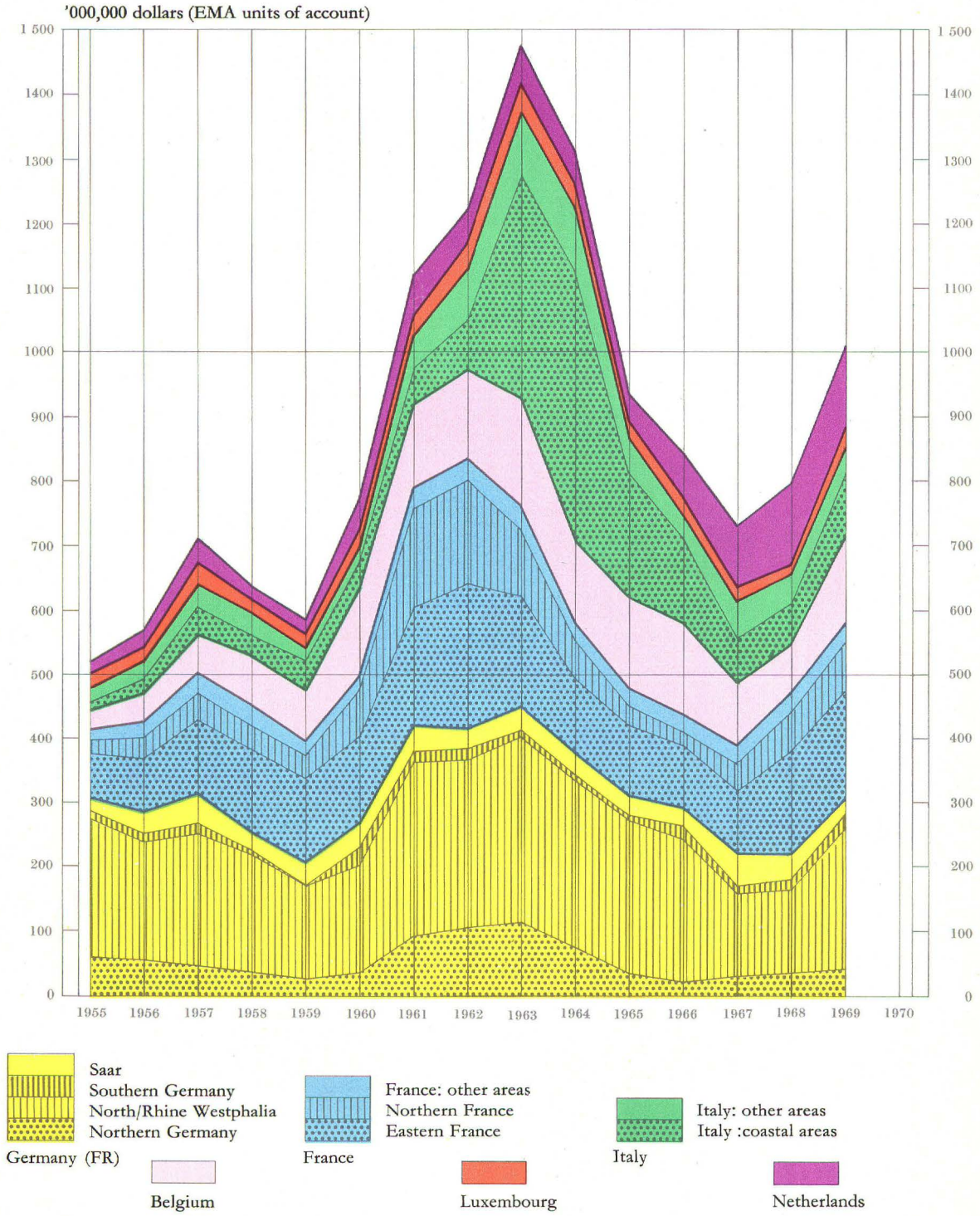


FIGURE 6

Capital Expenditure in the Iron-Ore Mines and Iron and Steel Industry

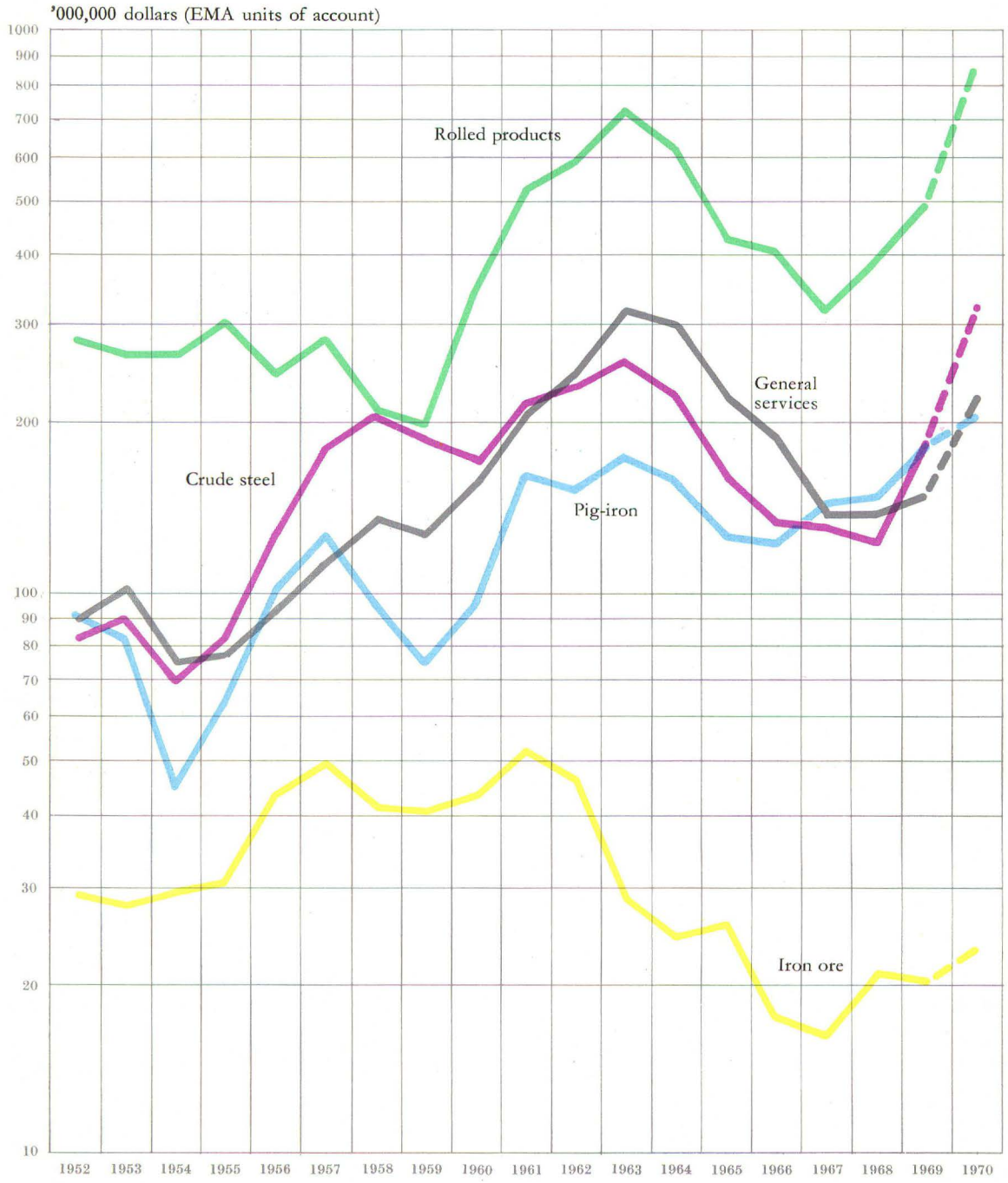


FIGURE 7

Breakdown of Capital Expenditure in the Iron and Steel Industry

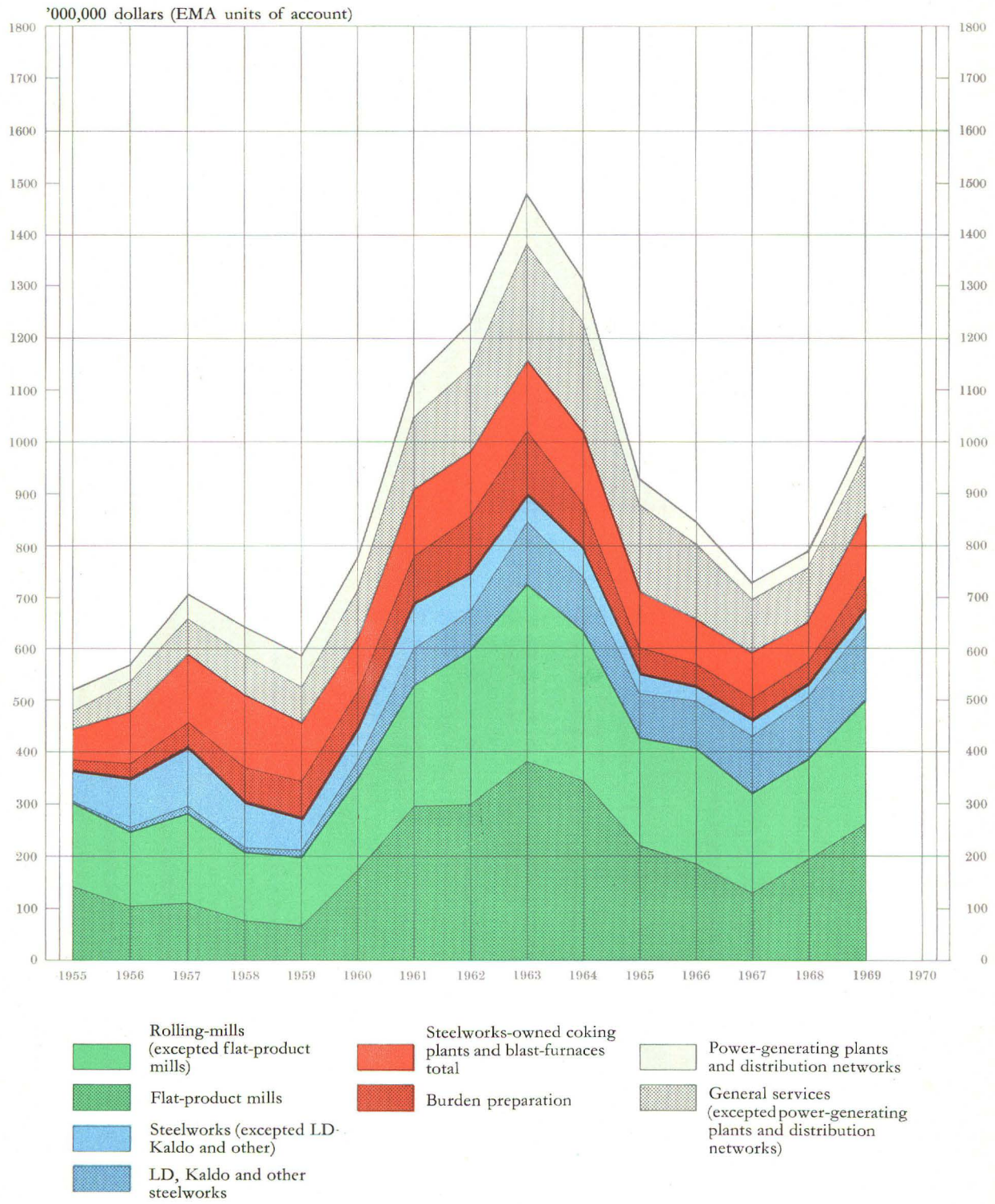


TABLE 10

Movement of forecast production potential

'000,000 metric tons

	Date of survey	1970	1971	1972	1973
Pig-iron	1969	91.3	94.0	95.5	—
	1970	93.7	98.4	105.5	108.9
Steel	1969	125.8	131.0	132.2	—
	1970	128.4	137.4	144.3	146.8
Rolled products	1969	95.3	97.8	100.6	—
	1970	95.3	100.7	106.9	108.9

From the anexed tables, in particular Table XV, it is possible to make a brief regional analysis of capital expenditure in 1969. As compared with the previous year, the increase is particularly sharp in Luxembourg, Belgium and Germany. It is more modest in Italy and France and remains stable at a high level in the Netherlands.

The following paragraphs analyse steel investments arranged according to major categories and their effect on the production potential of each sector.

a) Pig-iron production

With capital expenditure in 1969 at 186.6m., this survey shows an increase of 50% in relation to expenditure recorded in 1968. The subsequent increase is expected to be even sharper, and the sum forecast for 1971 is more than 40% above the peak recorded in 1963.

The increase is particularly marked in the **steelworks coking plants**: since 1969, expenditure, at 30.6m. in that year has been approaching the 1963 record level. Not considering projects merely envisaged, it could reach some 61m. in 1970 and 70m. in 1971.

The increase is slightly less marked for expenditure relating to **burden preparation**. On the other hand, **blast furnace** forecasts for 1970 and 1971 show sums considerably in excess of the previous records. This trend manifests itself in varying degrees according to the different regions.

TABLE 11

Capital Expenditure on Pig-Iron Production Plant, 1954—1971

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure											Estimated expenditure (Categories A+B)	
	1954-1959 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Steelworks-owned coking plants	22.9	11.5	18.3	25.0	33.8	29.7	17.2	10.4	11.5	13.7	30.6	60.8	69.9
Burden preparation .	42.7	73.7	93.3	110.9	123.2	85.0	52.0	45.0	43.8	44.3	68.1	113.3	102.5
Blast-furnaces	77.7	87.0	107.2	97.3	101.4	108.0	91.2	77.1	75.3	66.3	87.9	152.8	195.9
Total	**143.3**	**172.2**	**218.8**	**233.2**	**258.4**	**222.7**	**160.4**	**132.5**	**130.6**	**124.3**	**186.6**	**326.9**	**368.3**

Production potential in the **steelworks coking plants,** which has remained pratically unchanged since 1964 at the level of some 23m. tons, might increase by 9m. tons (including 1.6m. tons for Category C, investments merely envisaged), or 40%, between now and 1973. The new capacity will be largely located at coastal works.

In the course of the next four years, processes for the **direct reduction** of iron-ore will still not play an important part in the Community. For the first time, however, they will reach the industrial stage for the production of blast furnace pellets and even for the production of iron sponge they may be likely to supply directly the electrical furnaces.

Up to 1964, **sinter** potential had been increasing at a much greater rate than pig iron potential, which made it possible to double the amount of sinter charged in the blast furnaces in less than 10 years. Since then the two rates have followed a largely parallel trend. This movement may be expected to continue over the next few years and make it possible to charge sinter at a rate of slightly more than 1,100 kg per ton of pig iron produced. It should be noted however that this trend is proceeding at a marked rate in the Ruhr, the North of France and in the Netherlands, whilst there is a certain flagging trend in Belgium.

Pig iron production potential, which showed a slight increase in 1969, is expected to show an increase of 23% over the next four years on the considerable capital expenditure already in progress, especially for the construction of blast furnaces for very large capacities.

This expansion is expected to be particularly marked in the Ruhr where the increase forecast is 30%.

Between now and 1973, Community production potential will thus increase from 88.4 to 108.9m. tons, representing an annual cumulative growth rate of 5.3%.

FIGURE 8

Actual Production and Production Potential of the Iron and Steel Industry

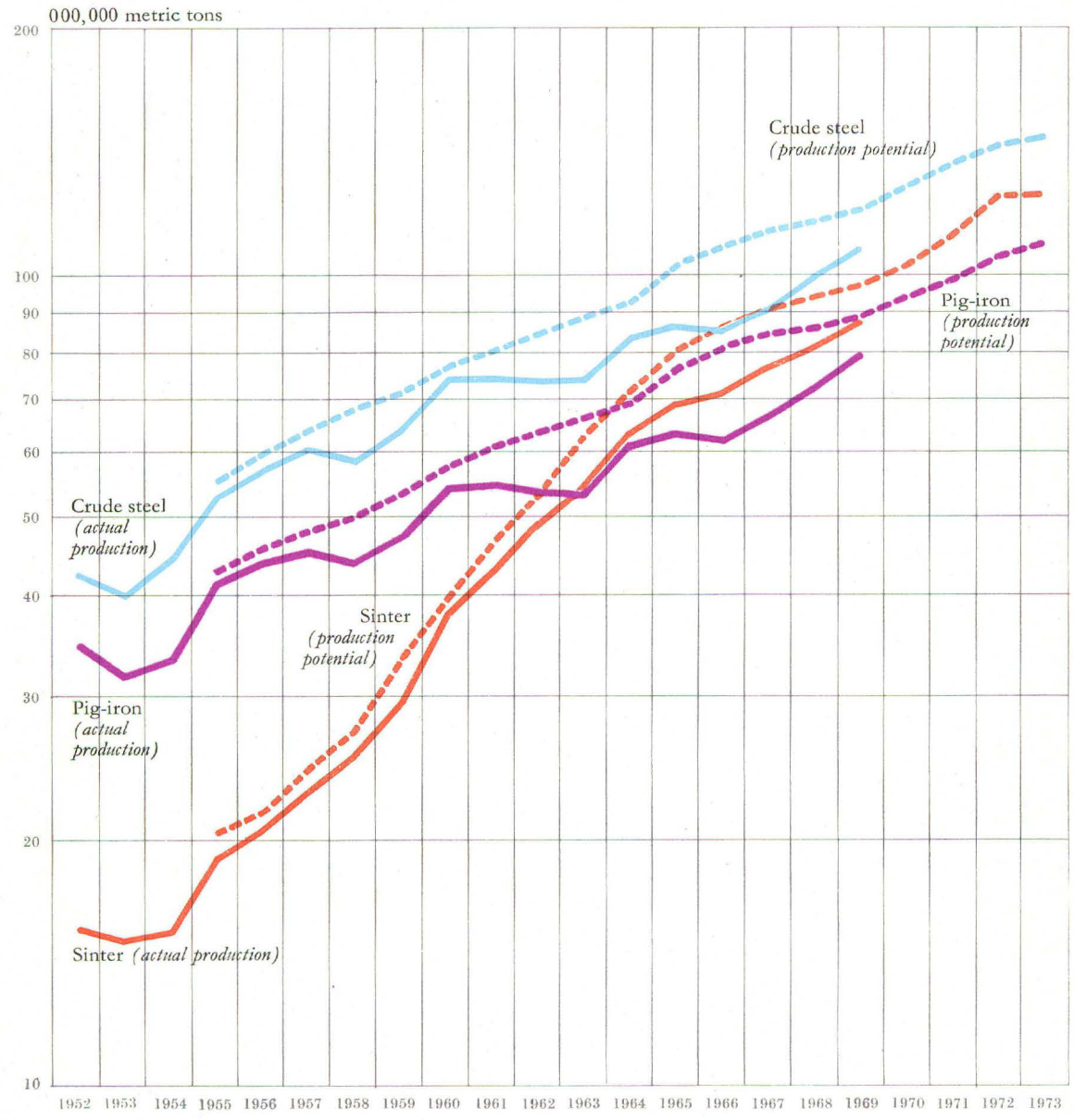


TABLE 12

Movement of Pig-Iron Production Potential

'000,000 metric tons

Product	Actual production		Production potential					
	1952	1969	1965	1969	1970	1971	1972	1973
Coke (steelworks-owned plant)(1)	15.8	24.1	23.1	23.5	26.6	27.6	29.0	30.9
Sinter	15.6	87.5	79.8	97.0	102.7	112.0	125.2	125.6
Pig-iron	34.7	79.3	75.4	88.4	93.7	98.4	105.5	108.9

(1) Cf. Table 8 in the Chapter dealing with Coking Plants. Production potential in the steelworks coking plants is calculated in this Table in the same way as that for pig iron and sinter, taking only investments already in progress or approved (Categories A + B) into account.

b) Steel Production

Capital expenditure on steelmaking capacity in 1969, at 184 million, has outstripped the previous peak recorded in 1963, and—which is almost without precedent—has exceeded by more than 15% the amount forecast for expenditure in the preceding survey.

Capital expenditure on **basic Bessemer** steelmaking capacity showed a slight increase as compared with 1968, which it seems may be sustained in 1970. It is, however, considerably lower than the corresponding figure for the beginning of the '60s. Capital expenditure on **open hearth** steelmaking capacity, at more or less the same level as that for basic Bessemer capacity, continues the decline which set in in 1962. Expenditure here is hardly 15% of the levels recorded towards the beginning of the '60s. The sum of both these expenditure categories, moreover, hardly accounts for more than 6% of the total capital expenditure on steelmaking capacity.

Expenditure on **electric** steelmaking capacity on the other hand, continues to rise and in 1969 had increased by more than 25% in relation to the previous year. In 1970, the forecasts expect double the 1969 expenditure. It will thus attain an absolute maximum. The relative share of electric steelmaking capacity in the total is expected to rise from some 12% in 1969 to close on 20% in 1970. The main areas of concentration will be in Germany, Central France and the continental areas of Italy.

The rapid increase in **basic oxygen steelmaking** capacity is progressing to the extent that it accounted for 82% of total expenditure on steelmaking capacity in 1969. The main areas of concentration were a certain number of the seaboard areas (North Germany, Italy) but also inland areas, mostly fed by inland waterways (Rhineland-Westphalia, Belgium, Lorraine). Similar amounts, the total of which is expected to be comparable, are expected for 1970 in the same areas plus the North of France.

TABLE 13

Capital Expenditure on Steelmaking Plant, 1954—1971

'000,000 dollars (EMA units of account)

Production process	Actual expenditure											Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Basic Bessemer.....	30.4	21.2	24.2	23.0	18.4	9.2	10.2	10.2	12.9	5.3	6.9	9.8	4.6
Open-hearth	33.5	29.1	44.8	30.2	18.5	22.7	13.0	8.7	3.9	6.7	4.9	6.5	1.6
Electric-furnace ...	13.0	11.1	21.8	21.1	18.1	19.9	16.5	10.4	16.8	16.6	20.9	39.8	13.0
LD, Kaldo, etc. ...	7.2	34.0	72.0	78.1	120.0	106.5	85.0	92.8	110.2	119.5	151.2	149.2	116.8
Total	**84.1**	**95.4**	**162.8**	**152.4**	**175.0**	**158.3**	**124.7**	**122.1**	**143.8**	**148.1**	**183.9**	**205.3**	**136.0**

Owing in particular to heavy investment in basic oxygen steelmaking plant, Community crude steel production potential should rise from 120.9m. tons in 1969 to 146.8m. tons in 1973, an increase of 21% in four years, representing a cumulative annual rate of growth of 5.0%.

This increase is considerably more marked than that forecast in the previous survey.

TABLE 14

Movement of forecast crude steel production potential

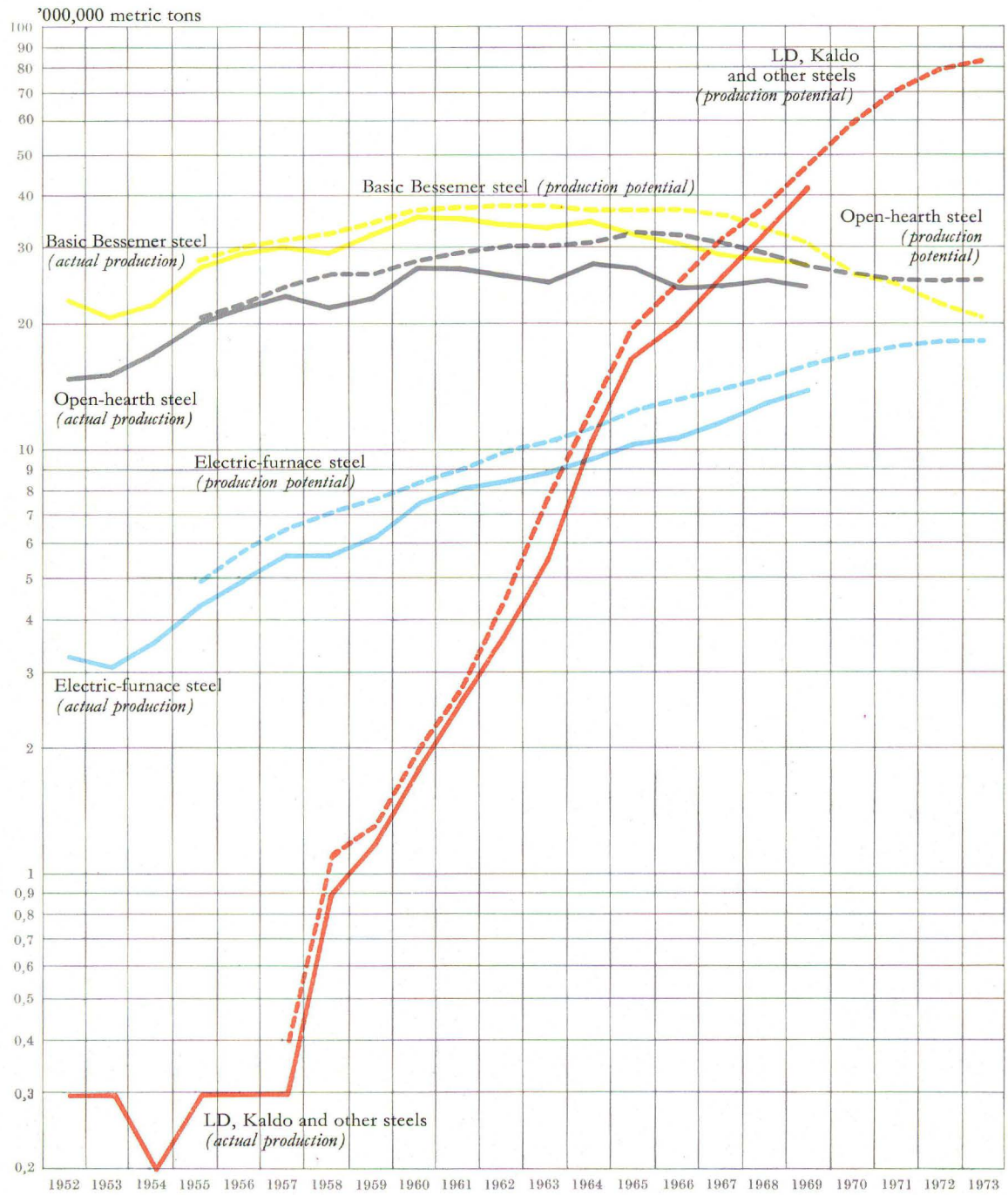
'000,000 tons

Date of survey	Production potential forecast				
	1969	1970	1971	1972	1973
1969	119.8	125.8	131.0	132.2	...
1970	120.9	128.4	137.4	144.3	146.8

Thus annual crude steel production potential for the next four years is expected to increase by 25.9m. tons. The annual potential of basic oxygen steelmaking plant alone should increase by 32.6m. tons, while electric steelmaking potential should increase by 2.1m. tons. The latter figure could well be exceeded in actual fact, bearing in mind the period required for building electric steelworks.

FIGURE 9

Actual Production and Production Potential of Crude Steel by Production Process



On the other hand, basic Bessemer and open hearth steel production potential is expected to decline by 9.8m. and 2.0m. tons per year respectively. The decline in the basic Bessemer process seems to be slowing down: that in the open hearth process appears to be speeding up; the adjustment of a number of basic Bessemer steelworks, in particular in the Saar, Southern Germany, Belgium, Lorraine and Luxembourg, to new processes of blowing oxygen through the converter bottoms does not reduce the decline which started several years ago.

TABLE 15

Net decrease in open hearth and basic Bessemer steelmaking potential

'000,000 tons per year

	basic Bessemer	open-hearth	total
1966	0.0	0.2	0.2
1967	0.9	1.7	2.6
1968	3.2	1.7	4.9
1969	2.4	2.0	4.4
Total net (actual) decrease for the period 1969—1973	6.5	5.6	12.1
Total net (forecast) decrease for the period 1969—1973	6.8	2.0	8.8

TABLE 16

Movement of Crude-Steel Production Potential according to manufacturing process

'000,000 metric tons

Production process	Actual production		Production potential					
	1952	1969	1965	1969	1970	1971	1972	1973
Basic Bessemer (1)	23.0	27.4	37.0	30.5	27.3	27.2	25.2	23.7
Open-hearth	15.2	24.5	33.0	27.4	26.2	25.3	25.3	25.4
Electric-furnace	3.3	13.9	12.5	16.1	17.0	17.6	18.1	18.2
LD, Kaldo, etc.	0.3	41.5	19.5	46.9	57.9	67.3	75.7	79.5
Total	**41.8**	**107.3**	**102.0**	**120.9**	**128.4**	**137.4**	**144.3**	**146.8**
Continuous casting	**0.0**	**4.9**	.	**5.0**	**6.6**	**9.7**	**13.8**	**15.8**

(1) Including bottom-blown oxygen processes.

The forecasts of the firms show that all the countries of the Community hope to produce in 1973 more than half their crude steel output by basic oxygen processes (the percentages of actual basic oxygen production in 1969 are given in brackets): Northern France 70% (49%), Netherlands 76% (72%), North Germany 74% (65%), Italian seaboard 74% (53%), Belgium 66% (45%), Ruhr 65% (49%), Luxembourg 52% (34%). In the same year 1973 the percentages applying to the Lorraine and the Saar steel industries should not exceed 29% and 31% respectively. In all other parts of the Community, pratically no interest has as yet been shown in steelmaking by the LD, Kaldo or similar processes. The regional differences alone should not of course be regarded as indicative of the greater or lesser competitivity of the various steel industries.

For the Community as a whole, basic oxygen steelmaking plant will account for more than 54% of overall capacity in 1973.

TABLE 17

Shares of the Different Steelmaking Processes in 1952, 1965, 1969 and 1973

%

Production process	Actual production		Production potential		
	1952	1969	1965	1969	1973 (estimated share)
Basic Bessemer	55.0	25.5	36.3	25.2	16.1
Open-hearth	36.4	22.8	32.4	22.7	17.3
Electric-furnace	7.9	13.0	12.2	13.3	12.4
LD, Kaldo, etc.	0.7	38.7	19.1	38.8	54.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

This makes a cumulative average annual increase of 14.1% from 1969 to 1973 for basic oxygen steels and a decrease of about 2.0% for open hearth and over 6% for basic Bessemer (as against 5.6% and 8.3% respectively anticipated in 1968 for the period ending in 1972). All these figures suggest a considerable speed-up in the rate of technical conversion begun some years ago.

TABLE 18

Average Annual Movement of the Different Steelmaking Processes

%

Production process	Average annual movement in actual production, 1952-1969	Estimated average annual movement in completed or approved production potential	
		1965-1969	1969-1973
Pig-iron (for comparison)	+ 5.0	+ 4.0	+ 5.3
Basic Bessemer	+ 1.0	— 4.7	— 6.1
Open-hearth	+ 2.8	— 4.5	— 1,9
Electric-furnace	+ 8.8	+ 6.4	+ 3.1
LD, Kaldo, etc.	+ 33.7	+ 24.5	+ 14.1
Total, crude steel	+ 5.7	+ 4.3	+ 5.0

The annual production potential in the next four years is thus expected to increase at a cumulative average rate of 5.0% per year. This rate is well above those forecast in the surveys for the past four years (3.7% in 1966, 3.1% in 1967, 2.6% in 1968 and 3.6% in 1969), and should be practically the same as the rate forecast by the 1961 survey for the four ensuing years.

The average rate of 5% conceals considerable regional differences: 9% for coastal works, compared with 4% for works inland.

Moreover, owing to the length of time required for the implementation of investment in the steel industry, this rate does not take into account the construction already approved of two new coastal steelworks, and only partially takes into account the envisaged extension of two others. Thus it is quite likely that the rate of growth indicated in the next survey will exceed, particularly in the seaboard area, the rate forecast this year.

As has already been mentioned (page 11, point 1), firms often tend not to declare projects for fairly rapid completion in cases where they do not seem to be immediately required. This fact has been particularly in evidence for steelmaking plant for which the rates of growth initially declared have been found to be below those recorded subsequently. This is less important for blast furnaces for which construction times are particularly long. Thus it is not surprising that, in the present survey, the annual rate of growth over the four years forecast for steel (5.0%) remains slightly below that forecast for pig iron (5.3%).

It is not unlikely that at the end of the four year period covered by the current survey, the actual rate of growth for pig iron may be equal to or even below the actual rate of growth for steel.

For the purposes of comparison we reproduce in the table below the rates of growth in production potential forecast in the surveys conducted during the past ten years:

TABLE 19

Average annuel rate of growth for pig iron production and steelmaking potential

%

Date of survey	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Period covered	1959-1963	1960-1964	1961-1965	1962-1966	1963-1967	1964-1968	1965-1969	1966-1970	1967-1971	1968-1972	1969-1973
Pig iron	5,2	6,3	6,8	6,1	3,8	4,7	3,1	2,6	2,5	3,0	5,3
Steel	3,8	5,8	5,5	5,2	4,0	5,0	3,7	3,1	2,6	3,6	5,0

c) Production of semis and rolled products

As far as semis required for section mills and in particular **heavy plate** and **wide strip mills** are concerned, special mention should be made of **continuous casting** plants. Investments in this field, having levelled off from 1957 onwards, are expected to undergo rapid growth again in 1970, when they may for the first time equal investments in blooming and slabbing mills.

Considerable investments are currently still being made in this field in the Ruhr and are increasing in importance in other areas: till recently the Saar, at present Southern Germany, Northern France and continental Italy and shortly in North Germany and the Italian seaboard.

Overall investment devoted to **flat product mills** between 1960 and 1965 had been more than double that devoted to **section mills.** In 1969, expenditure on flat product mills was four times greater than recorded for section mills. This discrepancy will no doubt become more marked during 1970.

TABLE 20

Capital Expenditure on Production Capacity for Semis and Rolled Products, 1954—1971

'000,000 dollars (EMA units of account)

Type of mill	Actual expenditure											Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Heavy and medium section mills	33.5	55.0	66.4	66.0	74.6	54.9	52.4	51.3	33.9	28.9	23.7	46.1	25.1
Small-bar mills	29.9	19.2	26.2	27.5	48.8	67.3	44.3	49.6	23.7	16.5	31.1	50.6	33.2
Wire mills	11.0	16.2	28.4	51.0	40.0	24.1	12.8	15.4	21.3	21.0	8.0	20.2	27.2
Total, section mills	*74.4*	*90.4*	*121.0*	*144.5*	*163.4*	*146.3*	*109.5*	*116.3*	*78.9*	*66.4*	*62.8*	*116.9*	*85.5*
Hoop and strip mills .	8.8	4.3	5.5	8.6	8.2	4.8	10.0	13.6	12.7	15.1	10.4	34.5	32.3
Plate and universal mills	29.0	24.8	35.4	46.2	64.0	32.2	23.1	33.2	20.5	34.6	44.3	84.0	47.1
Hot sheet mills.....	2.9	3.7	6.0	2.1	2.3	0.8	1.2	0.7	0.6	0.8	0.7	0.6	0.2
Cold sheet mills	1.4	0.4	0.7	0.4	0.1	0.4	0.5	0.1	3.2	10.9	2.0	—	—
Hot wide-strip mills..	27.0	27.5	67.0	65.5	158.7	147.0	86.6	78.8	63.2	90.6	62.8	88.0	76.6
Cold wide-strip mills .	38.8	114.8	178.6	175.9	147.1	159.3	97.6	59.6	30.7	41.8	138.7	295.1	216.6
Total, flat-products mills	*107.9*	*175.5*	*293.2*	*298.7*	*380.4*	*344.5*	*219.0*	*186.0*	*130.9*	*193.8*	*258.9*	*502.2*	*372.8*
Blooming and slabbing mills	*35.5*	*43.6*	*74.8*	*91.3*	*108.7*	*78.6*	*44.1*	*43.4*	*52.5*	*83.0*	*91.2*	*90.7*	*71.2*
Continuous-casting installations	.	.	.	*2.3*	*4.1*	*5.6*	*10.0*	*13.1*	*28.2*	*19.9*	*31.3*	*62.3*	*68.6*
Miscellaneous (including coating plants).	*32.1*	*40.8*	*43.4*	*60.8*	*69.8*	*59.3*	*42.9*	*46.2*	*27.2*	28.0	*52.1*	*93.1*	*72.1*
Total	**249.9**	**350.3**	**532.4**	**597.6**	**726.4**	**634.3**	**425.5**	**405.0**	**317.7**	**391.1**	**496.3**	**865.2**	**670.2**

The annual rate of growth in production potential for rolled steel finished products, having considerably fluctuated over recent years, has recovered and now exceeds 4%. It has thus returned to the level forecast by the 1960 survey. It is by no means unlikely that the 1971 survey may even show a higher rate if—as experience has shown—some of the firms during this period implement projects for rapid completion on which no firm decision has at present been taken.

The movement in production potential reflects the movement of capital expenditure approved by the enterprises. Almost without interruption during the past ten years the rate of development for both rolled steel product categories has been appreciably more rapid for flat products and for sections. This difference is tending to increase.

During the period from 1969 to 1973, the proportion of steel production for rolling on continuous or semi-continuous mills in the Community, which was only 50% in 1960, should rise from 67% to 72%.

TABLE 21

Average Annual Movement of the Different Types of Finished Products

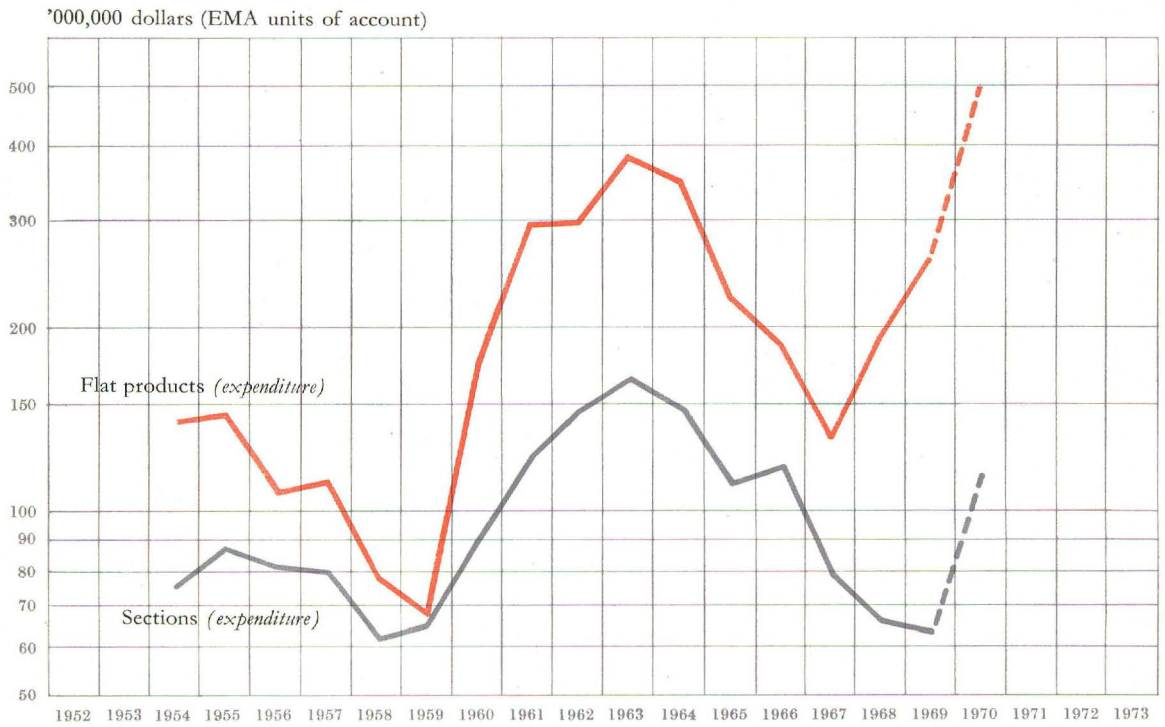
Product	Actual production			Production potential				
	1952 (mill. tons)	Average cumulative annual movement (%)	1969 (mill. tons)	1965 (mill. tons)	Average cumulative annual movement (%)	1969 (mill. tons)	Average cumulative annual movement %	1973 (mill. tons)
Heavy and light sections, incl. tube rounds and squares	15.2	+ 3.7	28.3	30.8	+ 4.0	36.0	+ 2.2	39.3
Wire-rod	2.8	+ 6.3	7.9	8.1	+ 5.7	10.1	+ 5.2	12.4
Total, sections	*18.0*	+ *4.2*	*36.2*	*38.9*	+ *4.3*	*46.1*	+ *2.9*	*51.7*
Hoop and strip and tube strip	2.3	+ 6.5	6.7	6.7	+ 6.0	8.5	+ 1.7	9.1
Plate of 3mm. and over(1)	4.3	+ 6.1	11.8	12.3	+ 5.8	15.4	+ 3.5	17.7
Hot-rolled sheet under 3mm.(1) ..	3.1	— 9.1	0.7	2.5	—20.5	1.0	— 0.3	0.9
Cold-reduced sheet under 3mm. ..	0.8	+20.5	19.1	16.2	+ 7.4	21.6	+ 8.0	29.5
Total, flats (1)	*10.5*	+ *7.9*	*38.3*	*37.7*	+ *5.3*	*46.5*	+ *5.3*	*57.2*
Total, finished rolled products (1)	**28.5**	+ **5.8**	**74.5**	**76.6**	+ **4.7**	**92.6**	+ 4.1	**108.9**
(of which: products rolled in continuous and semi-continuous mills)	(.)	(.)	(50.6)	(.)	(.)	(61.7)	(+ 6.2)	(78.5)

1) Exclusive of coils rating as end products in respect of which the production potential would increase from 5.0 to 7,4m. tons from 1969 to 1973.

FIGURE 10

Sections and Flat Products

A—Capital expenditure



B—Actual production and production potential

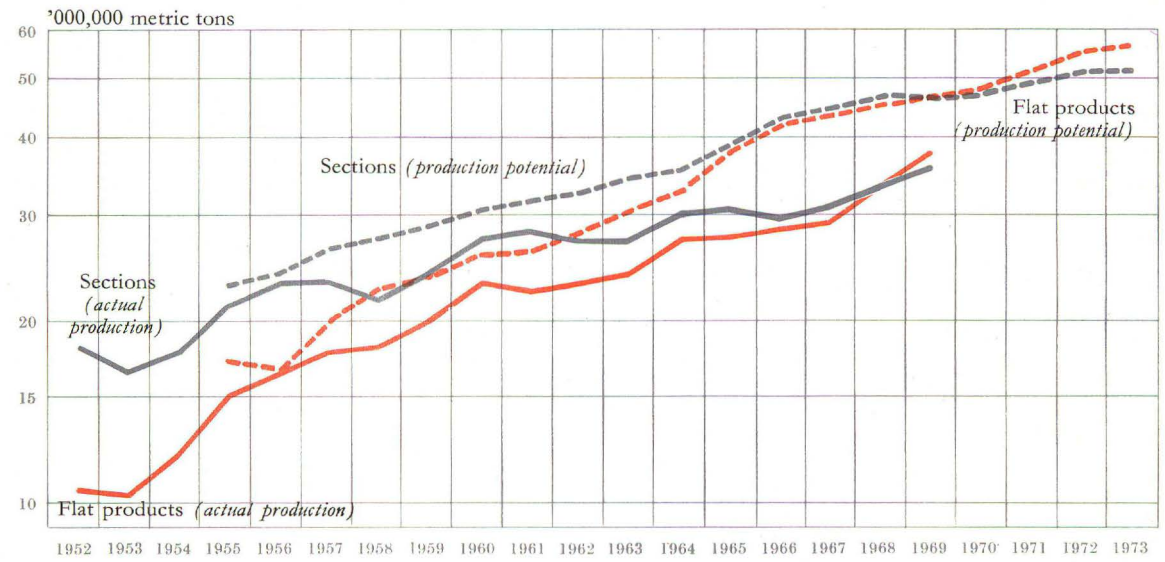
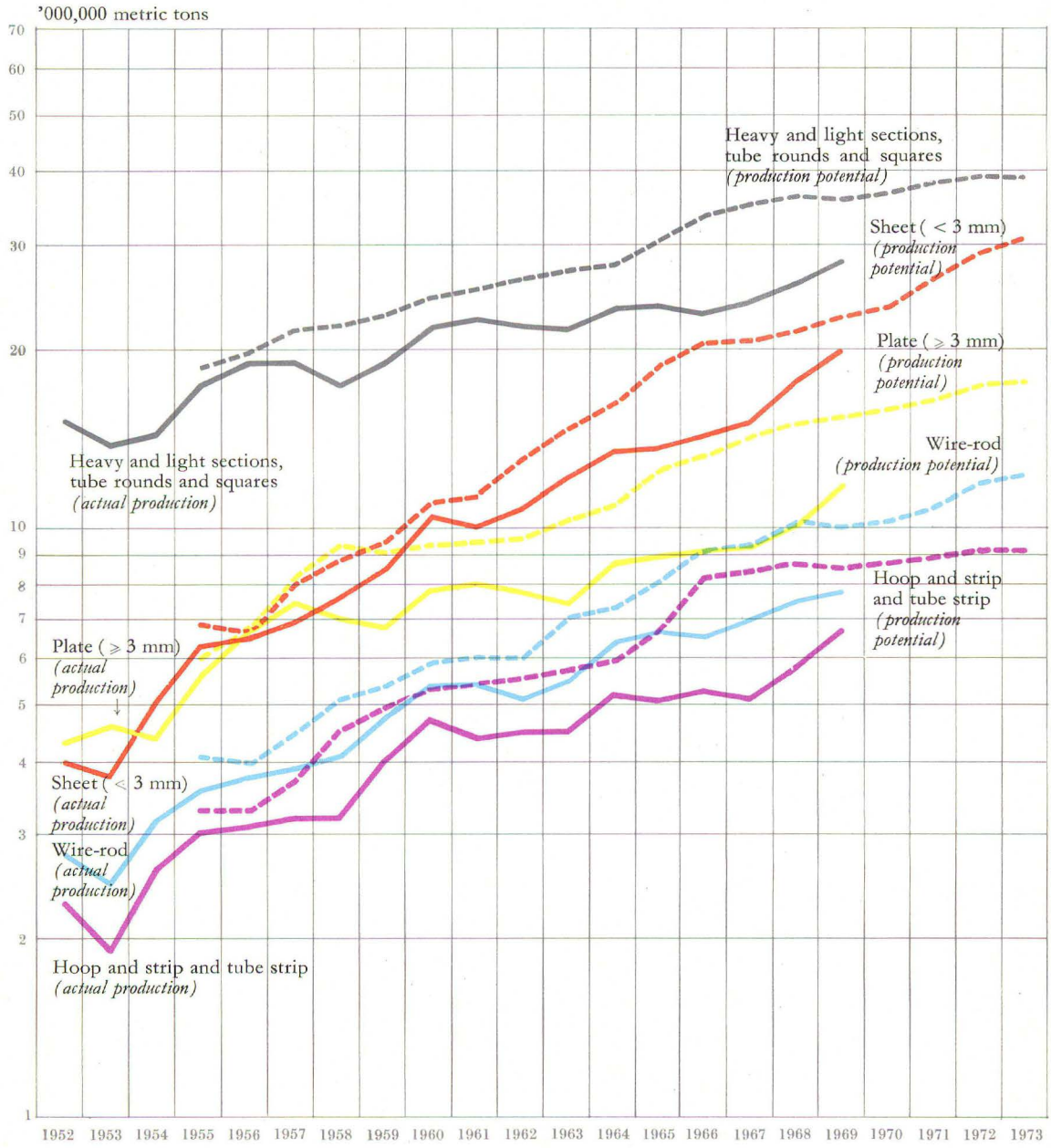


FIGURE 11

Actual Production and Production Potential for the Various Categories of Finished Rolled Product



The figures given in the two preceding paragraphs do not include hot rolled wide strip in coils which are generally included in the semis category, but an increasing proportion of these coils are being used as such by customers in the Community or are being exported to third countries and should thus be considered as finished products. But this separation into semis and finished products makes it difficult to give a survey of this material. Thus some works having hot wide strip mills seem, to a much larger extent than other works of comparable structure, to be organising their production programmes for coils as finished products.

According to the particulars supplied by the enterprises covered by the survey, sales of coils as finished products in 1973 should be some 7.4m. tons (in 1969 actual production is assumed to have been 4.3m. tons compared with production potential estimated at 5.0m.). If this tonnage of coils as finished products were added to the figure of 108.9m. tons given in Table 21, the estimate for flat product production potential in 1973 would be 56% instead of 52% of the total rolling potential in 1969. The proportion of steel production for rolling on continuous or semi-continuous mills in the Community would show a parallel increase.

Generally speaking, trends in the various regions of the Community have not necessarily been parallel in production potential for crude steel and rolled steel. Thus the figures for certain typical inland areas (Saar, Lorraine, Luxembourg) show a sharper relative decline in their crude steel than in their rolled steel production potential, as indicated in the table below.

TABLE 22

Movement in production potential in the Saar, Lorraine and Luxembourg in relation to Community production potential

%

	1969	1973
Crude steel	23.4	20.9
Rolled products	23.8	23.9

Thus some enterprises in these areas are showing an increasing tendency to seek their supplies of semis in other regions of the Community, looking in particular to the coastal steel works.

d) General services

Capital expenditure on general services—civil engineering, workshops, laboratories—has increased rapidly up to 1965, when it accounted for 300m. dollars, or 24% of total investments in the steel industry. The 150m. allocated under this heading in 1969 was only 15% of total investment. A new

increase in this item may be expected, however, for the period in which the major projects of enterprises about to expand or to build new integrated works on the Community seabord become due for implementation.

Up to 1965 also, expenditure on power plant had accounted for a considerable share in the total for general services. The slow-down in this area seems likely to continue as a result of the reduction in quantities of blast furnace gas available, as a result of the reduction in the coke rate.

TABLE 23

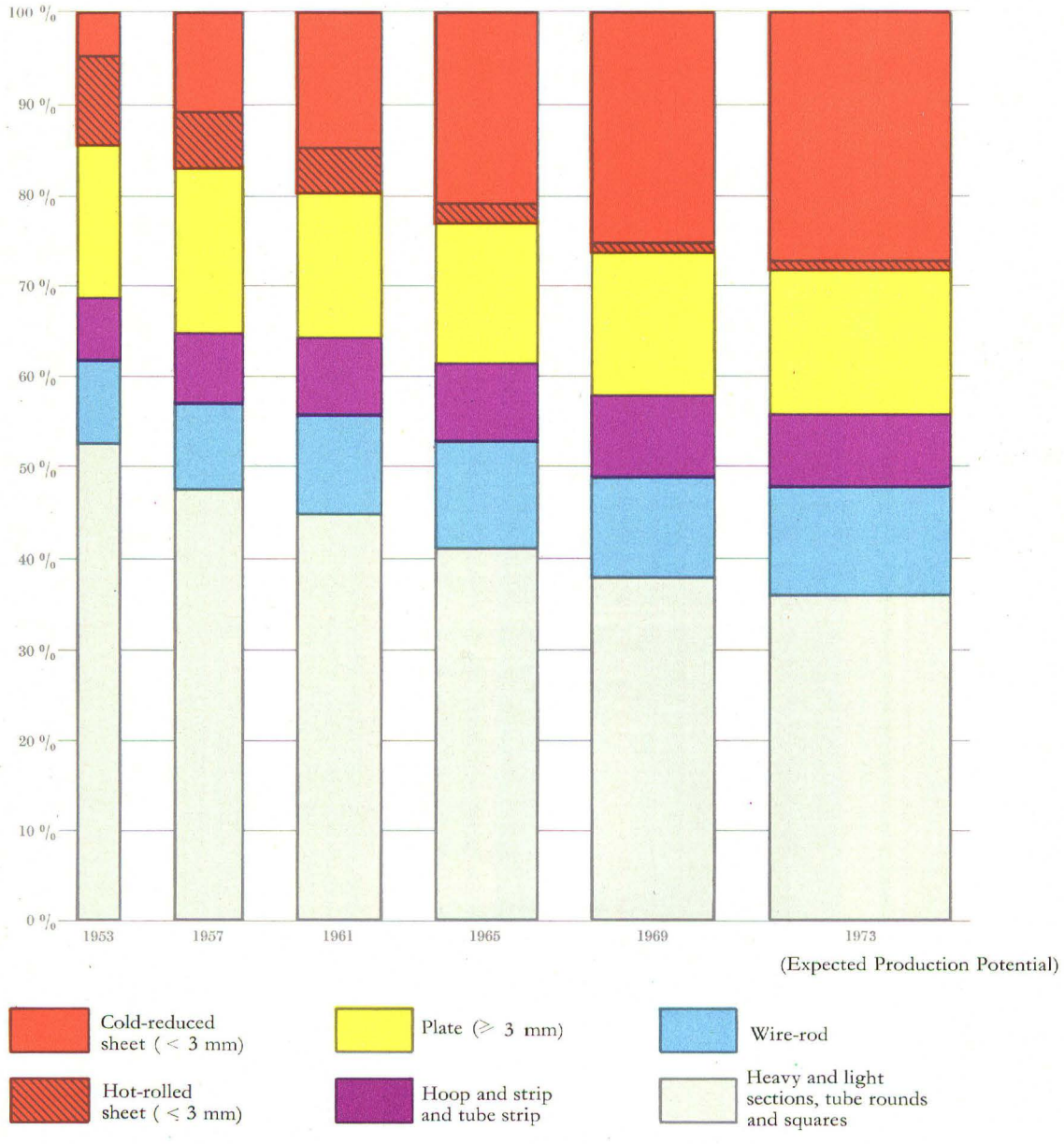
Capital Expenditure on the General Services of the Iron and Steel Industry, 1954—1971

'000,000 dollars (EMA units of account)

Type of installation	Actual expenditure											Estimated expenditure (Categories A+B)	
	1954-59 (annual average)	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Power-generating plant and distribution networks	45.5	60.7	71.7	84.2	93.6	86.3	55.7	43.1	33.5	33.4	39.3	40.6	24.2
Miscellaneous	58.3	96.6	137.4	162.9	226.1	213.7	166.0	145.4	104.7	105.2	111.0	184.7	121.4
Total	**103.8**	**157.3**	**209.1**	**247.1**	**319.7**	**300.0**	**221.7**	**188.5**	**138.2**	**138.6**	**150.3**	**225.3**	**145.6**

FIGURE 12

Breakdown of Total Production of Finished Rolled Products by Types of Products (1)



(1) This figure does not include finished coils products of which the quantitative assessment is a somewhat arbitrary matter.

V—CONCLUSIONS

The only branch of the Community's mining activities dealt with in this report is the **iron ore mining industry.** Although this industry is undergoing increasingly rapid development in overall terms, the trend in the Community is towards stagnation. Having exceeded 105m. tons in 1962, extraction potential has progressively fallen to 80m. tons in 1969. It now seems that potential will remain stable at this level between now and 1973, with the slight expansion forecast in Lorraine hardly compensating at all for the decline expected in Western France, and in Germany excluding Lower Saxony. Domestic iron ore supplies to the Community iron and steel industry will become increasingly concentrated in the minette orefields of Eastern France and Luxembourg.

Programme revisions undertaken recently by several of the coal mining enterprises, particularly in the Ruhr, make it impossible to predict at present the way in which colliery investments as a whole will develop. It has however been possible at this stage to establish the intentions of the various Community coke producers.

Since 1961, the annual production potential of Community **coking plants** has declined by 15m. tons, so that by 1969 it was only 69m. tons. During this eight year period, the decline in the mine-owned and independent coking plants was 14m. tons, and for steelworks coking plants 1m. tons. As a reaction to the serious shortage of coke from which the Community has been suffering for some time, the enterprises—especially the steel companies—have recently decided to intensify considerably their investment effort in this field. Between now and 1973, there should be a net increase in production potential of around 10m. tons, 9m. tons of this in the steelworks coking plants alone. The final replies from the Community coal industry, which have not yet been received, will no doubt make it possible to determine to what extent this increase is likely to be cancelled out wholly or in part by the closure of old coking plants. After 1973 the upward trend could continue in the steelworks sector.

For 1973, the Community enterprises have declared a **pig iron** production potential of 109m. tons, which corresponds to a cumulative rate of growth of 5.3% from 1969 onwards. This rate of growth slightly exceeds the rates for actual movements recorded for pig iron production (4.0% per year from 1965 to 1969) and the movement expected for crude steel production potential (5.0% per year from 1969 to 1973). In coming years, the iron-ore pre-reduction and direct reduction processes will reach the industrial stage in several Community plants.

The average coke rate in the Community blast furnaces was 590 kg per ton of pig iron in 1969. It could drop to 540 kg per ton in 1973. If this proved to be correct, pig iron production potential at 109m. tons would have to be matched by 59m. tons of blast furnace coke produktion potential. Allowing for a demand level of 5m. tons for coke fines for agglomeration and a demand level of 15m. tons for non-steelworks users, the total Community coke-making potential in 1973 would be 79m.

tons. This is precisely the level which would be attained on the basis of the projects declared for Community coking plants. Thus equilibrium between coke demand and coke-making potential could again be achieved at about this time. However, depending in particular on the trend in coke demand in the Community, the enterprises might decide to close coking plants which proved to be too obsolete or too poorly situated in relation to their sources of supply. Between 1965 and 1969 already, the Community enterprises have closed down a number of such coking plants, thus bringing about a net decrease in coke-making potential of 9.3m. tons. Although the situation may still be the subject of a reappraisal, the shortfall in Community coking coal resources will, in fact, increase and one of the preoccupations of the Community cokemaking industry is to secure additional external supplies under satisfactory conditions.

Having attained a maximum in 1963, at close on 1,500m. dollars, overall investments of the iron and steel industry declined to level off at 730m. dollars in 1967. The recovery which began in 1968 was consolidated in 1969, and it seems that this trend will be speeded up over the next few years: overall investment in 1969 was 1,017m. dollars, and investment expected for 1970 will exceed 1,600m. dollars. Of course, these figures do not yet reflect the construction, on which decisions have already been taken, of new coastal steelworks.

It is thus not surprising that expansion in crude steel production potential for the future may turn out to be more rapid than forecast in previous surveys. For each of the four-year periods concerned, the 1968 and 1969 and 1970 surveys forecast average cumulative rates of growth of 2.6%, 3.6% and 5.0% per year respectively. A similar dynamic trend was noted during the previous boom period in steel trading conditions and cumulative average rates of growth rose in a similar manner according to the successive forecasts of the 1959, 1960 and 1961 surveys. Allowing for the lenght of time it took for the investments decided upon at that time to be implemented, these rates only decreased very slowly during the ensuing years, in spite of the economic fluctuations which took place in the meantime.

In these circumstances, Community production potential should increase from 121m. to 147m. tons of crude steel between 1969 and 1973, and perhaps even higher, if—as experience has shown—certain enterprises implement some quick-maturing projects during this period, which have not yet been approved.

The around 26m. tons per year of production potential to be installed between now and 1973 derive from two opposing trends. The potential of basic oxygen steelmaking plants should increase by almost 33m.tons and that of electric-furnace melting shops by more than 2m. tons. On the other hand, the basic Bessemer and open hearth potential should decrease respectively by 7m. and 2m. tons. This twin trend makes it possible to gauge the degree of increasing modernization which typifies the Community's iron and steel industry. Modernization is taking place, in particular, at the expense of the basic Bessemer process, despite the 'conversion' of some basic Bessemer melting shops to new processes of blowing oxygen through the converter bottom.

Almost all the regions of the Community have a share, admittedly in unequal proportions, in the increase in investment recorded in 1969 and forecast for 1970. As far as crude steel is concerned, the production potential of coastal works will increase between 1969 and 1973 at a cumulative average rate of 9% per year, whereas the average rate will not exceed 5% for the Community as a whole and will not even reach 4% for the inland works. The disparity between the coastal and inland works is less for the rolling mills. There is an increasing trend amongst some of the inland works to seek supplies of semis in other regions of the Community.

As far as the **processing of steel** into semis and rolled products is concerned, attention should be drawn to the particularly rapid growth of continuous casting plants and flat product mills. In 1970, the amounts spent on continuous casting plants could reach the level of expenditure for blooming and slabbing mills. Steelmakers, moreover, continue to concentrate their rolling mill expenditure on the flat product sector. Since 1960, this sector has consistently absorbed more than double the investment allocated to section mills. In 1969, the disparity increased and expenditure for flat product mills increased to four times that for section mills. The difference will no doubt become even more marked in 1970. In these circumstances, the share of flat products in Community rolled steel production potential should rise from 52% in 1969 to 56% in 1973. Although it is true that rapid growth in flat products is typical of a developed economy, the question remains as to whether it would not be wiser to endeavour to stagger the completion of certain major projects, so that the growth in hot rolled strip and cold reduced sheet mills should be better adapted to the movement of demand and make it possible to achieve more rapidly their optimum use.

ANNEXES

I—Basic definitions

II—Statistical tables

I—BASIC DEFINITIONS

To ensure that the figures obtained shall be comparable, the High Authority and subsequently the Commission of the European Communities have adopted the following definitions.

I—INVESTMENT

(a) Capital expenditure

Capital expenditure means all expenditure shown or to be shown on the credit side of the balance-sheet as fixed assets in the year under review, except the financing of workers' housing schemes, financial participation and all investment not directly connected with ECSC-Treaty products (chemical and synthetic products other than the conventional by-products of coking-plants, castings, tubes, etc.).

(b) Classification of investment projects

As regards the trend in capital expenditure and related production potential, the same breakdown of capital schemes as that used in the questionnaires submitted to the enterprises has been adopted, viz.

A—*Projects completed or in progress before January 1, 1970;*

B—*Projects approved but not yet in progress on January 1, 1970;*

C—*Other projects planned to be started between January 1, 1970 and December 31, 1972.*

Since, in the case of the iron and steel industry projects merely "planned" can be dropped or deferred, if necessary, category C projects have been disregarded, except where iron ore mines and coking plants are concerned.

(c) Unit of account

The unit adopted is the dollar unit of account of the European Payments Union (EPU) and subsequently that of the *European Monetary Agreement* (EMA). Their equivalents in national currencies are given in the following table:

Country	Currency	Up to and including 1956	1957	1958	1959 and 1960	1961	1962 to 1968	1969	1970 and onwards
Germany (Fed. Rep.)	DM	4.20	4.20	4.20	4.20	4.03(4)	4.00	3.94(7)	3.66
Belgium/Luxembourg	BF/LF	50	50	50	50	50	50	50	50
France(1)	FF(2)	350	377(3)	420	4.937(3)	4.937	4.937	5.178(6)	5.554
Italy	Lire	625	625	625	625	625	625	625	625
Netherlands	Fl.	3.80	3.80	3.80	3.80	3.65(5)	3.62	3.62	3.62

(1) And Saar up to July 5, 1959.
(2) N.F. as from January 1, 1959.
(3) Mean between official rate of exchange in force from January 1 to August 11, 1957 (350) and that in force from August 12 to December 31, 1957 (4.20).
(4) Mean between official rate of exchange in force from January 1 to March 3, 1961 (4.20) and that in force from March 4 to December 31, 1961 (4.00).
(5) Mean between official rate of exchange in force from January 1 to March 3, 1961 (3.80), and that in force from March 4 to December 31, 1961 (3.62).
(6) Mean between official rate of exchange in force from January 1 to August 9, 1969 (4.937) and that in force from August 10 to December 31, 1969 (5.554).
(7) Mean between official rate of exchange in force from January 1 to October 21, 1969 (4.00) and that in force from October 22 to December 31, 1969 (3.66).

(d) Capital goods price indices

The statistics for the annual investment surveys are compiled from the enterprises' declarations at the ruling prices for the year concerned, the figures being converted into dollar units of account at the official rates shown above.

Capital goods for the iron and steel (or coal) industry are often highly specific and originate to a large extent in countries outside the Community. It is thus difficult to calculate price indices for these goods applicable to every country in the ECSC. It is nevertheless of interest to draw from the national accounts the indices concerning capital goods for all sectors of industry, and to weight these indices in accordance with the share of each country in Community steel investments.

The table below gives the indices calculated according to this new method, starting with 1960.

1960	1961	1962	1963	1964	1965	1966	1967	1968
92.5	93.0	97.2	100.0	102.0	104.4	106.9	108.3	108.6

The figures in this report can thus be converted to 1963 prices by applying the index for the year concerned to the annual expenditures recorded.

II—COKING PLANTS

Production potential

The figures shown represent the maximum annual coke production achievable with the plant in operation at a given date, taking into account the minimum coking time technically allowable for the normal composition of the coking blend, with due regard to the state of the ovens and the performance capacity of the ancillary and auxiliary installations. It is assumed that a ready market and unlimited raw material supplies are assured.

III—IRON ORE

(a) Extraction potential

The figures shown represent the maximum continuous output which can be achieved by each mine, allowing for the performance capacity of the different installations (underground, surface, ore-preparation plant where the ore is sold only after treatment) and for estimated manpower availabilities during the year under consideration.

(b) Geographical breakdown

In the tables, the orefields other than those mentioned by name are:

Central and Southern Germany:	Sauerland-Waldeck, Lahn-Dill, Taunus-Hunsrück, Upper Hesse;
Germany: other areas:	Dogger orefield, Kreide orefield.

IV—IRON AND STEEL INDUSTRY

(a) Production potential

Sinter, pig-iron, crude-steel and rolled products production potential means the *maximum production which can effectively be achieved by all the different sections of the plant together* allowing for possible bottlenecks in one section holding up all the others. This maximum possible production is defined as follows:

"Maximum possible production is the maximum production which it is possible to attain during the year under normal working conditions, with due regard for repairs, maintenance and the usual holidays, employing the plant available at the beginning of the year but also taking into account both additional production from any new plant installed and any existing plant to be finally taken off production in the course of the year. Production estimates must be based on the probable composition ratios of the charge in each plant concerned, on the assumption that the raw materials will be available."

In the case of steels produced mainly from pig-iron, the production potential is estimated in respect of the blast-furnaces and steelworks as a whole and not each steelworks individually.

The capital expenditure of a number of very small iron and steel works has not been included in this survey. It was assumed that the production potential of these enterprises would over the next few years remain at the level of actual production for 1969. The production potentials mentioned in this report therefore exceed those actually declared by a certain percentage which varies from sector to sector but does generally not exceed 1% for crude steel and 2.2% for finished rolled products.

As the production potential of the *rolling-mills* is governed by the shape (section), thickness and width of the material fed into the mill (metal input) and the products to be obtained, we have proceeded on the assumption that, should no forecast be possible as to future steel rolling conditions, it will be necessary to base estimates on the conditions obtained in 1969. The same applies to the apportionment of steel availabilities among the different types of mill.

(b) Geographical breakdown

In the tables, the producer regions other than those mentioned by name are:

Northern Germany:	Schleswig-Holstein, Lower Saxony, Hamburg, Bremen;
Southern Germany:	Hesse, Rhineland-Palatinate, Baden-Württemberg, Bavaria;
Eastern France:	Departments of Ardennes, Aube, Doubs, Haute-Marne, Marne, Meurthe-et-Moselle, Meuse, Vosges, Belfort, Haute-Saône, Moselle, Bas-Rhin, Haut-Rhin;
Northern France:	Departments of Aisne, Nord, Oise, Pas-de-Calais, Seine, Région parisienne, Seine-et-Marne, Somme;
France : other areas:	all other Departments.

II — STATISTICAL TABLES [1]

IRON ORE

COKING PLANTS

STEEL

[1] In order to facilitate comparison between the statistical tables of this and previous reports, the numbering used in the previous reports has been retained here.

IRON-ORE INDUSTRY

Investment

TABLE XIII

Capital Expenditure by Orefields

'000,000 dollars (EMA units of account)

Orefield	Actual expenditure					Estimated expenditure		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Salzgitter, Ilsede, Harzvorland	4.03	1.09	0.52	0.73	1.18	0.97	1.78	—
Osnabrück, Weser-Wiehengebirge	0.11	0.17	0.01	0.08	0.25	—	0.62	—
Siegerland-Wied Central and Southern Germ.	0.16	0.17	0.20	0.08	0.04	0.02	0.03	—
Other German fields	1.50	0.65	0.37	0.78	1.13	1.68	1.73	1.17
Germany (FR)	*5.80*	*2.08*	*1.10*	*1.67*	*2.60*	*2.67*	*4.16*	*1.17*
Belgium	—	—	*0.02*	—	—	—	—	—
Eastern France	16.07	12.51	12.88	16.16	14.29	18.92	13.38	9.22
Western France	1.96	1.12	1.06	1.87	1.04	1.62	0.99	0.78
Centre/Midi	0.11	0.03	0.03	0.04	0.05	0.04	0.17	0.02
France	*18.14*	*13.66*	*13.97*	*18.07*	*15.38*	*20.58*	*14.54*	*10.72*
Italy	*0.68*	*0.67*	*0.28*	*0.14*	*0.73*	*1.51*	*0.56*	*0.47*
Luxembourg	*0.97*	*0.91*	*0.61*	*0.80*	*1.47*	*1.26*	*4.02*	*3.17*
Total	**25.59**	**17.32**	**15.98**	**20.68**	**20.18**	**26.02**	**23.28**	**15.53**

IRON-ORE INDUSTRY

Extraction

TABLE XIV

Extraction and Extraction Potential by Orefields

'000,000 metric tons

Actual extraction 1969	Orefield	Extraction potential 1966	1967	1968	1969	Expected extraction potential 1970	1971	1972	1973
6,1	Salzgitter, Ilsede, Harzvorland Osnabrück, Weser-Wiehengebirge	8.6	7.5	7.2	6.4	6.6	6.7	6.7	6.7
0,3	Siegerland-Wied Central and Southern Germany	0.7	0.5	0.4	0.3	0.3	0.3	0.1	0.1
1,0	Other German fields	2.1	2.0	1.6	1.6	0.9	0.8	0.8	0.8
7,4	*Germany (FR)*	*11.4*	*10.0*	*9.2*	*8.3*	*7.8*	*7.8*	*7.6*	*7.6*
0,1	*Belgium*	*0.2*	*0.2*	*0.1*	*0.1*	—	—	—	—
53,9	Eastern France	64.5	*60.6*	59.4	59.3	61.4	61.9	61.1	60.1
3,1	Western France	4.7	4.7	4.4	3.7	3.3	3.1	3.1	3.1
0,0	Centre/Midi	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
56,0	*France*	*69.4*	*65.4*	*63.9*	*63.1*	*64.8*	*65.1*	*64.3*	*63.3*
1,2	*Italy*	*1.5*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*
6,3	*Luxembourg*	*8.0*	*7.3*	*7.3*	*7.3*	*6.4*	*7.3*	*7.4*	*7.2*
71,0	**Total**	**90.5**	**84.3**	**81.9**	**80.2**	**80.4**	**81.6**	**80.7**	**79.5**

COKE

Production

TABLE VII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production(1)	Area	Production potential				Expected production potential			
1969		1966	1967	1968	1969	1970	1971	1972	1973
	Mine-owned coking-plants								
26.4	Ruhr	34.4	30.5	28.8	28.2	27.6	27.9	28.7	30.9
2.1	Aachen(2)	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1
—	Lower Saxony	—	—	—	—	—	—	—	—
1.8	Saar	1.3	1.3	1.8	1.8	1.9	1.9	1.9	1.9
30.3	*Germany (F.R.)*	*37.6*	*33.7*	*32.6*	*32.0*	*31.6*	*31.9*	*32.7*	*34.9*
0.1	*Belgium* and the *Netherlands*	*3.4*	*2.4*	*2.1*	*1.0*	*0.1*	*0.1*	*0.1*	*0.1*
5.4	Nord/Pas-de-Calais	5.2	5.2	5.1	5.3	5.3	5.5	5.0	4.6
2.8	Lorraine	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7
0.8	Centre/Midi	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5
9.0	*France*	*8.9*	*8.9*	*8.8*	*9.0*	*9.0*	*9.2*	*8.7*	*7.8*
39.4	**Total**	**49.9**	**45.0**	**43.5**	**42.0**	**40.7**	**41.2**	**41.5**	**42.8**
	Independent coking-plants								
1.0	*Belgium* and the *Netherlands*	*1.4*	*1.4*	*1.4*	*1.2*	*1.0*	*1.0*	*1.0*	*1.0*
—	*France*	—	—	—	—	—	—	—	—
2.4	*Italy*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*
3.4	**Total**	**3.9**	**3.9**	**3.9**	**3.7**	**3.5**	**3.5**	**3.5**	**3.5**
	Steelworks-owned coking-plant								
7.8	*Germany (FR)*	*8.4*	*8.1*	*7.9*	*7.6*	*8.3*	*9.0*	*9.1*	*9.9*
7.8	*Belgium* and the *Netherlands*	*6.6*	*6.7*	*6.8*	*6.9*	*8.3*	*8.4*	*9.3*	*9.7*
4.4	*France*	*4.5*	*4.6*	*4.4*	*4.7*	*5.3*	*5.2*	*5.5*	*6.3*
4.1	*Italy*	*4.3*	*4.3*	*4.3*	*4.3*	*4.7*	*5.3*	*5.9*	*6.6*
24.1	**Total**	**23.8**	**23.7**	**23.4**	**23.5**	**26.6**	**27.9**	**29.8**	**32.5**
66.9	**Grand Total**	**77.6**	**72.6**	**70.8**	**69.2**	**70.8**	**72.6**	**74.8**	**78.8**

(1) These figures are not the same as those published in the Commission's *Bulletin Statistique*, since certain coking-plants have been classified differently.

(2) Including electrode coke (32 000 metric tons produced in 1969).

IRON AND STEEL INDUSTRY

Total Investment

TABLE XV

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	35.60	21.66	30.02	35.84	43.28	41.42	122.24	110.35
North Rhine/Westphalia	238.20	220.84	128.27	131.90	222.62	208.43	336.39	315.17
Southern Germany	9.06	22.78	9.35	15.12	22.34	27.41	39.59	27.72
Saar	28.70	29.05	55.93	41.71	22.00	36.32	69.62	57.41
Germany (FR)	*311.56*	*294.33*	*223.57*	*224.57*	*310.24*	*313.58*	*567.84*	*510.65*
Belgium	*142.35*	*142.87*	*100.17*	*74.45*	*132.24*	*133.22*	*253.11*	*132.33*
Eastern France	111.45	99.91	99.36	161.03	160.87	150.52	188.51	101.31
Northern France	30.93	22.42	42.97	66.15	77.57	91.98	133.65	193.46
France : other areas	27.53	25.23	28.08	25.94	35.04	40.71	58.43	35.05
France	*169.91*	*147.56*	*170.41*	*253.12*	*273.48*	*283.21*	*380.59*	*329.82*
Italy : coastal areas	193.98	131.50	69.11	64.90	102.81	157.24	183.12	173.34
Italy : other areas	52.29	35.09	56.53	46.53	39.90	63.99	93.38	46.26
Italy	*246.27*	*166.59*	*125.64*	*111.43*	*142.71*	*221.23*	*276.50*	*219.60*
Luxembourg	*24.83*	*28.37*	*15.80*	*13.55*	*34.13*	*35.39*	*45.21*	*27.74*
Netherlands	*37.32*	*68.35*	*94.61*	*124.95*	*124.26*	*112.34*	*98.42*	*99.92*
Total	**932.24**	**848.07**	**730.20**	**802.07**	**1017.06**	**1098.97**	**1622.67**	**1320.06**

STEELWORKS-OWNED COKING-PLANTS

Investment

TABLE XVI a

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	0.26	0.10	0.03	0.08	0.28	0.31	0.28	—
North Rhine/Westphalia	0.10	0.50	0.31	1.11	1.39	0.31	7.83	7.36
Southern Germany	0.03	0.02	0.06	—	—	—	—	—
Saar	0.12	0.10	0.88	0.42	0,34	0.70	0.25	—
Germany (FR)	*0.51*	*0.72*	*1.28*	*1.61*	*2.01*	*1.32*	*8.36*	*7.36*
Belgium	*1.91*	*2.18*	*1.27*	*0.44*	*0.48*	*0.20*	*18.64*	*20.66*
Eastern France	0.17	0.40	0.28	0.32	0.29	0.29	0.17	—
Northern France	0.45	0.21	3.96	9.51	16.40	17.40	13.15	16.52
France : other areas	0.10	0.02	0.08	0.06	0.03	0.01	—	—
France	*0.72*	*0.63*	*4.32*	*9.89*	*16.72*	*17.70*	*13.32*	*16.52*
Italy : coastal areas	12.49	5.47	1.72	1.03	11.23	17.24	19.40	23.08
Italy : other areas	—	—	—	—	—	—	—	—
Italy	*12.49*	*5.47*	*1.72*	*1.03*	*11.23*	*17.24*	*19.40*	*23.08*
Luxembourg	—	—	—	—	—	—	—	—
Netherlands	*1.61*	*1.37*	*2.88*	*0.73*	*0.18*	*0.15*	*1.12*	*2.32*
Total	**17.24**	**10.37**	**11.47**	**13.70**	**30.62**	**36.61**	**60.84**	**69.94**

BURDEN-PREPARATION

Investment

TABLE XVI b

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	1.16	0.35	0.16	1.22	2.09	2.95	4.10	3.56
North Rhine/Westphalia	3.16	1.95	2.56	2.44	8.15	9.37	25.50	34.61
Southern Germany	0.24	0.06	0.16	0.01	0.02	0.03	0.09	—
Saar	1.56	3.63	16.32	1.58	1.19	2.02	2.39	0.52
Germany (FR)	*6.12*	*5.99*	*19.20*	*5.25*	*11.45*	*14.37*	*32.08*	*38.69*
Belgium	*5.11*	*11.41*	*6.89*	*3.65*	*5.23*	*3.57*	*11.77*	*11.83*
Eastern France	13.51	11.79	9.70	17.09	9.15	12.27	21.50	6.40
Northern France	5.00	5.20	2.50	5.10	7.70	9.26	20.10	23.00
France : other areas	0.54	0.11	0.40	0.88	0.17	0.16	0.08	0.06
France	*19.05*	*17.10*	*12.60*	*23.07*	*17.02*	*21.69*	*41.68*	*29.46*
Italy : coastal areas	19.91	9.61	3.47	6.04	3.78	5.68	7.55	12.01
Italy : other areas	0.05	0.02	0.06	0.10	0.08	0.28	0.37	0.10
Italy	*19.96*	*9.63*	*3.53*	*6.14*	*3.86*	*5.96*	*7.92*	*12.11*
Luxembourg	*0.62*	*0.43*	*0.28*	*0.85*	*8.61*	*10.18*	*15.45*	*7.86*
Netherlands	*1.08*	*0.49*	*1.30*	*5.33*	*21.84*	*18.74*	*4.34*	*2.52*
Total	**51,94**	**45,05**	**43,80**	**44.29**	**68.01**	**74.51**	**113.24**	**102.47**

BLAST-FURNACES

Investment

TABLE XVI c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	7.73	4.19	5.35	3.66	6.89	7.18	23.48	15.31
North Rhine/Westphalia	28.63	16.31	8.19	12.82	16.01	15.90	44.08	85.57
Southern Germany	0.59	0.49	0.66	0.80	1.10	0.69	0.84	—
Saar	4.34	1.96	1.75	2.62	4.85	4.56	5.68	3.24
Germany (FR)	*41.29*	*22.95*	*15.95*	*19.90*	*28.85*	*28.33*	*74,08*	*104.12*
Belgium	*11.26*	*16.22*	*12.89*	*9.01*	*10.71*	*13.94*	*27.80*	*19.91*
Eastern France	9.82	7.31	10.93	10.65	11.02	10.91	13.24	7.95
Northern France	2.31	2.50	11.26	11.38	8.20	9.99	6.59	18.10
France : other areas ...	0.56	0.22	0.28	0.44	1.44	1.43	2.41	1.05
France	*12.69*	*10.03*	*22.47*	*22.47*	*20.66*	*22.33*	*22.24*	*27.10*
Italy : coastal areas ...	18.14	12.81	9.90	11.24	16.20	21.77	11.93	22.26
Italy : other areas	0.25	0.27	0.56	0.16	0.23	0.86	0.25	—
Italy	*18.39*	*13.08*	*10.46*	*11.40*	*16.43*	*22.63*	*12.18*	*22.26*
Luxembourg	*4.27*	*2.11*	*0.53*	*2.66*	*8.00*	*8.67*	*5.82*	*0.03*
Netherlands	*3.29*	*12.67*	*13.02*	*0.91*	*3.28*	*7.24*	*10.72*	*22.50*
Total	**91.19**	**77.06**	**75.32**	**66.35**	**87.93**	**103.14**	**152.84**	**195.92**

STEELWORKS-OWNED COKING-PLANTS, BURDEN PREPARATION AND BLAST-FURNACES-TOTAL

Investment

TABLE XVI d

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	9.15	4.64	5.54	4.96	9.26	10.44	27.86	18.87
North Rhine/Westphalia	31.89	18.76	11.06	16.37	25.55	25.58	77.41	127.54
Southern Germany	0.86	0.57	0.88	0.81	1.12	0.72	0.93	—
Saar	6.02	5.69	18.95	4.62	6.38	7.28	8.32	3.76
Germany (FR)	*47.92*	*29.66*	*36.43*	*26.76*	*42.31*	*44.02*	*114.52*	*150.17*
Belgium	*18.28*	*29.81*	*21.05*	*13.10*	*16.42*	*17.71*	*58.21*	*52.40*
Eastern France	23.50	19.50	20.91	28.06	20.46	23.47	34.91	14.35
Northern France	7.76	7.91	17.72	25.99	32.30	36.65	39.84	57.62
France : other areas	1.20	0.35	0.76	1.38	1.64	1.60	2.49	1.11
France	*32.46*	*27.76*	*39.39*	*55.43*	*54.40*	*61.72*	*77.24*	*73.08*
Italy : coastal areas	50.54	27.89	15.09	18.31	31.21	44.69	38.88	57.35
Italy : other areas	0.30	0.29	0.62	0.26	0.31	1.14	0.62	0.10
Italy	*50.84*	*28.18*	*15.71*	*18.57*	*31.52*	*45.83*	*39.50*	*57.45*
Luxembourg	*4.89*	*2.54*	*0.81*	*3.51*	*16.61*	*18.85*	*21.27*	*7.89*
Netherlands	*5.98*	*14.53*	*17.20*	*6.97*	*25.30*	*26.13*	*16.18*	*27.34*
Total	**160.37**	**132.48**	**130.59**	**124.34**	**186.56**	**214.26**	**326.92**	**368.33**

BASIC BESSEMER STEELWORKS

Investment

TABLE XVII a

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	0.60	0.52	0.07	0.14	—	—	—	—
North Rhine/Westphalia	1.32	0.69	6.20	—	0.02	—	—	—
Southern Germany	0.52	0.16	0.88	0.78	1.17	1.11	0.31	—
Saar	1.61	1.37	0.96	0.34	0.52	0.41	0.48	0.16
Germany (FR)	*4.05*	*2.74*	*8.11*	*1.26*	*1.71*	*1.52*	*0.79*	*0.16*
Belgium	*2.37*	*1.80*	*0.89*	*1.17*	*1.15*	*1.26*	*2.57*	*2.10*
Eastern France	2.32	3.33	2.88	2.80	3.93	3.51	4.60	1.57
Northern France	0.20	0.20	—	—	—	—	—	—
France : other areas	0.11	0.08	0.04	0.03	0.05	0.08	0.62	0.66
France	*2.63*	*3.61*	*2.92*	*2.83*	*3.98*	*3.59*	*5.22*	*2.23*
Italy : coastal areas	—	—	—	—	—	—	—	—
Italy : other areas	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—
Luxembourg	*1.11*	*2.08*	*0.95*	*0.09*	*0.04*	*0.19*	*1.20*	*0.08*
Netherlands	—	—	—	—	—	—	—	—
Total	**10.16**	**10.23**	**12.87**	**5.35**	**6.88**	**6.56**	**9.78**	**4.57**

OPEN-HEARTH STEELWORKS

Investment

TABLE XVII b

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	2.19	0.59	0.13	0.26	0.65	0.75	0.52	0.04
North Rhine/Westphalia	4.80	3.37	1.54	1.32	0.98	1.57	2.16	0.32
Southern Germany	0.35	0.37	0.13	0.05	0.02	0.03	0.78	—
Saar	0.46	0.32	0.32	1.35	0.55	0.34	0.17	—
Germany (FR)	*7.80*	*4.65*	*2.12*	*2.98*	*2.20*	*2.69*	*3.63*	*0.36*
Belgium	*0.21*	*0.05*	*0.03*	*0.01*	—	—	—	—
Eastern France	1.03	0.86	0,37	0.72	0.63	0.87	0.64	0.38
Northern France	0.20	0.67	0.21	0.28	0.76	0.14	0.97	—
France : other areas	0.07	0.03	0.06	0.04	0.14	0.12	0.26	0.36
France	*1.30*	*1.56*	*0.64*	*1.04*	*1.53*	*1.13*	*1.87*	*0.74*
Italy : coastal areas	2.32	0.41	0.24	0.13	0.41	0.58	0.29	—
Italy : other areas	0.90	1.35	0.85	1.94	0.59	0.76	0.58	0.46
Italy	*3.22*	*1.76*	*1.09*	*2.07*	*1.00*	*1.34*	*0.87*	*0.46*
Luxembourg	—	—	—	—	—	—	—	—
Netherlands	*0.52*	*0.63*	*—0.02*	*0.56*	*0.17*	*0.11*	*0.14*	*0.08*
Total	**13.05**	**8.65**	**3.86**	**6.66**	**4.90**	**5.27**	**6.51**	**1.64**

ELECTRIC-FURNACE STEELWORKS

Investment

TABLE XVII c

Capital Expenditure by Areas

'00000,0 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	0.05	—	0.06	—	0.08	—	0.03	—
North Rhine/Westphalia .	2.51	1.21	1.68	1.77	3.98	4.61	11.05	2.91
Southern Germany	0.51	0.38	0.10	4.01	0.67	0.45	0.15	0.05
Saar	—	1.49	4.66	0.13	0.79	1.53	1.28	—
Germany (FR)	*3.07*	*3.08*	*6.50*	*5.91*	*5.52*	*6.59*	*12.51*	*2.96*
Belgium	*0.34*	*0.23*	*0.17*	*0.63*	*1.97*	*3.10*	*5.57*	*0.62*
Eastern France	0.77	0.05	0.04	0.07	0.56	0.29	0.52	0.41
Northern France	0.34	0.38	0.82	0.09	1.12	0.33	4.99	3.46
France : other areas	6.30	3.58	2.53	2.39	5.92	8.57	7.58	2.19
France	*7.41*	*4.01*	*3.39*	*2.55*	*7.60*	*9.19*	*13.09*	*6.06*
Italy : coastal areas	1.41	0.85	0.25	0.67	0.73	0.04	0.26	—
Italy : other areas	3.46	2.06	6.47	6.82	5.03	5.06	8.11	3.24
Italy	*4.87*	*2.91*	*6.72*	*7.49*	*5.76*	*5.10*	*8.37*	*3.24*
Luxembourg	*0.01*	*0.01*	—	—	—	*0.02*	*0.23*	*0.10*
Netherlands	*0.75*	*0.19*	*0.05*	—	—	—	—	—
Total	**16.45**	**10.43**	**16.83**	**16.58**	**20.85**	**24.00**	**39.77**	**12.98**

LD, KALDO AND OTHER STEELWORKS

Investment

TABLE XVII d

Capital Expenditure by Area

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	0.63	0.18	12.43	15.23	16.30	12.65	12.58	4.14
North Rhine/Westphalia	23.58	31.96	14.20	19.67	42.69	27.32	25.18	16.75
Southern Germany	—	—	—	—	—	—	—	—
Saar	0.36	3.26	10.19	9.10	2.55	2.73	1.52	4.76
Germany (FR)	*24.57*	*35.40*	*36.82*	*44.00*	*61.54*	*42.70*	*39.28*	*26.65*
Belgium	*25.86*	*21.72*	*27.09*	*12.40*	*22.85*	*11.91*	*19.97*	*11.90*
Eastern France	2.51	3.36	7.84	22.99	33.49	22.79	34.31	27.84
Northern France	2.40	1.20	2.60	4.60	2.97	3.90	14.73	29.36
France : other areas	0.15	1.27	1.91	1.77	1.26	1.09	1.45	0.11
France	*5.06*	*5.83*	*12.35*	*29.36*	*37.72*	*27.78*	*50.49*	*57.31*
Italy : coastal areas	18.16	8.37	7.52	9.00	21.77	31.81	31.73	14.04
Italy : other areas	—	—	0.73	—	—	2.72	—	—
Italy	*18.16*	*8.37*	*8.25*	*9.00*	*21.77*	*34.53*	*31.73*	*14.04*
Luxembourg	*9.79*	*12.59*	*7.73*	*1.64*	*1.81*	*2.81*	*5.80*	*6.10*
Netherlands	*1.59*	*8.90*	*17.95*	*23.13*	*5.54*	*3.58*	*1.98*	*1.84*
Total	**85.03**	**92.81**	**110.19**	**119.53**	**151.23**	**123.31**	**149.25**	**116.84**

STEELWORKS TOTAL

Investment

TABLE XVII e

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	3.47	1.29	12.69	15.63	17.03	13.40	13.13	4.18
North Rhine/Westphalia .	32.21	37.23	23.62	22.76	47.67	33.50	38.39	19.98
Southern Germany	1.38	0.91	1.11	4.84	1.86	1.59	1.24	0.05
Saar..... ...	2.43	6.44	16.13	10.92	4.41	5.01	3.45	4.92
Germany (FR)	*39.49*	*45.87*	*53.55*	*54.15*	*70.97*	*53.50*	*56.21*	*29.13*
Belgium	*28.78*	*23.80*	*28.18*	*14.21*	*25.97*	*16.27*	*28.11*	*14.62*
Eastern France	6.63	7.60	11.13	26.58	38.61	27.46	40.07	30.20
Northern France	3.14	2.45	3.63	4.97	4.85	4.37	20.69	32.82
France : other areas	6.63	4.96	4.54	4.23	7.37	9.86	9.91	3.32
France.....	*16.40*	*15.01*	*19.30*	*35.78*	*50.83*	*41.69*	*70.67*	*66.34*
Italy : coastal areas	21.89	9.63	8.01	9.80	22.91	32.43	32.28	14.04
Italy : other areas..... .	4.36	3.41	8.05	8.76	5.62	8.54	8.69	3.70
Italy	*26.25*	*13.04*	*16.06*	*18.56*	*28.53*	*40.97*	*40.97*	*17.74*
Luxembourg	*10.91*	*14.68*	*8.68*	*1.73*	*1.85*	*3.02*	*7.23*	*6.28*
Netherlands	*2.86*	*9.72*	*17.98*	*23.69*	*5.71*	*3.69*	*2.12*	*1.92*
Total	**124.69**	**122.12**	**143.75**	**148.12**	**183.86**	**159.14**	**205.31**	**136.03**

BLOOMING AND SLABBING MILLS

Investment

TABLE XVIII a

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1970 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	1.53	1.25	1.20	1.57	1.52	1.88	9.19	11.05
North Rhine/Westphalia	6.59	13.11	8.15	9.42	11.57	9.01	14.88	13.07
Southern Germany	0.56	3.48	0.45	0.13	0.47	0.49	0.45	—
Saar	4.14	0.82	0.47	0.24	1.51	1.31	0.77	0.03
Germany (FR)	*12.82*	*18.66*	*10.27*	*11.36*	*15.07*	*12.69*	*25.29*	*24.15*
Belgium	*10.95*	*10.29*	*7.89*	*3.89*	*3.72*	*3.33*	*6.89*	*4.41*
Eastern France	2.57	4.66	18.10	44.85	36.01	29.30	28.81	20.61
Northern France	1.80	0.90	2.50	5.80	2.40	3.50	0.80	0.40
France : other areas	0.25	0.32	0.32	0.33	0.29	0.98	1.04	0.24
France	*4.62*	*5.88*	*20.92*	*50.98*	*38.70*	*33.78*	*30.65*	*21.25*
Italy : coastal areas.....	8.96	5.33	5.62	2.60	7.57	13.41	10.83	8.00
Italy : other areas	3.51	1.68	2.70	2.19	1.14	0.75	0.58	0.88
Italy	*12.47*	*7.01*	*8.32*	*4.79*	*8.71*	*14.16*	*11.41*	*8.88*
Luxembourg	*0.06*	*0.16*	*0.15*	*0.78*	*2.42*	*2.72*	*10.08*	*10.69*
Netherlands	*3.22*	*1.43*	*4.95*	*11.17*	*22.53*	*16.83*	*6.34*	*1.77*
Total	**44.14**	**43.43**	**52.50**	**82.97**	**91.15**	**83.51**	**90.66**	**71.15**

CONTINUOUS CASTING PLANTS

Investment

TABLE XVIII b

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	—	—	—	—	—	—	7.35	12.08
North Rhine/Westphalia ..	9.55	9.56	12.58	4.73	15.46	12.93	16.12	15.77
Southern Germany	0.02	0.20	0.05	1.19	5.51	3.09	2.00	—
Saar	0.15	1.88	8.34	6.46	0.49	—	1.64	1.37
Germany (FR)	*9.72*	*11.64*	*20.97*	*12.38*	*21.46*	*16.02*	*27.11*	*29.22*
Belgium	—	—	—	—	—	—	—	—
Eastern France	0.03	—	—	—	*0.02*	0.17	0.03	0.03
Northern France	—	—	0.67	1.22	5.00	8.45	15.61	27.99
France : other areas	—	—	—	0.95	0.62	0.64	0.07	—
France	*0.03*	—	*0.67*	*2.17*	*5.64*	*9.26*	*15.71*	*28.02*
Italy : coastal areas	—	0.41	0.01	—	1.41	3.09	12.68	10.27
Italy : other areas	0.26	1.07	6.61	5.34	2.77	2.14	6.80	1.07
Italy	*0.26*	*1.48*	*6.62*	*5.34*	*4.18*	*5.23*	*19.48*	*11.34*
Luxembourg	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—
Total	**10.01**	**13.12**	**28.26**	**19.89**	**31.28**	**30.51**	**62.30**	**68.58**

SECTION MILLS

Investment

TABLE XVIII c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	3.79	2.86	0.87	0.48	0.65	1.19	4.40	6.30
North Rhine/Westphalia	22.45	16.07	18.08	11.71	10.45	11.40	20.21	18.22
Southern Germany	0.93	2.35	0.33	4.27	2.14	5.29	8.48	3.14
Saar	1.60	2.42	2.38	11.74	0.94	3.10	13.24	20.32
Germany (FR)	*28.77*	*23.70*	*21.66*	*28.20*	*14.18*	*20.98*	*46.33*	*47.98*
Belgium	*4.93*	*3.62*	*2.70*	*5.17*	*18.42*	*14.72*	32.52	*18.70*
Eastern France	25.88	41.10	21.31	14.49	11.63	16.18	18.85	4.28
Northern France	1.35	1.47	1.80	2.62	1.65	2.19	3.94	0.10
France : other areas	8.39	6.12	3.83	2.75	2.08	3.50	3.44	3.53
France	*35.62*	*48.69*	*26.94*	*19.86*	*15.36*	*21.87*	*26.23*	*7.91*
Italy : coastal areas	20.57	22.49	11.54	4.54	1.98	2.86	3.20	2.97
Italy : other areas	6.33	9.23	12.29	7.25	3.84	9.40	7.06	7.86
Italy	*26.90*	*31.72*	*23.83*	*11.79*	*5.82*	*12.26*	*10.26*	*10.83*
Luxembourg	*5.42*	*2.58*	*0.38*	*0.86*	*9.40*	*6.73*	*1.56*	*0.10*
Netherlands	*7.83*	*5.97*	*3.33*	*0.51*	*– 0.33*	*0.04*	*0.03*	—
Total	**109.47**	**116.28**	**78.84**	**66.39**	**62.85**	**76.60**	**116.93**	**85.52**

FLAT-PRODUCT MILLS

Investment

TABLE XVIII d

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	7.01	5.07	2.10	2.85	6.09	5.61	44.97	51.51
North Rhine/Westphalia	77.51	84.90	31.33	32.88	58.25	55.87	93.54	90.38
Southern Germany	2.40	4.17	2.24	0.70	2.40	2.67	12.13	13.08
Saar	0.48	0.43	0.42	0.42	1.01	10.43	26.29	20.09
Germany (FR)	*87.40*	*94.57*	*36.09*	*36.85*	*67.75*	*74.58*	*176.93*	*175.06*
Belgium	*51.87*	*47.76*	*22.04*	*25.46*	*47.87*	*55.87*	*100.76*	*24.38*
Eastern France	13.93	4.40	6.86	13.13	21.96	24.22	31.57	12.21
Northern France	10.68	4.67	10.42	19.67	19.42	17.74	27.50	44.98
France : other areas	6.04	5.41	8.17	9.13	14.10	13.64	23.55	18.04
France	*30.65*	*14.48*	*25.45*	*41.93*	*55.48*	*55.60*	*82.62*	*75.23*
Italy : coastal areas	10.65	3.35	4.57	17.07	19.53	29.21	37.89	42.29
Italy : other areas	29.87	12.41	14.38	14.12	17.14	23.68	57.36	21.22
Italy	*40.53*	*15.76*	*18.95*	*31.19*	*36.67*	*52.89*	*95.25*	*63.51*
Luxembourg	*1.56*	*3.31*	*3.81*	*3.49*	*0.85*	*1.21*	*0.67*	*0.02*
Netherlands	*7.03*	*10.12*	*24.52*	*54.90*	*50.29*	*42.25*	*45.99*	*34.60*
Total	**219.04**	**186.00**	**130.86**	**193.82**	**258.91**	**282.40**	**502.22**	**372.80**

ROLLING-MILLS TOTAL(1)

Investment

TABLE XVIII e

Capital Expenditure by Area

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	12.64	9.72	4.97	6.95	9.11	9.56	69.64	82.76
North Rhine/Westphalia	132.60	134.62	73.83	61.99	109.68	108.13	170.33	150.53
Southern Germany	4.58	18.50	4.51	7.69	14.12	18.33	30.40	23.64
Saar	8.62	6.95	13.95	20.86	5.37	17.43	43.43	41.95
Germany (FR)	*158.44*	*169.79*	*97.26*	*97.49*	*138.28*	*153.45*	*313.80*	*298.88*
Belgium	*71.71*	*64.35*	*35.00*	*39.48*	*79.58*	*84.66*	*152.17*	*54.79*
Eastern France	47.95	54.49	49.28	76.34	73.42	74.52	82.70	37.88
Northern France	15.07	7.33	16.26	30.62	34.08	39.00	53.35	82.87
France : other areas	17.10	16.10	19.75	17.23	21.62	24.10	39.63	28.49
France	*80.12*	*77.92*	*85.29*	*124.19*	*129.12*	*137.62*	*175,68*	*149.24*
Italy : coastal areas.....	46.61	34.32	22.93	25.34	36.89	56.14	78.36	74.72
Italy : other areas	41.85	25.88	38.74	32.11	26.94	39.92	75.66	35.79
Italy	*88.46*	*60.20*	*61.67*	*57.45*	*63.83*	*96.06*	*154.02*	*110.51*
Luxembourg	*7.27*	*7.92*	*4.64*	*5.68*	*12.69*	*11.18*	*12.64*	*10.85*
Netherlands	*19.49*	*24.83*	*33.86*	*66.75*	*72.83*	*61.96*	*56.88*	*45.87*
Total	**425.49**	**405.01**	**317.72**	**391.04**	**496,33**	**544.93**	**865,19**	**670,14**

(1) Including ancillary and auxiliary plants.

STEELWORKS-OWNED POWER-GENERATING PLANTS AND DISTRIBUTION NETWORKS

Investment

TABLE XIX a

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	3.55	1.89	1.93	4.61	1.92	2.69	3.75	3.11
North Rhine/Westphalia	10.12	7.03	7.36	13.05	16.50	16.60	11.08	4.77
Southern Germany	1.10	0.79	0.77	0.34	4.48	5.32	3.24	1.83
Saar	1.23	0.63	0.42	0.71	1.15	0.71	2.37	0.99
Germany (FR)	*16.00*	*10.34*	*10.48*	*18.71*	*24.05*	*25.32*	*20.44*	*10.70*
Belgium	*13.62*	*13.97*	*7.46*	*2.29*	*3.02*	*5.50*	*4.72*	*2.81*
Eastern France	3.26	3.04	3.12	3.34	3.59	2.17	5.18	2.79
Northern France	1.47	0.41	0.23	0.14	0.12	0.63	1.51	0.10
France : other areas	0.65	0.78	0.99	1.21	1.46	1.97	0.76	0.67
France	*5.38*	*4.23*	*4.34*	*4.69*	*5.17*	*4.77*	*7.45*	*3.56*
Italy : coastal areas	16.65	5.20	0.94	0.38	0.02	0.43	0.13	0.48
Italy : other areas	1.37	1.68	2.76	1.18	1.23	1.54	1.79	1.61
Italy	*18.02*	*6.88*	*3.70*	*1.56*	*1.25*	*1.97*	*1.92*	*2.09*
Luxembourg	*0.50*	*1.50*	*0.47*	*0.60*	*0.06*	*0.10*	*0.15*	*0.02*
Netherlands	*2.20*	*6.12*	*7.02*	*5.52*	*5.72*	*5.41*	*5.93*	*5.05*
Total	**55.72**	**43.04**	**33.47**	**33.37**	**39.27**	**43.07**	**40.61**	**24.23**

MISCELLANEOUS (IRON AND STEEL WORKS)

- **Investment**

TABLE XIX b

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or aproved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	6.79	4.12	4.89	3.69	5.96	5.33	7.86	1.43
North Rhine/Westphalia ..	31.38	23.20	12.40	17.73	23.22	24.62	39.18	12.35
Southern Germany	1.14	2.01	2.08	1.44	0.76	1.45	3.78	2.20
Saar	10.40	9.34	6.48	4.60	4.69	5.89	12.05	5.79
Germany (FR)	*49.71*	*38.67*	*25.85*	*27.46*	*34.63*	*37.29*	*62.87*	*21.77*
Belgium	*9.96*	*10.94*	*8.48*	*5.37*	*7.25*	*9.08*	*9.90*	*7.71*
Eastern France	30.11	15.28	14.92	26.71	24.79	22.90	25.65	16.09
Northern France	3.49	4.32	5.13	4.43	6.22	11.33	18.26	20.05
France : other areas	1.95	3.04	2.04	1.89	2.95	3.18	5.64	1.46
France	*35.55*	*22.64*	*22.09*	*33.03*	*33.96*	*37.41*	*49.55*	*37.60*
Italy : coastal areas	58.29	54.46	22.14	11.07	11.78	23.55	33.47	26.75
Italy : other areas	4.41	3.83	6.36	4.22	5.80	12.85	6.62	5.06
Italy	*62.70*	*58.29*	*28.50*	*15.29*	*17.58*	*36.40*	*40.09*	*31.81*
Luxembourg	*1.26*	*1.73*	*1.20*	*2.03*	*2.92*	*2.24*	*4.92*	*2.70*
Netherlands	*6.79*	*13.15*	*18.55*	*22.02*	*14.70*	*15.15*	*17.31*	*19.74*
Total	**165.97**	**145.42**	**104.67**	**105.20**	**111.04**	**137.57**	**184.64**	**121.33**

GENERAL SERVICES (IRON AND STEEL WORKS) TOTAL

Investment

TABLE XIX c

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1969 for	on Jan. 1, 1970 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	10.34	6.01	6.82	8.30	7.88	8.02	11.61	4.54
North Rhine/Westphalia .	41.50	30.23	19.76	30.78	39.72	41.22	50.26	17.12
Southern Germany	2.24	2.80	2.85	1.78	5.24	6.77	7.02	4.03
Saar	11.63	9.97	6.90	5.31	5.84	6.60	14.42	6.78
Germany (FR)	*65.71*	*49.01*	*36.33*	*46.17*	*58.68*	*62.61*	*83.31*	*32.47*
Belgium	*23.58*	*24.91*	*15.94*	*7.66*	*10 27*	*14.58*	*14.62*	*10.52*
Eastern France	33.37	18.32	18.04	30.05	28.38	25.07	30.83	18.88
Northern France.....	4.96	4.73	5.36	4.57	6.34	11.96	19.77	20.15
France: other areas	2.60	3.82	3.03	3.10	4.41	5.15	6.40	2.13
France	*40.93*	*26.87*	*26.43*	*37.72*	*39.13*	*42.18*	*57.00*	*41.16*
Italy: coastal areas	74.94	59.66	23.08	11.45	11.80	23.98	33.60	27.23
Italy: other areas	5.78	5.51	9.12	5.40	7.03	14.39	8.41	6.67
Italy	*80.72*	*65.17*	*32.20*	*16.85*	*18.83*	*38.37*	*42.01*	*33.90*
Luxembourg	*1.76*	*3.23*	*1.67*	*2.63*	*2.98*	*2.34*	*5.07*	*2.72*
Netherlands	*8.99*	*19.27*	*25.57*	*27.54*	*20.42*	*20.56*	*23.24*	*24.79*
Total	**221.69**	**188.46**	**138.14**	**138.57**	**150.31**	**180.64**	**225.25**	**145.56**

SINTER

Production

TABLE XX

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
7.4	Northern Germany	7.9	8.4	8.4	9.0	10.0	10.4	10.4	10.4
19.4	North Rhine/Westphalia	21.4	20.8	22.0	21.4	22.3	26.2	32.2	32.2
9.2	Southern Germany	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
6.7	Saar	6.1	6.1	6.5	7.0	7.5	7.5	7.5	7.5
33.7	*Germany (FR)*	*35.8*	*35.7*	*37.2*	*37.7*	*40.0*	*44.3*	*50.3*	*50.3*
9.9	*Belgium*	*9.4*	*10.1*	*10.7*	*11.3*	*11.6*	*11.8*	*13.4*	*13.6*
20.8	Eastern France	18.0	19.7	20.2	22.1	22.1	24.0	25.6	25.6
5.0	Northern France	3.7	4.3	5.0	5.2	5.2	6.1	9.4	9.4
0.8	France: other areas	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
26.6	*France*	*23.1*	*25.4*	*26.6*	*28.7*	*28.7*	*31.5*	*36.4*	*36.4*
8.3	Italy: coastal areas	8.0	9.3	9.4	9.6	10.8	10.9	11.3	11.3
0.4	Italy: other areas	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8.7	*Italy*	*8.6*	*9.8*	*9.9*	*10.1*	*11.3*	*11.4*	*11.8*	*11.8*
5.2	*Luxembourg*	*5.6*	*5.7*	*5.7*	*5.8*	*5.8*	*7.3*	*7.3*	*7.3*
3.4	*Netherlands*	*3.2*	*3.3*	*3.4*	*3.4*	*5.3*	*5.7*	*6.0*	*6.2*
87.5	**Total**	**85.7**	**90.0**	**93.5**	**97.0**	**102.7**	**112.0**	**125.2**	**125.6**

PIG-IRON

Production

TABLE XXI

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
5.5	Northern Germany	5.7	5.9	6.2	6.7	7.2	7.6	8.9	8.9
22.8	North Rhine/Westphalia	23.3	23.6	24.0	24.2	26.0	28.0	31.5	31.8
0.9	Southern Germany	1.8	1.7	1.4	1.3	1.3	1.3	1.3	1.3
4.6	Saar	5.0	5.1	5.1	5.4	5.9	6.2	6.4	6.4
33.8	*Germany (FR)*	*35.8*	*36.3*	*36.7*	*37.6*	*40.4*	*43.1*	*48.1*	*48.4*
11.3	*Belgium*	*10.2*	*11.3*	*12.2*	*12.6*	*13.2*	*13.6*	*14.1*	*14.5*
12.2	Eastern France	14.1	14.1	13.9	13.4	13.7	13.9	14.2	14.4
5.1	Northern France	4.1	4.2	4.7	5.6	6.2	6.3	6.9	8.1
0.8	France: other areas	1.1	1.0	0.8	0.9	0.9	1.0	1.1	1.1
18.1	*France*	*19.3*	*19.3*	*19.4*	*19.9*	*20.8*	*21.2*	*22.2*	*23.6*
7.3	Italy: coastal areas	7.3	8.1	8.1	8.9	10.0	10.4	10.7	10.9
0.5	Italy: other areas	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7
7.8	*Italy*	*7.8*	*8.6*	*8.7*	*9.6*	*10.7*	*11.1*	*11.4*	*11.6*
4.9	*Luxembourg*	*4.8*	*5.1*	*5.1*	*5.2*	*5.3*	*5.3*	*5.3*	*5.3*
3.4	*Netherlands*	*2.4*	*2.6*	*2.9*	*3.5*	*3.3*	*4.1*	*4.4*	*5.5*
79.3	**Total**	**80.3**	**83.2**	**85.0**	**88.4**	**93.7**	**98.4**	**105.5**	**108.9**

BASIC BESSEMER STEEL

Production

TABLE XXII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.2	Northern Germany	1.2	1.2	0.8	0.4	—	—	—	—
2.7	North Rhine/Westphalia	7.4	6.4	3.8	2.9	0.9	0.9	0.9	0.9
0.7	Southern Germany	1.0	1.0	1.0	1.0	1.1	1.2	1.3	1.3
3.2	Saar	3.8	3.9	3.9	3.7	4.0	4.0	3.7	3.7
6.8	*Germany (FR)*	*13.4*	*12.5*	*9.5*	*8.0*	*6.0*	*6.1*	*5.9*	*5.9*
6.3	*Belgium*	*7.1*	*7.4*	*7.5*	*7.1*	*6.4*	*6.2*	*5.5*	*5.0*
9.2	Eastern France	10.2	10.5	10.5	10.1	9.7	9.8	9.1	8.6
1.2	Northern France	1.4	1.2	1.3	1.2	1.0	0.8	0.8	0.8
0.3	France : other areas	0.6	0.5	0.4	0.3	0.4	0.5	0.5	0.5
10.7	*France*	*12.2*	*12.2*	*12.2*	*11.6*	*11.1*	*11.1*	*10.4*	*9.9*
—	Italy : coastal areas	—	—	—	—	—	—	—	—
—	Italy : other areas	—	—	—	—	—	—	—	—
—	*Italy*	—	—	—	—	—	—	—	—
3.6	*Luxembourg*	*4.3*	*4.0*	*3.7*	*3.8*	*3.8*	*3.8*	*3.4*	*2.9*
—	*Netherlands*	—	—	—	—	—	—	—	—
27.4	**Total**	**37.0**	**36.1**	**32.9**	**30.5**	**27.3**	**27.2**	**25.2**	**23.7**

OPEN-HEARTH STEEL

Production

TABLE XXII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
2.0	Northern Germany	3.4	3.6	3.2	2.3	2.3	2.3	2.4	2.4
10.1	North Rhine/Westphalia	14.2	12.2	11.4	10.7	10.1	9.9	9.9	9.9
0.6	Southern Germany	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5
0.8	Saar	1.1	1.1	1.1	0.9	1.0	1.0	1.0	1.0
13.5	*Germany (FR)*	*19.5*	*17.7*	*16.4*	*14.6*	*14.0*	*13.7*	*13.8*	*13.8*
0.3	*Belgium*	*0.5*	*0.5*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
2.3	Eastern France	2.8	2.9	2.8	2.6	2.6	2.6	2.6	2.6
1.8	Northern France	2.4	2.2	1.9	1.9	1.9	1.9	1.8	1.8
0.4	France : other areas	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4.5	*France*	*5.7*	*5.6*	*5.2*	*5.0*	*5.0*	*5.0*	*4.9*	*4.9*
3.4	Italy : coastal areas	3.7	3.9	3.9	3.8	3.2	2.7	2.7	2.6
1.8	Italy : other areas	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
5.2	*Italy*	*6.1*	*6.3*	*6.3*	*6.3*	*5.7*	*5.2*	*5.2*	*5.1*
—	*Luxembourg*	—	—	—	—	—	—	—	—
1.0	*Netherlands*	*1.0*	*1.0*	*1.1*	*1.1*	*1.1*	*1.0*	*1.0*	*1.2*
24.5	**Total**	**32.8**	**31.1**	**29.4**	**27.4**	**26.2**	**25.3**	**25.3**	**25.4**

ELECTRIC-FURNACE STEEL

Production

TABEL XXII c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.2	Northern Germany	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
3.1	North Rhine/Westphalia	3.1	2.9	3.1	3.3	3.7	3.9	3.9	3.9
0.4	Southern Germany	0.2	0.3	0.3	0.4	0.6	0.6	0.6	0.6
0.5	Saar	0.2	0.3	0.4	0,5	0.5	0.6	0.6	0.6
4.2	*Germany (FR)*	*3.8*	*3.8*	*4.1*	*4.5*	*5.1*	*5.4*	*5.4*	*5.4*
0.4	*Belgium*	*0.6*	*0.6*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
0.5	Eastern France	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
0.4	Northern France	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7
1.4	France - other areas	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6
2.3	*France*	*2.3*	*2.4*	*2.5*	*2.7*	*2.8*	*2.9*	*3.0*	*3.0*
0.6	Italy : coastal areas	0.6	0.7	0.6	0.8	0.8	0.8	0.8	0.8
6.0	Italy : other areas	5.9	6.1	7.0	7.1	7.3	7.5	7.9	8.0
6.6	*Italy*	*6.5*	*6.8*	*7.6*	*7.9*	*8.1*	*8.3*	*8.7*	*8.8*
0.1	*Luxembourg*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
0.3	*Netherlands*	*0.3*	*0.3*	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
13.9	**Total**	**13.6**	**14.0**	**15.1**	**16,1**	**17,0**	**17,6**	**18,1**	**18,2**

LD, KALDO AND OTHER STEELS

Production

TABLE XXII d

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expeted production potential 1970	1971	1972	1973
4.5	Northern Germany	1.8	1.9	3.3	5.3	6.4	6.4	7.7	7.7
15.4	North Rhine/Westphalia	8.7	11.4	14.1	16.9	22.0	25.1	26.9	26.9
—	Southern Germany	0.0	—	—	—	—	—	—	—
0.9	Saar	0.3	0.4	0.4	1.3	1.6	1.8	2.4	2.4
20.8	*Germany (FR)*	*10.8*	*13.7*	*17.8*	*23.5*	*30.0*	*33.3*	*37.0*	*37.0*
5.8	*Belgium*	*2.9*	*3.9*	*5.4*	*6.5*	*7.6*	*9.3*	*10.5*	*11.3*
1.4	Eastern France	1.1	1.1	1.1	1.4	2.3	3.3	4.5	[redacted] 4,9
3.3	Northern France.....	2.1	2.5	2.9	3.7	4.4	5.4	6.2	7.7
0.3	France : other areas	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.4
5.0	*France*	*3.2*	*3.7*	*4.2*	*5.4*	*7.1*	*9.1*	*11.1*	*13.0*
4.6	Italy : coastal areas	4.9	5.7	5.7	6.1	7.4	8.9	9.3	9.6
0.0	Italy : other areas	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.2
4.6	*Italy*	*4.9*	*5.7*	*5.7*	*6.1*	*7.6*	*9.2*	*9.6*	*9.8*
1.9	*Luxembourg*	*0.7*	*1.6*	*1.9*	*2.0*	*2.1*	*2.1*	*2.6*	*3.2*
[redacted] *3,4*	*Netherlands*	*2.1*	*2.2*	*2.4*	*3.4*	*3.5*	*4.3*	*4.9*	*5.2*
41.5	**Total**	**24.6**	**30.8**	**37.4**	**46,9**	**57.9**	**67.3**	**75.7**	**79.5**

STEEL-TOTAL

Production

TABLE XXII e

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
6.9	Northern Germany	6.7	7.0	7.6	8.3	9.0	9.0	10.4	10.4
31.3	North Rhine/Westphalia	33.4	32.9	32.4	33.8	36.7	39.8	41.6	41.6
1.7	Southern Germany	2.0	2.1	2.0	2.1	2.3	2.3	2.4	2.4
5.4	Saar	5.4	5.7	5.8	6.4	7.1	7.4	7.7	7.7
45.3	*Germany (FR)*	*47.5*	*47.7*	*47.8*	*50.6*	*55.1*	*58.5*	*62.1*	*62.1*
12.8	*Belgium*	*11.1*	*12.4*	*13.8*	*14.5*	*14.9*	*16.4*	*16.9*	*17.2*
13.4	Eastern France	14.7	15.1	15.0	14.8	15.3	16.4	16.9	16.8
6.7	Northern France	6.2	6.2	6.5	7.3	7.8	8.7	9.5	11.0
2.4	France : other areas	2.5	2.6	2.6	2.6	2.9	3.0	3.0	3.0
22.5	*France*	*23.4*	*23.9*	*24.1*	*24.7*	*26.0*	*28.1*	*29.4*	*30.8*
8.6	Italy : coastal areas	9.2	10.3	10.2	10.7	11.4	12.4	12.8	13.0
7.8	Italy : other areas	8.3	8.5	9.4	9.6	10.0	10.3	10.7	10.7
16.4	*Italy*	*17.5*	*18.8*	*19.6*	*20.3*	*21.4*	*22.7*	*23.5*	*23.7*
5.6	*Luxembourg*	*5.1*	*5.7*	*5.7*	*5.9*	*6.0*	*6.0*	*6.1*	*6.2*
4.7	*Netherlands*	*3.4*	*3.5*	*3.8*	*4.9*	*5.0*	*5.7*	*6.3*	*6.8*
107.3	**Total**	**108.0**	**112.0**	**114.8**	**120.9**	**128.4**	**137.4**	**144.3**	**146.8**

TABLE XXIII a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
1.7	Northern Germany	2.6	2.8	2.9	3,1	3.0	3.0	3.3	3.3
8.8	North Rhine/Westphalia	12.5	12.7	12.4	11.0	11.3	12.0	12.2	12.5
0.9	Southern Germany	1.0	1.1	1.1	1.3	1.4	1.5	1.6	1.6
2.6	Saar	3.7	3.6	3.6	3.4	3.7	3.8	4.3	4.5
14.0	*Germany (FR)*	*19.8*	*20.2*	*20.0*	*18.8*	*19.4*	*20.3*	*21.4*	*21.9*
4.4	*Belgium*	4.6	*4.9*	*5.0*	*5.2*	*5.2*	*5.6*	*6.3*	*6.2*
5.6	Eastern France	6.0	6.1	6.9	7.0	7.2	7.6	7.6	7.4
1.5	Northern France	1.8	1.6	1.6	1.6	1.6	1.7	1.7	1.7
1.3	France : other areas	1.2	1.2	1.3	1.4	1.5	1.5	1.7	1.6
8.4	*France*	*9.0*	*8.9*	*9.8*	*10.0*	*10.3*	*10.8*	*11.0*	*10.7*
1.7	Italy : coastal areas	1.5	1.9	2.3	2.5	2.6	2.6	2.7	2.7
4.6	Italy : other areas	4.7	5.3	6.0	5.9	5.9	6.1	6.1	6.1
6.3	*Italy*	*6.2*	*7.2*	*8.3*	*8.4*	*8.5*	*8.7*	*8.8*	*8.8*
2.5	*Luxembourg*	*2.5*	*2.7*	*2.7*	*2.9*	*3.0*	*3.0*	*3.0*	*3.1*
0.6	*Netherlands*	*0.7*	*0.7*	*0.8*	*0.8*	*0.9*	*0.9*	*0.9*	*1.0*
36.2	**Total**	**42.8**	**44.6**	**46.6**	**46.1**	**47.3**	**49.3**	**51.4**	**51.7**

FLAT PRODUCTS(1)

Production

TABLE XXIII b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
2.2	Northern Germany	2.7	3.1	3.2	3.1	3.4	3.4	3.5	3.5
11.0	North Rhine/Westphalia	14.2	14.4	14.7	14.7	15.2	16.1	17.5	18.0
1.7	Southern Germany	1.8	1.9	1.9	1.9	1.8	1.8	2.4	2.4
1.0	Saar	1.4	1.4	1.5	1.8	1.8	1.8	2.4	2.4
15.9	*Germany (FR)*	*20.1*	*20.8*	*21.3*	*21.5*	*22.2*	*23.1*	*25.8*	*26.3*
4.6	*Belgium*	*4.0*	*4.7*	*4.9*	*5.0*	*5.4*	*6.1*	*6.2*	*6.5*
5.0	Eastern France	5.0	5.0	5.0	5.4	5.5	5.8	6.0	6.0
3.1	Northern France	2.7	2.8	3.0	3.4	3.5	4.0	4.1	4.3
0.5	France : other areas	0.5	0.5	0.5	0.6	0.6	0.7	0.8	1.1
8.6	*France*	*8.2*	*8.3*	*8.5*	*9.4*	*9.6*	*10.5*	*10.9*	*11.4*
2.6	Italy : coastal areas	2.4	2.9	3.3	3.4	3.6	4.0	4.2	4.2
2.9	Italy : other areas	3.0	3.3	3.4	3.4	3.4	3.5	3.7	3.9
5.5	*Italy*	*5.4*	*6.2*	*6.7*	*6.8*	*7.0*	*7.5*	*7.9*	*8.1*
1.4	*Luxembourg*	*1.4*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*
2.3	*Netherlands*	*1.9*	*1.7*	*2.1*	*2.3*	*2.3*	*2.7*	*3.2*	*3.4*
38.3	**Total**	**41.0**	**43.2**	**45.0**	**46,5**	**48.0**	**51,4**	**55.5**	**57.2**

(1) Except coils (finished products).

FINISHED ROLLED PRODUCTS-TOTAL(1)

Production

TABLE XXIII c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
3.9	Northern Germany	5.3	5.9	6.1	6.2	6.4	6.4	6.8	6.8
19.8	North Rhine/Westphalia	26.7	27.1	27.1	25.7	26.5	28.1	29.7	30.5
2.6	Southern Germany	2.8	3.0	3.0	3.2	3.2	3.3	4.0	4.0
3.6	Saar	5.1	5.0	5.1	5.2	5.5	5.6	6.7	6.9
29.9	*Germany (FR)*	*39.9*	*41.0*	*41.3*	*40.3*	*41.6*	*43.4*	*47.2*	*48.2*
9.0	*Belgium*	*8.6*	*9.6*	*9.9*	*10.2*	*10.6*	*11.7*	*12.5*	*12.7*
10.6	Eastern France	11.0	11.1	11.9	12.4	12.7	13.4	13.6	13.4
4,6	Northern France	4.5	4.4	4.6	5.0	5.1	5.7	5.8	6.0
1.8	France : other areas	1.7	1.7	1.8	2.0	2.1	2.2	2.5	2.7
17.0	*France*	*17.2*	*17.2*	*18.3*	*19.4*	*19.9*	*21.3*	*21.9*	*22.1*
4.3	Italy : coastal areas	3.9	4.8	5.6	5.9	6.2	6.6	6.9	6.9
7.5	Italy : other areas	7.7	8.6	9.4	9.3	9.3	9.6	9.8	10.0
11.8	*Italy*	*11.6*	*13.4*	*15.0*	*15.2*	*15.5*	*16.2*	*16.7*	*16.9*
3.9	*Luxembourg*	*3.9*	*4.2*	*4.2*	*4.4*	*4.5*	*4.5*	*4.5*	*4.6*
2.9	*Netherlands*	*2.6*	*2.4*	*2.9*	*3.1*	*3.2*	*3.6*	*4.1*	*4.4*
74.5	**Total**	**83.8**	**87.8**	**91.6**	**92.6**	**95.3**	**100.7**	**106.9**	**108.9**

(1) Except coils (finished products).

HEAVY AND LIGHT SECTIONS (INCLUDING TUBE ROUNDS AND SQUARES)

Production

TABLE XXIV a

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
1.5	Northern Germany	2.4	2.6	2.6	2.8	2.7	2.7	2.8	2.8
6.2	North Rhine/Westphalia	9.5	9.7	9.2	8.0	8.1	8.5	8.5	8.6
0.8	Southern Germany	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.4
2.1	Saar	3.1	3.0	2.9	2.8	3.0	3.1	3.0	3.0
9.6	*Germany (FR)*	*15.9*	*16.3*	*15.7*	*14.7*	*15.0*	*15.6*	*15.7*	*15.8*
3.5	*Belgium*	*3.4*	*3.7*	*3.8*	*4.1*	*4.2*	*4.6*	*5.3*	*5.2*
4.0	Eastern France	4.2	4.4	4.9	4.9	5.0	5.3	5.3	5.1
1.2	Northern France	1.5	1.3	1.3	1.3	1.3	1.4	1.4	1.4
1.0	France: other areas	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.1
6.2	*France*	*6.6*	*6.6*	*7.2*	*7.3*	*7.4*	*7.8*	*7.9*	*7.6*
1.5	Italy: coastal areas	1.3	1.6	2.0	2.2	2.3	2.3	2.4	2.4
4.0	Italy: other areas	3.9	4.4	4.9	4.9	5.0	5.1	5.1	5.1
5.5	*Italy*	*5.2*	*6.0*	*6.9*	*7.1*	*7.3*	*7.4*	*7.5*	*7.5*
2.1	*Luxembourg*	*2.2*	*2.4*	*2.3*	*2.4*	*2.5*	*2.5*	*2.5*	*2.6*
0.4	*Netherlands*	*0.3*	*0.3*	*0.4*	*0.4*	*0.5*	*0.5*	*0.5*	*0.6*
28.3	**Total**	**33.6**	**35.3**	**36.3**	**36,0**	**36.9**	**38.4**	**39,4**	**39,3**

WIRE-ROD

Production

TABLE XXIV b

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.2	Northern Germany	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.5
2.6	North Rhine/Westphalia	3.0	3.0	3.2	3.0	3.2	3.5	3.7	3.9
0.1	Southern Germany	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
0.5	Saar	0.6	0.6	0.7	0.6	0.7	0.7	1.3	1.5
3.4	*Germany (FR)*	*3.9*	*3.9*	*4.3*	*4.1*	*4.4*	*4.7*	*5.7*	*6.1*
0.9	*Belgium*	*1.2*	*1.2*	*1.2*	*1.1*	*1.0*	*1.0*	*1.0*	*1.0*
1.6	Eastern France	1.8	1.7	2.0	2.1	2.2	2.3	2.3	2.3
0.3	Northern France	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.3	France : other areas	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5
2.2	*France*	*2.4*	*2.3*	*2.6*	*2.7*	*2.9*	*3.0*	*3.1*	*3.1*
0.2	Italy : coastal areas	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.6	Italy : other areas	0.8	0.9	1.1	1.0	0.9	1.0	1.0	1.0
0.8	*Italy*	*1.0*	*1.2*	*1.4*	*1.3*	*1.2*	*1.3*	*1.3*	*1.3*
0.4	*Luxembourg*	*0.3*	*0.3*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
0.2	*Netherlands*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
7.9	**Total**	**9.2**	**9.3**	**10.3**	**10.1**	**10.4**	**10.9**	**12.0**	**12.4**

HOOP AND STRIP AND TUBE STRIP

Production

TABLE XXIV c

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.1	Northern Germany	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2.6	North Rhine/Westphalia	4.0	3.8	3.9	3.7	3.8	3.8	3.8	3.8
0.0	Southern Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	Saar	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.6
3.1	*Germany (FR)*	*4.5*	*4.3*	*4.4*	*4.4*	*4.5*	*4.5*	*4.5*	*4.5*
0.4	*Belgium*	*0.6*	*0.6*	*0.6*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
1.2	Eastern France	1.2	1.2	1.1	1.2	1.2	1.3	1.4	1.4
0.0	Northern France	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
0.0	France : other areas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.2	*France*	*1.2*	*1.2*	*1.1*	*1.3*	*1.3*	*1.4*	*1.5*	*1.5*
0.6	Italy : coastal areas	0.5	0.7	0.8	0.8	0.9	0.9	0.9	0.9
0.3	Italy : other areas	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5
0.9	*Italy*	*1.0*	*1.3*	*1.5*	*1.3*	*1.4*	*1.4*	*1.4*	*1.4*
0.9	*Luxembourg*	*0.8*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*
0.2	*Netherlands*	*0.1*	*0.1*	*0.2*	*0.2*	*0.2*	*0.3*	*0.4*	*0.4*
6.7	**Total**	8.2	8.4	8.7	8.5	8.7	8.9	9.1	9.1

PLATE ⩾ 3 mm. (INCLUDING WIDE FLAT STEEL)(1)

Production

TABLE XXIV d

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.9	Northern Germany	1.2	1.3	1.3	1.2	1.3	1.3	1.3	1.3
4.3	North Rhine/Westphalia	5.5	5.9	6.0	6.0	6.3	6.6	6.7	6.7
0.1	Southern Germany	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
0.6	Saar	1.0	1.0	1.1	1.2	1.2	1.2	1.8	1.8
5.9	*Germany (FR)*	*7.8*	*8.3*	*8.5*	*8.5*	*8.8*	*9.1*	*9.8*	*9.8*
1.5	*Belgium*	*1.2*	*1.4*	*1.5*	*1.5*	*1.7*	*1.7*	*1.7*	*1.8*
1.0	Eastern France	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3
1.0	Northern France	0.7	0.8	0.9	1.1	1.1	1.2	1.2	1.3
0.1	France: other areas	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
2.1	*France*	*1.8*	*2.0*	*2.1*	*2.4*	*2.4*	*2.6*	*2.7*	*2.8*
1.1	Italy: coastal areas	0.9	1.2	1.4	1.5	1.5	1.5	1.5	1.5
0.5	Italy: other areas	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.9
1.6	*Italy*	*1.4*	*1.8*	*2.1*	*2.2*	*2.2*	*2.2*	*2.3*	*2.4*
0.2	*Luxembourg*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.5	*Netherlands*	*0.5*	*0.4*	*0.5*	*0.5*	*0.5*	*0.6*	*0.6*	*0.6*
11.8	**Total**	**13.0**	**14.2**	**15.0**	**15.4**	**15.9**	**16.5**	**17.4**	**17.7**

(1) Except coils, finished products (see Table XXV b).

HOT-ROLLED SHEET
< 3 mm.(1)

Production

TABLE XXIV e

Production and Production Potential by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
0.0	Northern Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	North Rhine/Westphalia	0.6	0.4	0.3	0.2	0.1	0.1	0.2	0.2
0.1	Southern Germany	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
—	Saar	0.0	—	—	—	—	—	—	—
0.2	*Germany (FR)*	*0.8*	*0.6*	*0.4*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*
0.1	*Belgium*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*
0.1	Eastern France	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1
0.1	Northern France	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
0.1	France: other areas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.3	*France*	*0.5*	*0.4*	*0.4*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
0.1	Italy: coastal areas	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.0	Italy: other areas	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
0.1	*Italy*	*0.3*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*
—	*Luxembourg*	*0.0*	*0.0*	*0.0*	—	—	—	—	—
0.0	*Netherlands*	*0.0*	*0.0*	*0.0*	0.0	*0.0*	*0.0*	*0.0*	*0.0*
0.7	**Total**	**1.8**	**1.5**	**1.2**	**1.0**	**0.9**	**0.9**	**0.9**	**0.9**

(1) Except coils, finished products (see Table XXV b).

COLD-REDUCED SHEET
< 3 mm.

Production

TABLE XXIV f

Production and Production by Areas

'000,000 metric tons

Actual production 1969	Area	Production potential 1966	1967	1968	1969	Expected production potential 1970	1971	1972	1973
1.2	Northern Germany	1.4	1.7	1.8	1.8	2.0	2.0	2.1	2.1
4.0	North Rhine/Westphalia	4.1	4.3	4.5	4.8	5.0	5.6	6.8	7.2
1.5	Southern Germany	1.5	1.6	1.7	1.7	1.7	1.7	2.4	2.4
—	Saar	—	—	—	—	—	—	—	—
6.7	*Germany (FR)*	*7.0*	*7.6*	*8.0*	*8.3*	*8.7*	*9.3*	*11.3*	*11.8*
2.6	*Belgium*	*2.0*	*2.5*	*2.6*	*2.9*	*3.1*	*3.8*	*3.9*	*4.1*
2.7	Eastern France	2.5	2.5	2.7	2.9	3.0	3.2	3.2	3.2
2.0	Northern France	1.9	1.9	1.9	2.1	2.2	2.6	2.7	2.8
0.3	France : other areas	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.8
5.0	*France*	*4.7*	*4.7*	*4.9*	*5.4*	*5.6*	*6.2*	*6.4*	*6.8*
0.8	Italy : coastal areas	0.8	0.8	0.9	0.9	1.0	1.4	1.6	1.6
2.1	Italy : other areas	1.9	2.0	2.0	2.2	2.2	2.3	2.4	2.5
2.9	*Italy*	*2.7*	*2.8*	*2.9*	*3.1*	*3.2*	*3.7*	*4.0*	*4.1*
0.3	*Luxembourg*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
1.6	*Netherlands*	*1.3*	*1.2*	*1.4*	*1.6*	*1.6*	*1.8*	*2.2*	*2.5*
19.1	**Total**	**18.0**	**19.1**	**20.1**	**21.6**	**22.5**	**25.1**	**28.1**	**29.5**

HOT WIDE-STRIP MILLS

Investment
(already included in the capital expenditure for the flat-product mills: Table XVIII d)

TABLE XXV a

Capital Expenditure by Areas

'000,000 dollars (EMA units of account)

Area	Actual expenditure					Estimated expenditure (projects in progress, or approved)		
						on Jan. 1, 1968 for	on Jan. 1, 1969 for	
	1965	1966	1967	1968	1969	1969	1970	1971
Northern Germany	2.62	1.56	0.33	1.66	2.00	2.06	10.07	11.56
North Rhine/Westphalia	33.56	37.21	10.81	9.46	10.48	8.53	29.20	34.60
Southern Germany	—	—	—	—	—	—	—	—
Saar	—	—	—	—	—	—	—	—
Germany (FR)	*36.18*	*38.77*	*11.14*	*11.12*	*12.48*	*10.59*	*39.27*	*46.16*
Belgium	*22.90*	*25.78*	*16.90*	*11.60*	*10.89*	*10.28*	*16.51*	*5.73*
Eastern France	—	1.09	2.17	3.04	3.01	2.61	5.96	2.79
Northern France	4.50	1.70	7.10	11.80	4.20	5.80	3.80	9.50
France : other areas	0.06	—	—	—	—	—	—	—
France	*4.56*	*2.79*	*9.27*	*14.84*	*7.21*	*8.41*	*9.76*	*12.29*
Italy : coastal areas	6.70	0.61	0.04	0.73	1.53	4.10	8.27	7.88
Italy : other areas	14.53	4.09	3.34	1.59	0.68	1.29	4.92	1.31
Italy	*21.23*	*4.70*	*3.38*	*2.32*	*2.21*	*5.39*	*13.19*	*9.19*
Luxembourg	*0.55*	*0.50*	*0.16*	—	—	*0.04*	*0.04*	—
Netherlands	*1.15*	*6.31*	*22.34*	*50.70*	*30.00*	*19.54*	*9.25*	*3.25*
Total	**86.57**	**78.85**	**63.19**	**90.58**	**62.79**	**54.25**	**88.02**	**76.63**

COILS(1)

Production

TABLE XXV b

Production and Production Potential by Areas

'000,000 metric tons

Actual production		Area	Production potential				Expected production potential			
Total	of which: coils (finished products)		1966	1967	1968	1969	1970	1971	1972	1973
1969										
2.7	0.5	Northern Germany	2.8	2.9	3.0	3.2	3.2	4.1	4.9	4.9
8.5	1.5	North Rhine/Westphalia	6.3	7.5	8.2	9.1	9.4	11.2	12.6	12.7
—	—	Southern Germany	—	—	—	—	—	—	—	—
—	—	Saar	—	—	—	—	—	—	—	—
11.2	*2.0*	*Germany (FR)*	*9.1*	*10.4*	*11.2*	*12.3*	*12.6*	*15.3*	*17.5*	*17.6*
4.4	*0.8*	*Belgium*	*2.8*	*4.0*	*4.3*	*4.9*	*5.4*	*6.2*	*6.2*	*6.4*
2.7	0.1	Eastern France	2.6	2.7	2.7	2.9	2.9	2.9	2.8	2.9
3.3	0.1	Northern France	2.8	2.7	3.0	3.5	4.0	4.5	5.0	5.8
—	—	France : other areas	0.1	—	—	—	—	—	—	—
6.0	*0.2*	*France*	*5.5*	*5.4*	*5.7*	*6.4*	*6.9*	*7.4*	*7.8*	*8.7*
3.7	1.0	Italy : coastal areas	3.4	4.1	4.1	4.2	4.5	5.3	5.6	5.6
0.8	0.0	Italy : other areas	0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1
4.5	*1.0*	*Italy*	*4.2*	*5.2*	*5.2*	*5.3*	*5.6*	*6.4*	*6.7*	*6.7*
0.4	*0.1*	*Luxembourg*	*0.4*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
2.0	*0.2*	*Netherlands*	*1.6*	*1.6*	*1.7*	*2.1*	*3.3*	*4.0*	4.5	*4.7*
28.5	**4.3**	**Total**	**23.6**	**27.1**	**28.6**	**31.5**	**34.3**	**39.7**	**43.2**	**44.6**

(1) Treaty products obtained by transformation of hot-rolled coils are included in the tables XXIII b and c, XXIV c, d, e and f.