# EUROPEAN COAL AND STEEL COMMUNITY

THE HIGH AUTHORITY

## 15th GENERAL REPORT

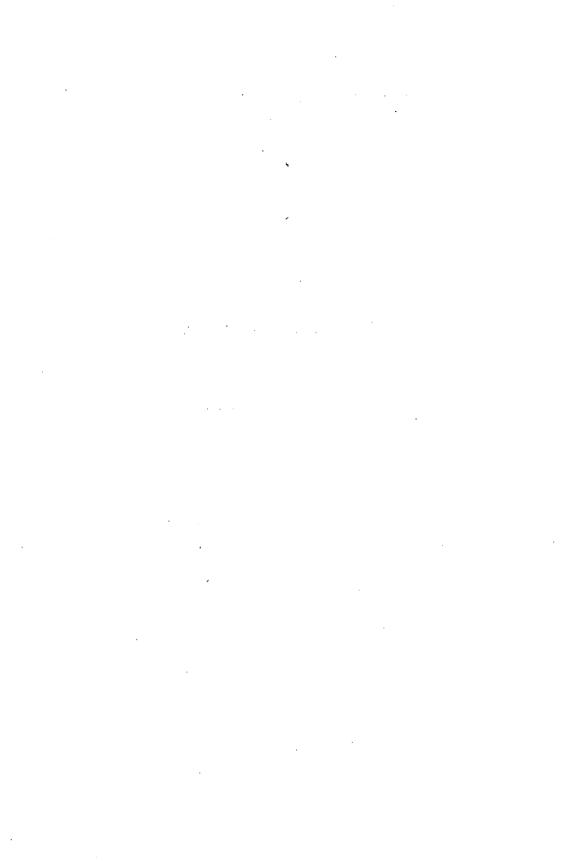
on the

## Activities of the Community

(February 1, 1966 - January 31, 1967)

**LUXEMBOURG** 

March 1967



## EUROPEAN COAL AND STEEL COMMUNITY

THE HIGH AUTHORITY

THE PRESIDENT

Luxembourg, March 1, 1967

Mr. President,

In accordance with Article 17 of the Treaty establishing the European Coal and Steel Community, I have the honour to submit to you the Fifteenth General Report of the High Authority on the activities of the Community.

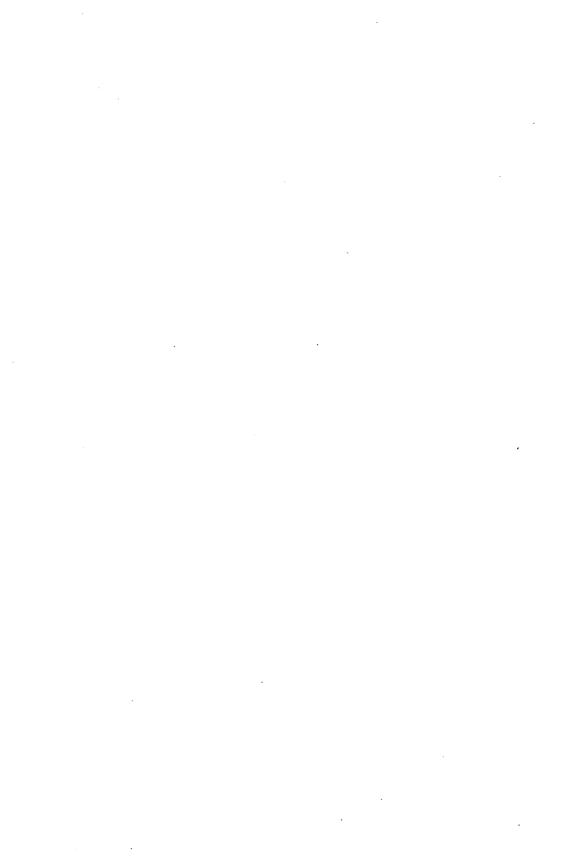
The portion of the Report dealing with administrative expenditure and the budget estimates and reports provided for by Article 78 of the Treaty are set out in separate documents, which will be forwarded to you in the near future.

Please accept, Mr. President, the expression of my high consideration.

Min Hel Ho

The President of the European Parliament,

19, rue Beaumont, Luxembourg.



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## INTRODUCTION

1. In submitting its Fifteenth General Report, the High Authority thinks it well to draw attention to the rather special circumstances in which the European Coal and Steel Community finds itself at the present time.

In the first place, for the past three years it has been necessary constantly to bear in mind the eventuality of an early merger of the three Community Executives, and subsequently of the three Community Treaties, while at the same time ensuring that E.C.S.C.'s work goes steadily forward as if that eventuality did not exist. The difficulties created by this uncertainty on something so fundamental are too obvious to need enumeration.

In the second place, on the economic and social side, the Common Market for coal and steel has been proving more and more difficult to run adequately on the basis of the regular Treaty provisions alone. In the case of coal the High Authority has been having for quite some time to avail itself of Articles 37 and 95, which unlike the regular provisions were really framed for exceptional cases; whereas for steel the High Authority and the Council have been engaged since the end of 1966 in a detailed study of possible further measures some of which might also overstep the bounds of normal Treaty implementation.

2. Accordingly, before going on to detail the current difficulties and possible ways of tackling them, the High Authority feels it necessary to offer some comments concerning the institutional aspects of its present approach. The comments are occasioned by the construction tending to be placed on the very close co-operation with the Council of Ministers that has grown up in

the last few years, which is, wrongly, taken as implying that the High Authority has surrendered part of its independent status, or at any rate is not asserting this.

In point of fact, this co-operation stems direct from the Treaty. So far from delegating back to the national authorities powers vested in the Community, it is intended to devise additional Community-level modes of action over and above those provided for in the Treaty, and ensure that these dovetail satisfactorily with the policies the Governments are pursuing in the spheres remaining under national sovereignty.

Such additional arrangements have become manifestly essential owing to the complete turnround in the situation since 1950. With the whole position of coal in the economy entirely altered, and the iron and steel industry having to undertake adjustments no one could possibly have anticipated at the outset the need for a Community-level structural policy is now generally accepted. But because of these very developments, the market system and specific powers set up by the Treaty of Paris and the specific powers provided under it are no longer adequate in themselves to ensure that changes and development on the Common Market for coal and steel take place in an orderly way. of the Treaty requires that the Community "shall accomplish its mission ... with limited intervention," the forms which that intervention may take being carefully set forth in various passages further on. It is thus one of the Treaty's basic assumptions that, generally speaking, competition among the Common Market operators will be sufficient stimulus, except in cases where the High Authority is empowered or obliged to intervene by means specifically provided for. Now, as regards the coal industry for example, this assumption no longer holds when the position of Community coal vis-à-vis its competitors is primarily determined by State intervention.

3. While the High Authority thus accepts that the competitive system and corrective mechanisms laid down in the Treaty are not now always adequate to attain certain desired objectives, this does not mean that it is in any way inclined to underrate the importance of competition as a spur to technical and economic progress. On the contrary, a healthy degree of competition is

essential, and the High Authority has every intention of seeing that this is maintained. At the same time, there are limits: it is necessary to know those limits, and to ensure, by appropriate corrective measures, that the process of adjusting to circumstances does not degenerate into general disorder.

Against this background, the Treaty articles which permit new departures-stopping short of "major revision," a step requiring ratification by the six national Parliaments-are now assuming special importance. Prominent among them is Article 95, which declares it lawful, firstly, to issue Decisions in line with the Treaty's general principles in "cases not expressly provided for" therein, and secondly, still in line with those principles, to amend the text of the Treaty itself.

Reasonably enough, the High Authority does not enjoy the same independent powers with regard to these new departures as it does in the implementation of the regular Treaty provisions: in particular, it has to work closely with the Council of Ministers in instituting any course of action under Article 95. So, the structural difficulties in the Common Market having reached proportions beyond the capacity of the regular Treaty armoury to tackle, it is necessarily obliged to act in conjunction with the Council. But this does not in the least imply that it is not at the same time making full use of every weapon of its own which the Treaty affords: on the contrary, it implies precisely that it is.

4. Thus, its Fifteenth Report records continuing intensive financial activity. During 1966, despite general tightness in the money markets, the High Authority succeeded in contracting loans amounting in all to 103m. dollar units of account, bringing the total loan capital raised since the Community's inception to 662m. units of account. 1966 also witnessed still greater exertions on the social side, more especially with respect to redevelopment and readaptation: 17m. units of account were paid out during the year¹) in loans to aid schemes in five out of the six countries for establishing new industries able to reabsorb former miners and steelworkers (the total amount lent for this purpose to date now stands at 46m. units of account), while assistance

<sup>1)</sup> Actual disbursements; for amounts committed (54,800,000 units of account between February 1, 1966, and January 31, 1967) see Nos. 409 ff.

from the E.C.S.C. levy for the tiding-over and retraining of the redundant workers themselves is now running at over 10m. units of account a year, as compared with 3-4m. only four years ago.

In addition, considerably larger sums than before were set aside from the levy for technical and social research.

The High Authority established a number of new arrangements to enable it to check effectively for compliance with the pricing rules in the Common Market, and also, for the purposes of its investment orientation work, added to its existing powers concerning compulsory declaration of projects certain further facilities designed to help it elicit fuller particulars of enterprises' plans.

Mention should be made of the action taken during the year to promote the utilization of Treaty products.

5. Both the number and the scale of the projected cartels and concentrations on which the High Authority was required to give judgment were larger than ever before, mainly in consequence of the structural adjustment in progress in the steel industry. The High Authority also ruled on numerous applications for permission to institute special transport tariffs. Notable strides were made towards ensuring disclosure of all transport rates charged.

With regard to commercial policy, the Report sets forth in detail the considerations underlying the decision to retain, with some changes, certain external trade and tariff arrangements, coupled with others unanimously decided upon by the six Governments within the field of their responsibilities.

The High Authority prepared and published a fresh set of General Objectives for steel running up to 1970, and also drew up a coal production target for that year. These calculations form the reference basis for its industrial loan policy, under which it was able to continue furnishing substantial amounts thanks to extensive borrowing.

All these regular Treaty activities are as necessary as ever, and integral to a Community-level industrial policy. Although as time goes on additional measures are coming to be needed

which the High Authority on its own is not empowered to take, this is no reflection on the means the Treaty does afford: on the contrary, it should be an incentive to devise new ways of acting as a Community in other contexts too, grounded on the solidarity among the member countries, until such time as the Treaty can be expanded and amended as the High Authority has so often urged it should be.

6. This is not the place to dwell on the circumstances which have repeatedly delayed the remodelling of the Treaty as part of the eventual merger of the three Communities scheduled, according to the member States' agreement in 1963, to follow upon the oft-heralded but still unachieved merger of the Executives. For so long as the great step of unifying the Treaties has not been taken, we can consider it fortunate that E.C.S.C. is able to act on the special provisions in its own Treaty permitting the High Authority and Council jointly to break new ground where necessary.

This is no mere passive acquiescence: it is a definite, positive policy, offering the only possible alternative to a congeries of national-level measures which would spell deadly danger to the Common Market. For that policy to work, the High Authority has to apply itself, imaginatively and perseveringly, to evolving new arrangements framed in the interest of the Community as a whole, yet with due regard for the interests of all parties, and to accept full responsibility for them. It is no easy matter now, and it will not be easy in the future, to bring the Ministers and the High Authority to a common mind, but each fresh move in this policy is fresh proof of the Community's vitality in facing up to problems the makers of the Treaty could not have been expected to foresee.

7. Before considering in detail the course of developments in the E.C.S.C. sectors, it is worth noting that there is a wide difference between the problems involved in the two mining industries on the one hand and in the iron and steel industry on the other. It would be a mistake to confuse the causes of the two sets of difficulties, even though the difficulties themselves are currently running parallel.

The Community coal industry is in process of structural contraction: its outlets are dwindling steadily under pressure from other fuels and from imported coal, and, partly for geological reasons, only a certain amount can be done to make it more competitive. Community iron ore too is losing out more and more to its overseas competitors, which can offer a higher ferrous content at a lower price. The question is therefore what measure of assistance should be given to the two industries to prevent social and economic hardship resulting from unduly sharp and sudden contraction.

Outlets for steel, on the other hand, will go on expanding. The rate of growth is less marked than formerly, however: temporary downturns are more liable to occur when there is a falling-off in the general level of business activity, as there has been latterly in various member countries. Largely on this account, Community crude-steel production actually showed a very slight drop in 1966, from 85,900,000 tons to 85,100,000.

Just as this slowdown has overtaken it, the Community steel industry has become caught up in the technological revolution which has been going on for some time now in steelmaking all over the world: in order to remain competitive vis-à-vis the rest of the world, it is now necessary to reorganize and modernize on the grand scale. And over and above the changes brought by technology there have been radical alterations in patterns of seaborne transport, bringing down maritime freight-rates to well below the level of overland transport costs within the Community. Accordingly, the centres of steel production are shifting more and more to the coastal areas, for the sake of readier access to cheaper and/or higher-grade raw materials from overseas. Several entirely new production complexes have been set up in this way in entirely new surroundings.

Now the ultra-modern types of plant are mostly also ultralarge, so that their completion inevitably means a further substantial increase in aggregate potential. Inasmuch as a corresponding decrease has not, or not yet, been secured by scrapping obsolete installations, the incipient stagnation in the steel market is developing towards a serious supply/demand imbalance—a state of affairs which is by no means confined to the Community. The Community plants of late have been operating at only 80% of capacity, while competition, which had been getting steadily fiercer for some time, has come near in some instances to a state of chaos, the last thing that could possibly be desired in the interests either of the Community or of the basic aims of the Treaty.

8. The resulting collapse in prices (not paralleled in the other main steel-producing areas) represents a very real menace to the Community steel industry's future development, since it means that the enterprises are short of capital for carrying out indispensable modernization and reorganization. Investment projects declared during 1966 totalled barely 300m. units of account in value, the lowest figure since 1963 and nowhere near the annual average rate since 1960 of over 500m.

In face of this disquieting trend, the High Authority has for the last year and more been urging enterprises to tailor production to demand, and not to attempt, by allowing discounts of every sort and kind, to sell extra tonnages on a market that cannot absorb them. For its campaign of persuasion it has so far relied mainly on the quarterly programmes which it issues after detailed discussion with the Consultative Committee, and which it has sought to make more effective by advancing the date of issue and sending programmes to each enterprise individually. recently further decided that the forecasts given in the programmes should in future be broken down by products and enterprises, in order to bring home to every company just how matters currently stand in the market. With regard to pricing, a Decision requiring enterprises to furnish particulars of their modes of quotation will shortly be coming into effect. Nonetheless, the fact that the High Authority has so acted on tonnages and prices, in accordance with its own powers under the Treaty, does not necessarily mean that more direct measures may not be needed to impose some degree of discipline upon the producers.

9. This is one of the points now being carefully examined by the Council of Ministers/High Authority ad hoc Committee on Steel which was set up in November 1966 at the High Authority's request. It was also agreed, at the same Council meeting, that the Ministers should regularly compare and discuss industry-level plans for the steel sector prepared in various member States, the object being, in accordance with Article 26 of the Treaty, to "harmonize the action of the High Authority and that of the

Governments, which are responsible for the general economic policy of their countries." Meantime, so as to be equipped to contribute as effectively as possible by means of its longer-range guidance and orientation work to the establishment of a structural policy, the High Authority issued a Decision intended to secure for it fuller details of enterprises' investment programmes than they had hitherto been required to supply.

Given these various arrangements, it will now be for the ad hoc Committee to see what further steps should be proposed to the Council and High Authority.

One point of relevance in this connection is that a substantial proportion—not far off 20%—of the Community's steel is sold abroad, to say nothing of a similarly high proportion steel contained in other exports. This being so, the slide in the world market is an aspect of the present troubles calling for specially careful analysis. Thanks to its extensive contacts with third countries, the High Authority is able to keep in close touch with developments outside the Common Market. It has gladly accepted a suggestion by the British Government that the two, through the Council of Association, should study conditions in the world steel market to see what can be done about them, if possible in co-operation with other third countries concerned.

10. Steel market discipline can be strengthened when top-level policy decisions on production and marketing come into progressively fewer hands. The steel industry in the Community is a good deal more fragmented than in some of the other big producer areas, and the steel trade more so still. As was already recorded in last year's Report, however, the pattern is now changing in the direction of larger units and greater specialization. This process continued in 1966 all over the Community, in the form of the establishment either of selling agencies or of concentrations of various kinds, some of them on a cross-frontier scale. The High Authority, in accordance with the Treaty, pursued its policy of endorsing such link-ups and agreements where calculated to increase competitive capacity.

As concerns the social implications of these changes, the High Authority has been making the necessary advance preparations for action in the field of redevelopment and readaptation.

The shrinkage in employment in the steel industry which began in 1964 became rather more marked in 1966, when it reached 4%: this is one side-effect of the rationalization of production which will of course have to be met by appropriate social measures, though for the present the decrease is due principally to reduced recruitment, the new intake in the last two years having been considerably smaller than the natural wastage. The social aspects of the steel situation are included in the *ad hoc* Committee's studies and will be dealt with in its findings when these are presented.

11. An important item both on the steel and on the coal side is coking coal, which is at once an essential raw material for steel-making and an assured outlet for coal, since in its case liquid fuels are not a practicable substitute. Coking coal thus has a special place in the study of energy problems, and a separate section was devoted to it in the Protocol of April 21, 1964, the instrument which instituted the transitional energy and coal policy pending the merger of the Treaties.

In March 1966, when the E.C.S.C. Council of Ministers resumed its meetings after the E.E.C. crisis of the previous June, the High Authority pressed for additional measures over and above those already taken under the Protocol: despite the Community system of coal industry subsidies introduced by Decision No. 3/65, the position had deteriorated further, with production more and more out of step with sales and stocks already up to an alarming level. As a reference basis for policy in the next few years, the High Authority drew up a Memorandum indicating as the production target for 1970 a figure of about 185m. tons hard-coal equivalent. Assuming that this was the tonnage to be aimed at, it should then, the High Authority considered, be possible to work out what measures—chiefly State aids—would be needed to achieve it, and to arrange for the member Governments to settle among themselves concerning these.

An ad hoc Committee was set up, and on the basis of its proposals the Council in November 1966 reached a number of important decisions, notably that, as provided for in the Protocol, the member States should periodically compare notes on their forecasts of home sales, production, imports and trade exchanges, in order to help balance the supply and demand position for the

Community overall. Under this procedure, the figure now accepted for indigenous coal production in 1970 is 185m. tons, as compared with 209.8m. tons in 1966, which in its turn is 6.2% down on 1965.

12. As the Council had also agreed that steam-raising coal should be assisted by promoting its use in thermal power-stations, and that special attention should be given to the position in the private-household sector, it remained to find means of dealing with the key problem of coking coal.

The ad hoc Committee duly worked out detailed proposals for supplementary assistance to enable the prices of coking coal and coke to be aligned on the delivered prices of imports, thereby retaining sizeable outlets for the Community collieries while eliminating artificial disparities in conditions of supply for the steel industry. The Committee was also directed to submit proposals for a multilateral compensation scheme among the six countries, to share the cost of this assistance in respect of coke and coking-coal traded between member countries. discussion with the consultative Committee, these proposals were put before the Council at its 107th meeting on February 16, 1967, which gave the necessary consent under Article 95,1. Designed to round off the Community system of State aids to the coal industry, also introduced under article 95,1, in March 1965, the new arrangements, providing for an average subsidy per ton of 1.7 dollar units of account, were formally authorised under High Authority Decision 1/67 of February 21, 1967. This decision is valid for the period until December 31, 1968, since pending the merger of the Community Treaties, it and similar measures are temporary in character.

13. The object of these measures and those still to be taken is to ensure that the contraction of the Community coalmining industry proceeds at an acceptably moderate pace. Appropriate action must of course be taken on the social as well as the economic side, and the High Authority has put forward a number of points and suggestions for the Council's consideration in this connection. The number of workers employed in coalmining again dropped sharply in 1966, by 62,000, or nearly 10%. Despite this, and even though stocks meantime grew to a level now representing

over two months' production, the incidence of short-time working was considerable, resulting in a production loss of more than 4,500,000 tons, twice as much as in 1965. This emphasizes the scale of the labour problems involved by the contraction process. Active assistance with readaptation and redevelopment is therefore more necessary than ever in order to contain the social and regional impact as far as possible.

14. Such are the main elements of the High Authority's present policy. Backed as it knows itself to be by the European Parliament, which has been giving close attention to the problems of coal and steel both in committee and in its plenary debates, the High Authority intends to press ahead along the lines just described. The difficulties now being encountered must not be allowed to conceal the fact that the technological and economic changes taking place in heavy industry are in fact a consequence of growth in a Common Market of economic and social progress. To meet those difficulties the High Authority will continue to turn to the fullest account all the potential of the Treaty of Paris, much of whose content, though dating back fifteen years, is still today as original and constructive as ever.

Luxembourg, February 8, 1967.

DINO DEL BO

**IEAN FOHRMANN** 

President

ALBERT COPPÉ
Vice-President

ALBERT WEHRER

ROGER REYNAUD

PIERRE-OLIVIER LAPIE

FRITZ HELLWIG

KARL M. HETTLAGE

JOHANNES LINTHORST HOMAN



#### CHAPTER ONE

## THE INSTITUTIONS AND THE EXTERNAL RELATIONS OF THE COMMUNITY

## Section 1: Activities of the Istitutions; Inter-Community Co-operation

#### THE INSTITUTIONS

## The High Authority

1. Mr. Léon Daum, a Member of the High Authority from 1952 to 1959, died on May 31, 1966.

A qualified engineer of the highest grade (ingénieur au Corps des Mines), Mr. Daum first worked for the French mining authorities overseas, and later held executive posts at various steel plants in France.

His international career began when he was appointed Chairman of the Steel Committee of O.E.E.C. in Paris. Upon the coming into force of the E.C.S.C. Treaty, he was one of those designated by the six Governments on August 10, 1952, to form the High Authority of the new Community, and from then until his retirement in September 1959 he devoted himself whole-heartedly to the work of establishing and consolidating E.C.S.C. Afterwards he was for some years the High Authority's appointed "watchdog" on the activities of the French State agency responsible for regulating coal imports, A.T.I.C. (Association technique d'importation charbonnière).

At the funeral in Nancy on June 4, Dr. Fritz Hellwig paid tribute on behalf of the High Authority to the memory of one who had been outstanding among "that small band of men who made the first European Community into a living reality."

### Membership and duties

- No changes occurred in the Membership of the High Authority during the period under review. Pending agreement on the composition of the single Commission to be established under the Merger Treaty of April 8, 1965,1) the Conference of Member Government Representatives made no new appointments in place of present Members whose terms have expired,2) and the latter are therefore remaining in office in accordance with Article 10 of the Treaty.
- 3. The High Authority's existing Working Parties also remained unchanged.3) In view of the pressing problems in the Common Market for Coal and Steel, however, the High Authority on September 14 took the step of setting up two new three-member Working Parties, one (Mr. Wehrer, Mr. Lapie and Dr. Hellwig) on coal and one (Mr. Reynaud, Dr. Hellwig and Mr. Linthorst Homan) on steel. The Working Party on Coal was given the assignment, in the first instance, of touring the six capitals without delay to consult urgently with the Governments on Community action to cope with the current coal problems, and more partieularly with that of supplies of coking coal for Community steel plants.4) The Working Party on Steel was instructed to consider the state of the Common Market for steel and propose remedial measures.

In November the High Authority also set up a special committee, consisting of Mr. Wehrer, Mr. Reynaud and Dr. Hettlage, to examine and report back on the implications for the Community's budget of the increased volume of activity necessitated by the economic situation of the coal and steel industries.

4. More general activities included the further stepping-up of contacts with the empoyers' federations and the trade unions, a number of delegations from which visited Luxembourg. The position was discussed in detail at meetings in Menton on February 9-11 and in Turin on October 13-14 with representatives of the miners' and steelworkers' unions.

President Del Bo and Mr. Fohrmann went on March 23 to the headquarters of I.G. Bergbau und Energie at Bochum, Germany (Fed. Rep.), and on November 24 the Minister of Economic Affairs and the Economic Affairs Committee of the Parliament of Land North Rhine/Westphalia paid a visit to Luxembourg.

<sup>1)</sup> See Fourteenth General Report, Nos. 38 ff., and E.C.S.C. Bulletin, No. 56.

<sup>&</sup>lt;sup>2</sup>) *Ibid.*, No. 2. <sup>3</sup>) *Ibid.*, No. 3. <sup>4</sup>) See Nos. 61 ff. below.

### High Authority administration

#### Staff Rules and Regulations

5. The inter-Institutional co-operation established since the introduction of the revised Staff Rules and Regulations, through specialized Working Parties and meetings of departmental heads and of the Staff Rules Committee, continued in 1966, and enabled progress to be made in the drawing-up of harmonized directives setting forth officials' and employees' entitlements and obligations under the Rules.

### Personnel training

6. The High Authority duly launched its planned programme of initial, advanced and refresher training for personnel of all grades, and the response was considerable. A number of further courses are being introduced, in languages, economics, law, accounting, secretarial work and filing.

Following the High Authority's first staff seminar in 1965, a second was held at Bruges in 1966, with the co-operation of university lecturers from different Community countries; it was also attended by officials from the Joint Services and from the E.E.C. and Euratom Institutions. A third seminar is in preparation.

#### Other activities

7. The High Authority continued with the various regular duties it performs on behalf of the European Institutions as a whole, which include publishing the Official Gazette of the Communities and other official material, running the sales network for all these publications inside and outside the Community, and supplying free copies to 87 registered depositary libraries in different parts of the world.

Two studies are in progress on electronic data-processing methods. The first, the preparation of an automated dictionary ("Dicautom"), giving translators word equivalents in context in all the official languages, is expected to be completed in 1967: the work already done on this has enabled the High Authority to issue at its successive Steel Congresses comprehensive technical glossaries which have been warmly welcomed by the experts. The second project, concerning the storage and retrieval of technical material on iron and steel, is being

conducted in close co-operation with the industry's research and documentation centres in the different member countries and with Euratom, which already has several years' experience in this connection.

#### The Consultative Committee

### Meetings and composition

The Consultative Committee met six times in plenary session, under the chairmanship of Mr. G.G. P. Cavazzuti (steel workers).1) As required by Article 18 of the Treaty, the Council at the end of the year began proceedings for the appointment of the Committee members for 1967 and 1968.

#### Activities

On all six occasions the Committee was specially concerned to discuss with the High Authority the urgent problems posed by the trend of developments in the Common Market for coal and steel. Debates took place in particular with reference to the quarterly guidance programmes submitted for its consideration, and also to the High Authority's annual forecasts, notes on the movement of the market, and reports on its own activities (108th, 109th and 111th meetings).

The proposed coal production target for 1970 and outline of coal policy were discussed at the 106th and 107th meetings and a Resolution passed on the subject.2) Special attention was devoted to the state of the Common Market for steel and Community policy thereon at the 109th meeting, when the High Authority consulted the Committee under Article 46 of the Treaty with respect to its draft General Objectives for Steel in 1970.

Regarding the worsening problems of the past year, the three groups producers, consumers and dealers, and workers—expressed their support for the High Authority's efforts to see that the state of the coal and steel markets was not allowed to lead to the establishment of separate systems of protection by the individual member countries, and so to a situation at variance with the basic principles of the Common Market.

<sup>1) 106</sup>th meeting, Luxembourg, March 24, 1966; 107th meeting, Luxembourg, April 28, 1966;

<sup>108</sup>th meeting, Rotterdam, June 21, 1966; 109th meeting, Luxembourg, September 22-23, 1966; 110th meeting, Luxembourg, December 16, 1966; 111th meeting, Luxembourg, January 10, 1967.

<sup>2)</sup> See Official Gazette of the Communities No. 123/66.

- 10. The Committee discussed in detail the High Authority's work in connection with technical research¹) and with research on industrial medicine, health and safety²) at its 109th meeting. In accordance with Article 55 of the Treaty, it was asked for its views on proposed appropriations to a total of just under 20m. dollar units of account for 17 projects in these two fields.
- 11. The High Authority consulted the Committee under Article 95,1 of the Treaty as to the advisability of again extending, for the calendar year 1967, Decision No. 1/64 prohibiting alignment of steel and pig-iron prices on quotations from countries or areas with State-controlled trading systems (110th meeting).
- 12. The report adopted on January 14, 1966, embodying the Committee's views with regard to the merger of the Communities (rapporteur Mr. Martin), was published in the Official Gazette of April 2.3)

## The European Parliament

Sessions; Bureau

13. The European Parliament met six times in Strasbourg in plenary session, and also once for the annual joint session with the Consultative Assembly of the Council of Europe. 4)

At the constituent sitting on March 7, Mr. Alain Poher, of the French Senate, Chairman of the Christian Democrat group, was elected President by acclamation. The following nominees of different groups were elected Vice-Presidents:

Mr. Paul J. Kapteyn (who subsequently resigned and was succeeded on October 17 by Mr. Van der Goes van Naters);

Mr. Edoardo Battaglia;

Mr. Jacques Vendroux;

E.C.S.C. Bulletin No. 62, "Ten Years of Technical Research on Coal and Steel."
 E.C.S.C. Bulletin No. 60, "Policy of the High Authority concerning Studies and Research on Industrial Health, Medicine and Safety."

<sup>See Official Gazette of the Communities No. 62/66.
March 7-11, 1966 (Official Gazette No. 53/66);
May 9-13, 1966 (Official Gazette No. 96/66);
June 27-July 2, 1966 (Official Gazette No. 130/66);
September 23-24, 1966 (Official Gazette No. 201/66);
October 17-21, 1966 (Official Gazette No. 201/66);
November 24-December 2, 1966 (Official Gazette No. 232/66);
January 30-February 3, 1967 (Official Gazette No. 28/67).</sup> 

Mr. Hans Furler;

Mr. Joseph Wohlfart;

Mr. Cornelis Berkhouwer;

Mr. Enrico Carboni;

Mr. Ludwig Metzger.

The House in addition appointed the members to sit on its fourteen Committees and on the Parliamentary Conference of the Community/Afro-Malagasy Association. Mr. Gerhard Philipp was chosen as Rapporteur on the activities of E.C.S.C., but died on April 20; Mr. de Winter was then appointed in his stead.

#### Activities

- 14. The theme of the joint session with the Council of Europe, debated on the basis of an introductory report by Mr. D. Catroux, ) was the extension of the European Community and Europe's economic and political responsibilities in the world.
- 15. On the political side, the House passed a Resolution commenting on the outcome of the Extraordinary Session of the E.E.C. Council in Luxembourg on January 17-18 and 28-29, 1966,<sup>2</sup>) and another, concerning its own position in face of recent developments in the institutional pattern of the Communities, stating with "grave misgiving" that it could not be considered in order for the Communities "to continue evolving without more effective implementation of the six countries' own accepted constitutional principles based on democracy and the rule of law."<sup>3</sup>)

The House twice, on June 28 and November 28, engaged in direct discussion with the Councils in the presence of the Executives. On the first occasion, the President in office of the Councils, Mr. Pierre Werner, Prime Minister and Foreign Minister of the Grand Duchy of Luxembourg, reported on the Councils' activities during his term. At the annual Parliament/Councils/Executives confrontation, Dr. Joseph Luns, the Netherlands Foreign Minister, gave an account of the Community's progress and prospects with regard to the achievement of economic union.

Mr. Catroux also presented the report on the Parliament's activities during the period May 1, 1965-April 30, 1966.

<sup>2)</sup> See Official Gazette No. 53/66.

<sup>&</sup>lt;sup>3</sup>) *Ibid.*, No. 201/66.

- Resolutions were passed on the following matters of concern to all three 16. Communities:
  - (a) the further extension of the European Schools, as regards not only the educational and other facilities offered but also the number of schools:1)
  - (b) the establishment of a European Youth Office;2)
  - (c) Community technology and research;3)
  - (d) European scientific policy;<sup>3</sup>)
  - (e) the Italian flood disaster;4)
  - (f) future steps by the Community in the matter of monetary policy and the establishment of a European Monetary Union.4)
- Questions relating specifically to E.C.S.C. were for the most part dealt with at the debate on the High Authority's Fourteenth Report. Basing itself on Mr. de Winter's report, the House in June passed a Resolution embodying its views on the main problems facing E.C.S.C.5) A Resolution was also adopted concerning relations between E.C.S.C. and the associated Afro-Malagasy countries, 5) and another, on E.C.S.C. budgeting and administration, in which the House expressed approval of the High Authority's handling of this aspect during the financial year 1964-65.5)
- With regard to energy, Parliament passed a Resolution on Community 18. policy concerning oil and natural gas. In a further Resolution it pressed for special interim measures in respect of European coking and household coals pending the merger of the Communities, such action being deemed urgently necessary in order to prevent complications in overall energy policy later.6)
- Detailed attention was devoted to various matters of regional policy. 19. a Resolution passed with reference to the first E.E.C. Commission paper on the subject, the House praised the High Authority's "constructive and practical" work in this connection, and urged it to press ahead, within the framework of the coming merger of the Executives, with both its basic studies on area structure

<sup>1)</sup> See Official Gazette No. 53/66.

<sup>2)</sup> Ibid., No. 96/66.
3) Ibid., No. 201/66.

<sup>4)</sup> Ibid., No. 232/66.

Ibid., No. 130/66.

<sup>6)</sup> Ibid., No. 201/66.

and its assistance for area development schemes, in the closest possible co-operation with the regional and national authorities. A separate Resolution was also adopted on the social aspects of development and redevelopment.<sup>1</sup>)

20. In response to a verbal Parliamentary question as to the existence of certain cartel-type agreements in the iron and steel sector, the High Authority outlined its policy in this field, and suggested that it should keep the appropriate Committee informed on the subject. The House assented.

At the last 1966 session President Del Bo gave an account of the position on the coal and steel sides following the E.C.S.C. Council's meeting of November 22, and his remarks were thereupon referred to the appropriate Committees for consideration. At the ensuing session, in January-February 1967, Parliament delivered itself of its comments on President Del Bo's statement. In a Resolution on the position in the steel market and on some points concerning the coal market, it declared its support for the High Authority's efforts "in the first instance to restore some measure of equilibrium between steel production and consumption by appealing to producers' self-restraint and good sense to take account of the quarterly guidance programmes," but added at the same time that should indirect measures prove inadequate "Article 95,1 of the Treaty should be invoked without delay." In a second Resolution on the 1970 General Objectives for steel, the House requested "that the High Authority and Council of Ministers submit as soon as possible a programme for the adjustment of the iron and steel industry to the technical and economic developments in progress, and work out Community measures to counter the crisis now threatening."2)

## The Special Council of Ministers

Presidency; meetings

21. The Special Council of Ministers of E.C.S.C. met four times (103rd to 106th meetings) during the period under review.

In accordance with Article 27 of the Treaty, the Presidency was exercised in rotation as follows:

December 8, 1965-March 7, 1966, by the Netherlands (Mr. D. M. Den Uyl, Minister of Economic Affairs, in the chair at the 103rd meeting, on March 7);

See Official Gazette No. 130/66.
 Ibid., No. 28/67.

March 8-June 7, 1966, by Germany (Fed. Rep.) (Mr. Kurt Schmücker, Minister of Economic Affairs, in the chair at the 104th meeting, on May 3);

June 8-September 7, 1966, by Belgium (Mr. J. van Offelen, Minister of Economic Affairs, in the chair at the 105th meeting, on July 12);

September 8-December 7, 1966, by France (Mr. R. Marcellin, Minister of Industry, in the chair at the 106th meeting, on November 22);

From December 8, 1966, by Italy.

#### Activities

22. During the year the Council sought to work out with the High Authority ways and means of tackling the major structural problems facing the Community industries.

With regard to the coal and energy sector it set up on March 7 an *ad hoc* Committee on Coal Problems, consisting of senior Government officials under a High Authority chairman. The Committee's activities are described in the following Chapter.<sup>1</sup>)

Council/High Authority consultations under Article 2,1 of High Authority Decision No. 3/65 took place on the Governments' intended measures of financial aid to the collieries, for 1965 at the 103rd and for 1966 at the 105th meeting, and also, at the same meetings, consultations under Article 10,2 of the Energy Protocol of April 21, 1964, on action taken in the energy field by the German Government.

23. The 106th meeting was largely devoted to the problems of the Community steel industry. The Council heard an account of the state of the market from President Del Bo, and took cognizance of the Decisions the High Authority was planning to promulgate with respect to internal market conditions. The necessary steps were taken to renew and adjust the peripheral tariff arrangements instituted some years previously concerning imports of steel and pig-iron.

After surveying the position as a whole, the Council decided to set up an ad hoc Committee on Steel Problems to consider all the points arising in connection with the state of the Common Market for steel and suggest appropriate action.

24. During the period under review the Council gave its consent under Article 56,2,a of the Treaty to the part-financing by the High Authority of 19 industrial redevelopment projects, and under Article 55,2,c to the part-financing of 11 re-

<sup>1)</sup> See No. 92 below.

search projects in the field of technology and industrial medicine. In addition, at its 103rd meeting, it gave the unanimous consent required by Article 54,2 for the High Authority to extend loans and guarantees, for the purposes of Workers' Housing Scheme VI, to other parties associated in the operations (building societies, etc.) and to Treaty enterprises.

The six-monthly tariff arrangements, lowering certain rates of duty and fixing import quotas, were made for the two halves of 1966 via the written procedure, and for the first half of 1967 at the 106th meeting.

## The Court of Justice of the European Communities

## Composition

25. The Court elected Judge A. Trabucchi President of the first Chamber and Judge R. Monaco President of the second Chamber for one year with effect from October 8, 1966.

The Court is accordingly at present constituted as follows:

President.

C. L. Hammes

1st Chamber,

A. Trabucchi, President

L. Delvaux and R. Lecourt, Judges

K. Roemer, Counsel-General

2nd Chamber,

R. Monaco, President

A. M. Donner and W. Strauß, Judges

J. Gand, Counsel-General

Registrar.

A. van Houtte

## Litigation during the year

26. 31 new apeals were lodged during 1966, of which four were against the High Authority, 22 against the E.E.C. Commission, four against the Euratom Commission and one against the European Parliament, while one was an application by a national court for an interlocutory ruling in respect of the E.E.C. Treaty.

The Court delivered judgment in eight High Authority, six E.E.C., ten Euratom and one Parliament case, and issued four interlocutory rulings. Seven actions were withdrawn, including one relating to the High Authority.

High Authority cases pending at January 1, 1967, totalled nine, seven brought by enterprises and two by member States.

Judgments in E.C.S.C. cases

Case No. 8/65

27. Judgment was delivered on February 8, 1966,¹) on the appeal by Acciaierie & Ferriere Pugliesi against a High Authority Decision fixing the amount of contributions due in scrap price compensation.

The Court dismissed the appellants' first contention, that the Decision complained of was insufficiently grounded, but upheld the second, that insufficient evidence was adduced in support of the High Authority's readjustments of the appellants' declarations. The Decision was accordingly quashed.

Case No. 30/65

28. In a judgment of March 22, 1966,¹) the Court dismissed an appeal by Macchiorlati Dalmas & Figli against two High Authority Decisions fixing the tonnage of scrap on which compensation contributions were payable and the amount of the contributions in question.

The judgment is of importance in that it states a number of general principles in connection with scrap compensation disputes. In particular, the Court ruled

- (a) that appellants in putting forward their private assessment of the deductions for own arisings must furnish evidence that owing to special circumstances the own arisings in fact worked out higher than the amount calculated by the High Authority;
- (b) that checks carried out under Article 47 through private trustee companies do not constitute delegation of powers but exercise of its own powers by the High Authority, which makes use of the information so obtained on its own responsibility;

<sup>1)</sup> See Recueil de la Jurisprudence de la Cour (Compendium of Community Case Law) 1966, Vol. XII

(c) that Article 47 of the Treaty does not require the High Authority to disclose to enterprises the data employed in computing compensation, other than those directly concerning them.

#### Case 49/65

29. In a judgment of April 28, 1966,¹) the Court reversed an individual Decision of the High Authority fixing compensation payable by Ferriere & Acciaierie Napoletane in respect of a tonnage of imported scrap which the appellants contended came within the category of alloy scrap, and so was not liable for compensation. The appellants' request that the High Authority be directed to pay indemnification for damage alleged to have been sustained in consequence of the Decision was, however, refused...

#### Case 51/65

30. In a judgment of April 28, 1966,<sup>1</sup>) the Court dismissed an appeal by I.L.F.O. against two individual Decisions relating to scrap compensation. The case is of interest in that the High Authority, upon the appellants' producing fresh evidence during the hearings, prevailed upon the Court simply to amend the figures in the Decisions, without actually reversing the Decisions themselves.

#### Case 50/65

31. In a judgment of June 16, 1966,¹) the Court dismissed an appeal by Acciaierie & Férriere di Solbiate concerning scrap price compensation. The appellants claimed that no purchase of scrap had taken place, inasmuch as they had merely used scrap in the possession of a firm under the same personal ownership as Solbiate. The Court, however, found that the transaction ranked as a purchase since the two companies were legally separate enterprises.

#### Case No. 2/65

32. The Court delivered judgment on June 30, 1966,¹) on an appeal by Ferriera Ernesto Preo & Figli against two individual Decisions relating to scrap compensation. Refusing the appellants' application for a stay of execution, it quashed the two Decisions altogether as insufficiently grounded.

1

<sup>1)</sup> See Recueil 1966, Vol. XII.

Case No. 53/65

33. The Società Arturo Mondini contested a High Authority Decision of July 21, 1965, fining it Lire 2m. for failure to publish its price schedules, as all Community enterprises are required to do under Article 60 of the Treaty, and conjointly with its main appeal sought a stay of execution of the Decision.

By order of September 24, 1965,1) the President of the Court refused the stay of execution; the appellants then withdrew their main action, and the case was struck off the Court's books by order of February 17, 1966.

Case No. 54/65

34. The Compagnie des Forges de Châtillon, Commentry et Neuves-Maisons on October 4, 1965, lodged an appeal for the reversal of a High Authority Decision of July 21, 1965, relating to it in connection with the scrap compensation scheme, and further thereto an action for restitution in recognition of alleged negligence on the part of the High Authority.

Specifically, Forges de Châtillon complained that it had been debarred by the Decision from deducting from its contribution assessment, on the ground that they did not rate as comparable with ordinary scrap, certain tonnages of Armco pure metal waste sold by it. With regard to the subsidiary application for indemnification, the company pleaded that in view of the attitude taken by the Compensation Office for Imported Scrap at the time it had treated the waste in question as ordinary scrap (sales of which are deductible from the contribution assessment of enterprises covered by the compensation scheme).

The Court delivered judgment on June 16, 1966.¹) On the first head it found for the High Authority, ruling on the strength of the enactments in force and of the technical and economic considerations advanced by the defendants that Armco waste did not rate as comparable with ordinary scrap and hence was not deductible from the contribution assessment in the event of sale. On the application for indemnification the Court found that the appellants had in fact suffered no injury to their interests, as their price policy had not in this case been affected by the attitude of the Compensation Office.

<sup>1)</sup> See Recueil 1966, Vol. XII.

#### INTER-COMMUNITY CO-OPERATION

## Joint Services

#### Legal Department

35. The Board of the Legal Department, whose membership remained unchanged, proceeded as usual with its administration and budgeting activities.

Consultation among the three branches of the joint Legal Department was intensified in connection with the analysis of problems relevant to the functioning of more than one Community. It was found necessary, in particular, in dealing with institutional matters, with the state of the law on competition and on transport, and with the interpretation and implementation of the Staff Rules and Regulations. Various basic points of law were also the subject of discussions, correspondence and regular exchanges of information.

36. With regard to the specific functions of E.C.S.C., the Legal Department continued, as in the past, to be closely associated with all the High Authority's activities, being regularly consulted on all points of law arising in the interpretation and implementation of the Treaty and on the framing of the High Authority's various enactments.

It continued to represent the High Authority in all disputed claims, and defended High Authority Decisions in actions before the Court. 18 Court cases were investigated during the period under review, of which nine have now been disposed of and nine are still pending.<sup>1</sup>)

Members of the Board were present at a number of legal congresses on problems connected with Community law as such or with its implementation in the member States.

## Statistical Office

37. The Statistical Office of the Communities continued in 1966 to put out a regular flow of basic statistical material for the use of the European Institutions and others. It also went ahead with the organization and evaluation of surveys in various fields, and with its work on the compiling of classifications and the furtherance of harmonization in a number of connections.

<sup>1)</sup> See No. 26 above.

The Board of the Office met several times, mainly to discuss budgeting matters and the replanning of the organization chart.

The conference of Directors of national statistical offices dealt more particularly with the progress of the 1966 social surveys, the agricultural survey, the working programme for 1968, and current problems in the evolving of a common system of industrial statistics.

38. The Office examined questions arising in connection with the harmonization of population and housing censuses.

Indications compiled from the national accounts for 1966 were published in a special brochure which contains a wealth of data on the member countries, together with recapitulatory tables on E.E.C. as a whole, Britain and the United States. The methodological studies under this head were concerned principally with apportionment. The Office also took an active part in the discussions of the Economic Commission for Europe on the revision of the United Nations system of national accounts.

39. A comprehensive study was carried out on the methodology of financial accounts. A draft consolidated balance-sheet of the credit institutions is now ready, and a survey is in progress on the balance-sheets of producer enterprises. In addition a series of monographs has been prepared on points of method with regard to the member States' balances of payments.

In No. 9 of the *Statistical Bulletin* the Office published an input/output table for the European Community overall, which showed, as did the separate national tables from which it was prepared, the position in 1959 in 37 producer sectors.

The Office's proposed arrangements for surveying the structure of retail trade on the basis of a standardized classification were approved by the E.E.C. countries which conduct such surveys; a remodelled version of a system originally put forward by U.N., their adoption is to be recommended by the latter to its members. The Office also made a start on evaluating the effects of the Common Market on prices by means of a series of price surveys at big stores and specialized business concerns.

40. The Office's work with reference to third countries was again mainly concentrated on te recapitulation of the Eastern European countries' trade figures and the preparation of studies on trends in trade between them and E.E.C.

The scope of the model energy balance-sheet was extended, principally with regard to the industrial sector. Various basic data concerning the Community's supply flow of crude oil were published in *Statistical Informations*.

A number of new questionnaires were drawn up for the purpose of obtaining fresh statistics on coal.

A pocket *vade-mecum* of general statistics on the associated Afro-Malagasy States was issued.

In the field of external trade statistics, the Office again supplied a substantial volume of material for the Kennedy talks and other purposes. A notable development in 1966 was the coming into use of the harmonized E.E.C. external trade classification ("Nimexe"). Further discussions were held on problems in connection with intra-Community trade statistics following the levelling of tariff walls, and also on the unification of statistical methods on the basis of a combined summary tabulation of the methods employed in the member countries and a provisional catalogue of common standards.

Work on transport statistics was concerned mainly with a survey of infrastructure costs.

41. With regard to industrial statistics, mention should be made in particular of the talks with the Directorates-General responsible, the *Union des industries de la Communauté européenne* (UNICE) and certain national bodies and agencies concerning the feasibility of working up a consistent system of statistical coverage. Work continued on the common classification of European Community industrial products ("Nipro") which is ultimately to form the basis for the compilation of production statistics. The findings of the 1963 industrial census were taken in hand by the member States for further evaluation.

On the steel side the Office's work was mainly in connection with the preparation of the General Objectives and the bringing-out of a revised and expanded yearbook.

As regards social statistics, the Council's Regulations Nos. 100 and 101, concerning wage surveys in the road-haulage sector and in industry respectively, are of special importance; under Regulation 101 it will be possible to take a census of wage costs throughout industry in a single year, instead of, as heretofore, in different sectors of industry each year. 1966 witnessed the completion of the survey on wage structures, which is of particular importance for all concerned; Greece, incidentally, took part, the first time anything of the kind had been undertaken there. A pilot survey on occupational accidents in the paper industry was carried out in preparation for a series of detailed studies on the subject in the E.E.C. industries generally. The findings of the family-budgets survey were published for a number of countries. The Office also computed the "common index" under Article 65 of the Staff Rules and Regulations.

With regard to agricultural statistics, attention was principally devoted to the preparation of the forthcoming survey on the structure of the agricultural sector. The remaining gaps in the system of supply returns were made good, so that returns are now available for all products. A long-term timetable for statistical coverage of animal products was discussed with the different countries; a number of studies were undertaken concerning comparability as among categories of slaughter stock and among fruit and vegetable statistics; and material was assembled and processed on trawler tonnage and on fish prices.

#### Press and Information Service

42. The joint Press and Information Service continued its activities in line with the policy roughed out with the E.E.C. and E.C.S.C. Councils in July 1964. Both in the member countries and in third countries where it has offices (Britain, Switzerland, the United States, Latin America), regular contact was maintained with all the opinion pacemakers, and in particular with the news media and with the employers' and workers' federations. Interest in European affairs is meantime growing steadily in university and youth circles both inside and outside the Community, including some Eastern European universities, so that the Service is having to handle a rapidly increasing volume of requests for documentation, visits by lecturers and other educationists, and technical assistance with the preparation of classes and theses.

With regard more particularly to E.C.S.C. publicity, the Service in co-operation with the High Authority Spokesman's Department organized the distribution of a film on European steel and the production of another on redevelopment and readaptation, provided a stand on the High Authority's social policy for display at the Seventh Technical Exhibition at Charleroi, Belgium, and arranged visits to Luxembourg, with programmes of talks, for 159 selected parties, numbering nearly 5,600 persons in all.

Details of the Service's work on behalf of the three Communities generally will be given in the Tenth General Report of the E.E.C. Commission.

## Inter-Executive Co-operation

43. As in previous years, the High Authority worked in co-operation with the E.E.C. and Euratom Commissions in various connections coming within its terms of reference.

This was especially the case in the social field: the High Authority took a regular share in the proceedings of the Administrative Committee on Social Security for Migrant Workers, and High Authority and E.E.C. Commission representatives sat together on questions concerning occupational diseases, working hours, occupational safety, occupational training, labour law and redevelopment.

On the economic side, the High Authority worked with the Commissions on matters arising with respect to fiscal policy (countervailing dues on turnover tax) and to industrial competition, and was represented at the meetings of the Short-term and Medium-term Economic Policy Committees and the Working Party on Research Policy.

High Authority experts also took part in studies on the capital market. Specially close contact was maintained on transport policy through the Liaison Office, in consideration of the shared powers in this sector.

At the Euratom Commission's invitation, High Authority representatives attended a symposium on accidental irradiation at work, and a conference on the social aspects of the development of nuclear energy.

The Executives kept one another regularly informed on all matters of common concern *vis-à-vis* the member Governments, and on their main activities and plans.

## The Inter-Executive Working Parties

44. The three Inter-Executive Working Parties continued their activities. The Working Party on Energy examined the latest review of the long-term energy outlook for the Communities and the memorandum setting the coal production target for 1970 and outlining future coal policy. The Working Party on Transport devoted its attention in particular to the current problem of special railway rates for consignments to and from the Saar. The Working Party on Research, and its ad hoc Committee, met frequently to frame suggestions with reference to various studies in connection with European research policy.

## Council | Executives Relations

45. The High Authority was invited to the 185th E.E.C. and 109th Euratom Council meetings on May 4-5, 1966, at which matters coming within its jurisdiction were up for discussion.

A great part of the joint work concerned the Kennedy talks, in preparation for which High Authority delegates attended meetings of the Special Committee set up under Article 111 of the E.E.C. Treaty, and of the Committee of Representatives. In addition, the Co-ordination Committee of the E.C.S.C. Council sat jointly with the Special (Article 111) Committee to agree a common position for the GATT negotiations.

High Authority delegates further attended Permanent Representatives' meetings on points concerning the common Institutions' Budgets and Staff Rules and Regulations; the material for the discussions had been prepared by the Finance Experts' Committee and Budget Committee, on which High Authority representatives also sit.

As in previous years, the E.E.C. and Euratom Commissions were invited to all E.C.S.C. Council meetings dealing with questions of energy policy. An E.E.C. Commission representative was also present at the proceedings of the E.C.S.C. Council's *ad hoc* Committee on Steel Problems.

### Section 2: External Relations and Commercial Policy

46. In the field of external relations and commercial policy, the High Authority continued to pursue the general course outlined in the last three Annual Reports.

This consists, essentially, in doing all that possibly can be done with a Treaty gravely deficient in the provision it makes for commercial policy, acting throughout with a careful eye on international developments and the ultimate prospect of a single merged Community. The object is to evolve arrangements which will reconcile to the fullest possible extent the sometimes conflicting interests of the member countries, and will gain the latter's approval by producing results beneficial to the Community overall.

The High Authority's efforts for a convergent, and if possible common, policy are encountering notably less difficulty on the steel side, the national positions there being closer to one another than in the case of coal, where the production and supply situations vary very substantially. The measures taken with regard to steel, though temporary, have proved reasonably satisfactory; in the coal sector, on the other hand, commercial policy still differs sharply from one country to another.

#### COMMERCIAL POLICY

## Peripheral Tariff Arrangements

47. At the end of 1966 the High Authority had again to opt between retaining, relaxing and abolishing the corpus of peripheral tariff measures instituted since 1963 to safeguard the Common Market for steel. In view of the worsening conditions there, it was felt that to attempt to cut the present steel duties at this stage would be asking for trouble in the present state of competition.<sup>1</sup>)

The High Authority accordingly decided to retain in force until further notice, pending in particular the outcome of the multilateral tariff negotiations in GATT its Recommendation No. 1/64, of January 15, 1964, requiring the former harmonized national duties on steel (exclusive of items consolidated at a lower level) to be adjusted to the highest level among them, namely Italy's, averaging 9%.2)

<sup>1)</sup> Cf. Nos. 200 ff. below.

<sup>2)</sup> See Official Gazette No. 8/64.

However, some member countries being, quite properly, anxious for the sake of trade that some flexibility should be allowed in the application of the measure, it gave permission, as in the previous years, for a quota of some 350,000 tons to be imported at the old harmonized rates (Decision No. 24/66, of November 30, 1966), and also for certain steel products to be brought in during the first half of 1967 at these same rates or at lower ones still (Decision No. 25/66 of the same date), in accordance with the half-yearly tariff adjustments which had been unanimously approved by the Council under the system regularly employed since the Common Market's inception.

48. Recommendation 2/64 passed at the same time¹) had imposed a specific minimum duty of \$7.00 per ton on imports of foundry pig-iron for a period of two years, subsequently extended to three by Recommendation No. 1/65. Careful study of the state of the market for foundry pig showed that world prices were still extremely low, while the drastic remodelling that was having to be effected within the industry to enable it to stand up to international competition if and when conditions did return to normal was giving rise to economic and social complications which had not been fully overcome in the three years the protection had been in force. This being so, the High Authority decided to recommend the Governments to continue charging a specific duty on foundry pig in 1967 and 1968, but this time of only \$5.00 per ton instead of \$7.00 (Recommendation No. 1/66, of November 30, 1966).²)

In consideration of this substantial reduction in the rate of duty, however, the earlier quota arrangement permitting a certain tonnage to be imported at the pre-1964 harmonized rates was withdrawn for the ordinary grades of foundry pig, and was confined to special grades with a manganese content of less than 0.03%, not enough of which for some consumers' needs is produced in the Community (Decisions Nos. 26/66, of November 30, and 27/66, of December 7, 1966).3)

# Restriction of Steel Imports from Countries with State-Controlled Trading Systems

49. The Governments and the High Authority came to the conclusion that the restrictions imposed in 1963 on imports of iron and steel products from countries with State-controlled trading systems would have to be extended for a further year, though with some relaxations. This was duly agreed at the Council's meeting on November 22, as an act of Community solidarity.

<sup>1)</sup> See Official Gazette No. 8/64.

<sup>&</sup>lt;sup>2</sup>) *Ibid.*, No. 227/66. <sup>3</sup>) *Ibid.*, No. 231/66

The High Authority also, with the Council's consent and having taken the opinion of the Consultative Committee, renewed for a year its prohibition of price alignments on quotations for pig-iron and steel from such countries (Decision No. 30/66, of December 16, 1966),¹) a necessary adjunct to the tonnage restrictions.

# Multilateral G.A.T.T. Tariff Negociations (The Kennedy Round)

50. The negotiations with respect to steel went forward in 1966 in the Working Party referred to in last year's Report, on which all the major steel-producing countries in G.A.T.T. are represented, and in bilateral talks with some of these.

The Working Party met in May to consider the offers submitted; the High Authority, acting for the member States, offered a 50% cut from an average level of 14%.2) So far the working party has not reached agreement on the negotiating bases. However, E.C.S.C. suggestions for a reasonable harmonization of steel tariffs as among the big steel-producing and exporting countries were favourably received by several of the contracting parties to G.A.T.T., including the United States. The High Authority will do its utmost, in accordance with the instructions it receives from the member Governments, to secure general acceptance of these.

#### THIRD COUNTRIES

## The E.C.S.C./U.K. Council of Association

51. The three Committees went ahead with their activities in preparation for the next plenary session of the Council of Association, the Coal Committee meeting on October 4, the Steel Committee on June 9 and December 9, 1966, and the Trade Relations Committee on January 12, 1967. Close contact was meantime also maintained through the United Kingdom Delegation in Luxembourg and the High Authority Delegation in London. As agreed at the Council's December 1965 session, the British Government kept the High Authority informed of developments in connection with the preparations for nationalizing the British steel industry; two briefings were held in London, the first on the Government's White Paper and the second on the provisions of the Steel Nationalization Bill.

<sup>1)</sup> See Official Gazette No. 238/66.

<sup>2)</sup> See Thirteenth General Report, No. 55.

At the end of November the British Government finally lifted the import surcharge (originally 15%, later 10%) introduced in October 1964 to help the balance-of-payments position.¹) Nothing, however, was done, despite the High Authority's representations, to make restitution for the injurious effects of the Government's failure when imposing the surcharge to give the required thirty days' notice, and the High Authority was obliged to express its serious disappointment at this disregard of the explicit provisions of the agreement of November 25, 1957.

52. At its sixteenth session, held in Luxembourg on January 13, 1967, the Council of Association approved its three Committees' reports on their work since the previous session in London, and discussed the course of events meantime in the British and Community coal and steel industries.

The Council considered the current state of play in the Kennedy round with regard to steel, and emphasized the importance of a successful issue to the negotiations in this connection.

Reviewing the world steel position, the Council noted the persisting excess of capacity over demand. Grave concern was expressed at the present unsettled state of the international steel market and the bad effects this was having on prices, the Council being of the opinion that a speedy return to more balanced conditions was vital to the stability and efficiency of the British and Community industries. It was agreed that the two parties should give urgent joint consideration to the matter, in parallel with the discussions in O.E.C.D., and accordingly talks at senior-official level are to begin shortly.

## Austrian Application to Open Negotiations

53. The Austrian Government, which has for some titime been in negotiation with E.E.C. for an overall agreement, recently approached E.C.S.C. with a similar end in view. On December 15, 1966, it contacted the E.C.S.C. Council of Ministers, the member Governments and the High Authority recalling its earlier statements on the need to settle its economic relations with the Community in regard to coal and steel also; the two products, it pointed out, bulked very large in Austro-Community trade, and there were close links between the industries concerned, while in addition extensive co-operation had developed with E.C.S.C., as witness the conclusion of a number of agreements, notably on transport.

<sup>1)</sup> See Thirteenth General Report No. 59, and Fourteenth General Report, No. 51.

Since the sectors under E.E.C. and under E.C.S.C. jurisdiction interlocked, the Austrian Government went on, it was most anxious to get matters arranged with both Communities at the same time; the negotiations with E.E.C. being already well advanced, it now asked to open similar talks with E.C.S.C., on the understanding that here too due provision would be made to respect Austria's neutral status and obligations under the Occupation Statute.

## Other Third Countries

54. In order to keep abreast of developments in the world steel market, with which the Community market is so closely interlinked, the High Authority continued actively with its efforts to obtain first-hand information on major producer and consumer foci outside the Community.

Its liaison office in Santiago de Chile regularly forwards to it market intelligence concerning the huge Latin American area, itself now at grips with the problems of economic integration. The High Authority has also been working to further the steel standardization drive in progress there, and has gone ahead with its training scheme for young Latin Americans. Vice-President Coppé was present on its behalf at the Latin American Iron and Steel Institute's congress in Bogotá on September 26-29.

Japanese Government and High Authority officials met twice in 1966, in Tokyo on April 25-26 and in Luxembourg on October 10-11, for discussions, which proved most useful and enlightening, on the position in the Japanese and Community steel and mining industries. A proposal by Sweden for a similar interchange of information was taken up, and the arrangements are to be finalized in a few weeks' time.

In response to an offer from the United States Government in April 1966, the High Authority is preparing, in consultation with the official bodies concerned in the member countries, to organize the Community end of a system of co-operation in research on coal valorization and utilization.

With regard to the developing countries, the High Authority is taking a close interest at once in the implications of their industrialization drive for steel, and in the prospects of increased steel consumption as a result of the various development aid programmes and infrastructure improvement operations. In view of the growing world imbalance between steel production and consumption, it feels obliged to stress, as a straight fact, that an active push to increase consumption is essential if the installation of more new steel plants is not to lead to the production of surplus tonnages impossible to sell at anything like worth-while prices.

55. The High Authority is doing all it can to foster co-operation with the E.E.C.-associated Afro-Malagasy States (A.A.M.S.); since, however, no statutory provision exists for its taking a share in the implementation of the Yaoundé Convention, it has to proceed largely on a pragmatic basis, making use of such means as the Treaty of Paris affords, and working in close consultation with the E.E.C. Commission.

No further reference need be made to the series of survey and prospection operations conducted in Africa under Article 55 of the Treaty, which yielded notable additional information on the mineral resources of some of the associated countries. As regards trade, total E.C.S.C. imports of iron and manganese ore from A.A.M.S. sources, which in 1955 amounted to no more than 100,000 tons, were up by 1963 to 1,280,000 tons and by 1965 to close on 5m. tons (the greater part from Mauritania). The trade balance with respect to E.C.S.C. Treaty products is very substantially in favour of A.A.M.S.

It may be added that the High Authority has offered—prompted *inter alia* by the hopes expressed at the Parliamentary Conference at Dakar in December 1964—to provide a number of study grants for African and Malagasy nationals wishing to learn more about coal and steel.

56. The High Authority's interest in the associated States is also shown by its practice of devoting part of the proceedings of its International Steel Utilization Congresses to consideration of the problems of the developing countries. At the 1965 Congress on Steel Processing there was a special Working Party on steel utilization in the tropics; in 1966 one of the four Congress Working Parties, chaired by an African Parliamentary Deputy, discussed the use of steel in the agriculture of the developing countries, and put forward a number of suggestions and desiderata which are now being studied by the High Authority and by experts in industry and agriculture.

Also, the High Authority is planning, in co-operation with other international agencies, to organize by stages a training programme in connection with the uses of steel for the purposes of the developing countries.

These points were made in the paper presented for the High Authority at the Parliamentary Conference of the E.E.C./Afro-Malagasy Association in Abidjan on December 10-14, 1966.

In all that it is doing in this field the High Authority of course works in the closest co-operation with the E.E.C. Commission, which is responsible for the implementation of the Association's programme.

## New Diplomatic Missions to E.C.S.C.

57. Two more countries in 1966 appointed official diplomatic representatives to the High Authority. They were Gabon and Argentina, whose representatives presented their letters of credence respectively on February 1 and May 5.

## International Organizations

58. The High Authority kept in regular touch with the various international organizations whose responsibilities, in their several ways, march with its own, exchanging information with them to the considerable benefit of the activities of both sides.

The High Authority attended the thirteenth Joint Session of the Consultative Assembly of the Council of Europe and the European Parliament on September 23-24, at which President Del Bo, speaking on the state of the world steel market, strongly emphasized that Europe must be more alive to world economic and political interdependence, and in particular must seek to reconcile the interests of the industrialized and the developing countries.

The High Authority was again represented at the Ministerial meeting of O.E.C.D. in Paris on November 24-25. Co-operation with O.E.C.D. is particularly intensive, many O.E.C.D. committees—the Economic Policy, Energy, Steel and Restrictive Practices Committees, and the new Scientific Policy Committee set up following the latest meeting of the member countries' Ministers of Science and Technology—being engaged on work closely connected with the High Authority's activities under the Treaty of Paris.

Other occasions at which the High Authority was represented included the twenty-first session of E.C.E. in Geneva on April 13-28, various G.A.T.T. meetings over and above those in connection with the Kennedy talks, and the sessions of the W.E.U. and Nato Assemblies.

## Co-operation with I.L.O.

59. Mr. Jean Fohrmann, Member of the High Authority and Chairman of the Working Party on Social Problems, visited the International Labour Office on the fiftieth session of its International Conference, and signed the convention setting forth the basis on which the High Authority is to co-operate with I.L.O.'s Advanced Technical Training Centre at Turin.¹) The Authority is to contribute an annual 30,000 units of account towards the Centre's operating costs for a period of four years.

Talks were begun between Centre and High Authority representatives on the organization of the first two courses in 1967 for Latin American and African training officers.

As before, High Authority representatives attended meetings of I.L.O.'s Governing Body and committees at which matters of relevance to E.C.S.C. were on the agenda, while I.L.O. representatives sat in on various High Authority committees, working parties and seminars.



As will be clear from this brief account of its activities in the past twelve months in the field of external relations, the High Authority fully realizes the importance of giving its best attention to this aspect in a world of growing political and economic interdependence.

<sup>1)</sup> See Fourteenth General Report, No. 346.

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#### CHAPTER TWO

#### ENERGY PROBLEMS

#### Section 1: Energy Position of the Community in 1966 and Outlook for 1967

#### Introduction

60. The Community's energy requirements in 1966 were below the level forecast at the beginning of the year. The effects of the markedly slower increase than in 1960-65 were mainly felt in the energy market's most vulnerable sector, coal.

The background to the current energy trend is briefly as follows:

- (a) very disparate rates of general economic growth in the different countries, with a sharp deceleration in those where coal is prominent. Overall, G.N.P. is expected to rise in 1967 by 4% and industrial production by 5%, as against 4.3% and 5.5% in 1966;
- (b) a slight decrease in iron and steel production in both 1966 and 1967;
- (c) above-average temperatures, noticeably affecting energy consumption, in 1966, and also a high water run-off. The forecasts for 1967 are, as usual, based on the assumption of average conditions in both respects.

 $TABLE \ 1$  Factors governing the trend in Community energy demand

Indicator	1965	1966 (estimated)	1967 (forecast)
G.N.P. (% p.a.) Industrial production (% p.a.) Steel production ('000,000 tons) Pig-iron production ('000,000 tons) Temperature (average = 1.00)	4·1	4·3	4·1
	3·9	5·5	5·1
	86·0	85·11	84·30¹)
	63·20	61·72	61·00¹)
Water run-off (average == 1.00) Germany (Fed. Rep.) France Italy	1·15	(1·20)	(1·00)
	1·07	1·12	(1·00)
	1·02	1·04	(1·00)

<sup>1)</sup> Working hypothesis, without prejudice to calculations currently in hand.

## Total Energy Consumption

61. The general energy picture stands, according to present information, roughly as follows. Internal energy consumption in 1966 amounted to just under 620m. tons hard-coal equivalent, of which half was indigenous and half imported. Coal accounted for one-third of the whole (Community coal 30%), and petroleum products for close on 50%. Other requirements, for exports, bunkering and the manufacture of non-energy products (the latter covered almost entirely by oil), brought the total demand to nearly 745m. tons h.c.e. (see Table 2).

Internal consumption showed three main features:

- (a) a drop from 4% to 3.4% in the increase for the Community overall. This occurred despite a higher general economic growth rate than in 1965, at all events for the Community as a whole, but temperature conditions, as noted, had a good deal to do with it: corrected for these, the figure works out at 4.5%, which is comparable with previous years;
- (b) sharply contrasting trends in the individual contries—a decrease in Luxembourg, marginal increases in Germany and Belgium, a jump of over 7% in Italy—reflecting differences in the movement of business activity generally and in the level of steel production;

TABLE 2 Total internal energy requirements, by energy sources

	'0	00,000 tons h.c	e.e.	Breakdown in %			
	1965	1966 (estimated)	1967 (forecast)	1965	1966 (estimated)	1967 (forecast)	
Hard coal Brown coal Oil <sup>1</sup> ) Natural gas Primary electricity	225·4 34·4 271·2 22·7 44·7	208·2 34·4 298·9 27·1 49·0	201·4 35·0 327·8 33·8 46·1	37·7 5·7 45·3 3·8 7·5	33·7 5·6 48·4 4·4 7·9	31·3 5·4 50·9 5·2 7·2	
Total <sup>2</sup> )	598.5	617-6	644.1	100	100	100	
Contribution of (a) indigenous energy (of which: hard coal) (b) imported energy	321·8 (202·3) 276·7	311·2 (185·4) 306·4	310·3 (178·2) 333·8	53·8 33·8 46·2	50·4 30·0 49·6	48·2 27·7 51·8	

<sup>1)</sup> Of which: motor spirit 1985 1986 1987 (1000,000 tons) 52.2 56.1 80.3 (1000,000 tons h.c.e.) 74.8 80.2 88.0 (1000,000 tons h.c.e.) 74.6 80.2 88.0 (1000,000 tons h.c.e.) 74.6 80.2 80.0 (1000,000 tons h.c.e.) 74.6 80.2 80.0 (1000,000 tons h.c.e.) 74.8 80.2 88.0 (1000,000 tons h.c.e.) 74.8 80.2 80.0 (1000,000 tons h.c.e.) 74.8 80.2 80.

TABLE 3 Total internal energy requirements, by countries

	''0	Percentage change <sup>1</sup>			
	1965	1966 (estimated)	1967 (forecast)	1966 (estimated)	1967 (forecast)
Germany (Fed. Rep.) Belgium	253·3 40·8	256·3 40·9	262·3 41·5	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	+ 2.3 + 1.4
France Italy	155·6 101·1	$162.0 \\ 108.4$	169·8 117·8	$\left \begin{array}{cc} + 4.1 \\ + 7.3 \end{array}\right $	$+ 4.9 \\ + 8.7$
Luxembourg Netherlands	$\begin{array}{c} 5.5 \\ 42.2 \end{array}$	5·3 44·6	5·2 47·4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-3.1 + 6.5
Community <sup>2</sup> ) Corrected for temperature	598·5 594	617·6 620·5	644·1 644	$+3.2 \\ +4.5$	+ 4.3 + 3.8

<sup>1)</sup> Between unrounded figures.
2) Rounded figures, which may therefore differ from the sum of the individual items.

- (c) further changes in the product breakdown, with coal bearing the main brunt of the overall slowdown: coal consumption slumped by 17m. tons, only 5-6m. tons out of this total being due to the chance factors of temperature and rainfall.
- 62. 1967 is expected to see
- (a) a 4.3% increase in energy consumption, working out, however, after correction for 1966 temperature variation, at less than 4%;
- (b) national trends again differing considerably, on roughly the same lines as in 1966;
- (c) a further drop of 7m. tons h.c.e., or 3%, in hard-coal consumption;
- (d) a further rise of 10% in consumption of oil and of 25% in consumption of natural gas.

Total Community energy consumption would thus amount to round about 645m. tons h.c.e., only 48% of it indigenous, and over 50% in the form of oil.

## Consumption by Sectors

- 63. Table 4, showing energy consumption by sectors, offers a picture of the trends in progress. It may be noted that in the year just over,
- in contrast to common past experience, the overall increase in consumption was distributed over a fairly large number of sectors, and not concentrated in any one of them;

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- (b) consumption rose only very little in the general industry sector, and in the iron and steel sector actually fell;
- (c) the thermal power-stations' requirements showed only a comparatively small increase, owing to the good water run-off.

 $TABLE\ 4$  Total internal energy requirements, by sectors

('000,000 tons h.c.e.)

Sector	Energy consumption 1965	Change 1966/1965 (estimated)	Change 1967/1966 (forecast)	Energy consumption 1967 (forecast)
1. Iron and steel industry 2. Other industries 3. Transport:     rail     road     other transport 4. Private households 5. Thermal power stations 6. Hydro power-stations <sup>1</sup> ) 7. Other sectors 8. Total internal consumption  of which: hard coal     brown coal     oil     natural gas     primary electricity <sup>1</sup> )	61·2 116·6 9·5 57·7 8·8 142·9 106·5 44·7 50·5 598·5 225·4 34·4 271·3 22·7	$\begin{array}{c} - & 2.5 \\ + & 1.4 \\ - & 1.2 \\ + & 4.7 \\ + & 0.5 \\ + & 4.7 \\ + & 3.8 \\ + & 4.3 \\ + & 3.4 \\ \hline + & 19.1 \\ \hline - & 17.1 \\ - & 27.6 \\ + & 4.4 \\ + & 4.3 \\ \end{array}$	$\begin{array}{c} - & 1.0 \\ + & 5.0 \\ \hline - & 0.6 \\ + & 5.0 \\ + & 0.5 \\ + & 6.2 \\ + & 10.8 \\ \hline - & 2.9 \\ + & 3.5 \\ \hline - & 6.8 \\ + & 0.6 \\ + & 28.9 \\ + & 6.7 \\ \hline - & 2.9 \\ \end{array}$	57·7 123·0 7·7 67·4 9·9 153·8 121·1 46·1 57·4 644·1 201·4 35·0 327·8 33·8 46·1

Including geothermal and nuclear power-stations, and also including the net balance of external trade in electric current.

#### Iron and steel industry

64. The main feature of the year here was the 3m. ton drop in coke consumption, as the combined result of lower pig-iron production and a further substantial reduction in the coke rate.¹) Consumption of liquid fuels meantime rose by another 10%, largely in consequence of the spreading practice of fuel-oil injection at the blast-furnaces. The trend must be expected to continue in 1967, in which case, even assuming a comparatively modest downward movement in the coke rate, the year is likely to see a fresh decrease of over 2m. tons in the industry's coke consumption.

N.B. The power-stations are considered as end consumers, so that the individual figures do not include consumption of electric current. Those for the hydro power-stations represent the primary-energy equivalent of the hydro-electric power produced (exclusive of pumped production), converted on the basis of the average specific consumption of the publicly-owned power-stations of the Community. To avoid duplication, the steel industry's consumption is shown minus production of blast-furnace gas. Since the above are rounded figures, the totals may differ from the sum of the individual items.

<sup>1)</sup> See No. 183 below.

TABLE 5

Blast-furnace coke rate and total coke consumption of the iron and steel industry

Year	Coke rate (kg. per ton of pig-iron produced)	Total consumption ('000,000 tons)
960	883	51·1
965	702	49·3
966 (estimated)	669	45·6
967 (forecast)	643	43·5

#### Other industries

65. It was in this sector that the outstanding development of 1966 occurred, when energy demand, after rising steeply for years, suddenly and sharply levelled off: the increase in the Community as a whole was barely 1%, while in Germany requirements actually fell, by 2.5%. It seems claer, however, that weather conditions played no small part in this.

In the countries where industry is still a fairly large consumer of solid fuels, namely Germany and France, the already contracting demand for these received a heavy blow, dropping by 4,300,000 tons, or over 20%, in the former and 1,400,000 tons, or 14%, in the latter. In Belgium, where three-quarters of the sector's energy consumption is of petroleum products, both solid and liquid fuels were affected. The Netherlands is a special case owing to the market breakthrough of natural gas: though total energy consumption rose by 8%, the share of oil remained about the same, while that of gas shot up by some 50% in a single year, and now already stands at 20%—a state of affairs unparalleled anywhere else in the Community.

In 1967, consumption of solid fuels is expected to fall by some 13% and that of liquid and gaseous fuels to rise by perhaps 8%; the general outline of developments should thus be pretty much as in 1966, though somewhat less marked.

#### Transport

66. The explosive growth in the demand for motor spirit is showing increasing signs of slackening, the rate now standing at 8% as compared with over 10% a year or two ago.

#### Private households

67. In contrast to industry, the trend in this sector was much steadier than in previous years. Notwithstanding generally mild weather, total energy consumption showed an increase of over 3%, which suggests that, corrected for temperature, the underlying expansive tendency is still there. The decline in sales of solid fuels, still thought last year by some to be possibly a temporary downturn, continued, but a good deal less markedly than in 1965, the decrease amounting to 6% as against the previous year's 12%, and affecting coke more than coal. Given average temperatures during 1967, consumption as a whole may be expected to go up by rather over 4%, with the sub-trends for the different fuels remaining much as in 1966. Compared with the picture for the "other industries" sector, this is a fairly modest estimate.

The rise of natural gas as a household fuel continues an important feature of the situation. The following three points should be noted.

- (a) The impact is still far more apparent in the Netherlands than anywhere else: the increase there in 1966 was nearly 50%, as against a Community average of 15%. The next few years, however, may well see an upsurge in other countries also, notably Belgium.
- (b) The process is bearing hard on coal dealers because it takes place in a series of sudden jumps: as soon as an area is connected to the gas grid, coal sales drop steeply.
- (c) The competition from gas is affecting the market positions of oil as well as of solid fuels.

#### Power-stations

- 68. For the second year in succession, the increase in Community consumption of electric current (+6.4%) was below the rate needed for a doubling over ten years. The deceleration was in evidence not only in the countries where general economic activity has been sluggish lately, but also in France. It was brought about by two circumstances:
- (1) industrial demand is now growing, for the Community as a whole, at only 5-6%. The iron and steel industry's requirements are still climbing slowly despite reduced production, partly in consequence of the spread of oxygen steelmaking, the share of which in total steel production amounted to 23% in 1966 and is expected to reach 26-27% in 1967;

(2) household demand, after rocketing between 1960 and 1965, is gradually levelling out: the present rate of increase is round about 9-10%, as compared with 12% in most of the Community countries some years ago.

A further increase of 6.5%, the same as in 1966, has been premised for 1967, but, as in other sectors, it is unlikely to be so much if the economic slowdown observable in some countries becomes any more pronounced. At all events, electricity consumption is not now driving up Community primary-energy requirements to the same extent as before.

As regards more particularly the requirements of the conventional thermal power-stations, there are three additional considerations to be borne in mind, namely

- (a) the state of the water run-off and of electricity imports, as a result of which the demand for current from the thermal stations was down in 1966 by 16 TWh (see No. 60 above);
- (b) the expansion of nuclear production, which is expected to increase from 5.4 TWh in 1966 to 9.0 TWh in 1967 (see No. 71 below);
- (c) the progressive whittling-down of specific consumption, which is proceeding exactly as forecast at about 40-50 kcal per gross kWh a year. The thermal stations' specific consumption should thus go down, for the Community as a whole, from 2,435 kcal per gross kWh in 1966 to 2,395 in 1967.

In consequence of the good water run-off, the thermal stations' consumption of all fuels increased in 1966 by only 4m. tons h.c.e.; their consumption of hard coal even decreased, by something like 1m. In 1967, given average rainfall, there should be an upswing of perhaps 11m. tons h.c.e.

69. The breakdown as among the different fuels is coming to be governed more and more by official action.

In Germany the recently enacted Verstromungsgesetze may be expected to make a difference: having regard to the good water run-off in 1966, the effect should be to send up the power-stations' consumption of hard coal by some 2m. tons h.c.e., provided the arrangements concerning the implementation of the new Acts are settled fairly soon. The had, however, not yet been finalized when the present estimates were drawn up, so that there remains a sizeable margin of uncertainty. As regards brown coal, with new large-capacity units coming into service the producers should be able to make good their losses on the briquetting side by selling larger amounts to the power-stations.

In *France*, given an average water run-off, the increase is likely to work out at around 3m. tons: on the other hand, much of this will be imported, as it is planned to bring in one million tons of American and 500,000 tons of Polish coal.

In *Belgium* the position will again depend largely on the power-stations' willingness to take the tonnages of low-grade fuels available: their consumption of spoil and usable shale will probably be no higher, and may be lower, than the 1965 figure of 450,000 tons (= 130,000 tons h.c.e.).

In the *Netherlands* arrangements are in train for ensuring that the power-stations take a certain minimum of Dutch coal, although they too will be going over to gas on a fairly big scale in and after 1967.

Taking into account these various measures, we may tentatively estimate the breakdown of the expected increment of 11m. tons h.c.e. in the power-stations' overall fuel requirements as follows:

hard coal				5,000,000
brown coal	٠	•		1,500,000
petroleum products				3,500,000
gas (mainly natural, but also coke-oven)			•	1,000,000

On a conservative assessment of the prospects regarding specific consumption, it should be added that the figure for hard coal is more likely to prove an over- than an under-estimate.

- 70. To sum up, the main features of the present trend in energy consumption are as follows.
- (a) The growth of certain requirements not directly linked to the movement of the economy, viz. motor spirit and private consumers' electric current, is levelling out.
- (b) In the present rather inert state of industrial activity, the demand on the "other" industries' part both for fuels and for electricity is no more than crawling up, while the iron and steel industry's requirements of non-electrical energy appear likely actually to go down. This is causing coal consumption to contract faster than ever.
- (c) Demand in the household sector is at the moment fairly steady, but is of course always at the mercy of chance, in the shape of the weather.

(d) The thermal power-stations remain the principal outlet still expanding. Government measures to promote coal sales to this sector are altering the relative proportions of the different fuels consumed, in varying degree according to country; the resulting increase, though likely to be substantial in 1967, will not be sufficient to offset the shrinkage in coal's other markets.

## The Supply Position

71. In 1966, the coal glut became still greater, while such huge amounts of oil were on offer that efforts are having to be made to regulate the flow. Oil price cuts during the year related mainly to gasoline in some countries there were quite appreciable increases in the prices of fuel oils.

The flow of indigenous energy diminished further, as the larger quantities of natural gas and nuclear power now coming on the market are not sufficient to counterbalance the drastic cutbacks in Community production of coal and, to a lesser extent, oil.

#### Community coal

- 72. The rate at which coal sales are now falling is making it imperative to adjust production. Both production and imports were in fact reduced in 1966, but substantial tonnages had to be put to stock nevertheless (see Chapter III following). The industry plans in 1967 to produce 192m. tons h.c.e. (= 198m, according to the national ton-for-ton figures), 7m. tons less than in 1966; this is. however, unlikely to work out given the state of the market.
- 73. The supply and demand forecasts suggest a fresh Community surplus of no less than 13m. tons h.c.e., 12m. of it concentrated in Germany. Intra-Community trade will almost certainly suffer, to the tune of -1m. tons, or 3.5%, though Italy will probably increase its procurements from other Community countries.

What with the worsening supply/demand imbalance and the by now critical state of the coal industry's finances, the situation is becoming grave indeed, especially in the context of the current all-round economic slowdown.

#### Imported coal

The f.o.b. prices of American coal went up in 1966 by between 2% and 4% according to type of coal, largely in consequence of wage increases in May; single-trip freight rates, on the other hand, though fluctuating a good deal, were well below the 1965 level. As a result, the prices of mixed fines c.i.f. Amsterdam/ Rotterdam/Antwerp dropped to around \$13-13.50 per ton, which about corresponds to the cost of procuring coking coal under long-term contract.

TABLE 6 Prices of American coking coal (high-grade and mixed coking fines)

(\$ ber metric ton)

	F.o.b. price	Freight-rate		C.i.f. price A/R/A		
	Pocahontas Sewell	Mixed fines	Hampton Roads- A/R/A*)	Pocahontas Sewell	Mixed fines	
4th qtr. 1964 3rd qtr. 1965 4th qtr. 1965 1st qtr. 1966 2nd qtr. 1966 3rd qtr. 1966 4th qtr. 1966	10.74 - 11.46 10.74 - 11.46 10.86 - 11.58 10.86 - 11.58 10.94 - 11.66 11.11 - 11.83 11.11 - 11.83	10.41 10.47 10.47 10.51 10.72 10.85	3.76 3.76 4.04 3.67 2.73 2.32 2.79	14.50 - 15.22 14.50 - 15.22 14.90 - 15.62 14.53 - 15.25 13.67 - 14.39 13.43 - 14.15 13.90 - 14.62	14.17 14.17 14.51 14.14 13.24 13.04 13.64	

Oil

- A number of developments occurred in the Community petroleum market in 1966.
- The rise in fuel-oil prices in Italy which had begun in 1965 continued, resulting in an increase of over \$2 per ton in Italian nett backs1) in a year and a half.
- (b) There was also some hardening of fuel-oil prices in Germany.
- In France the prices both of household and of heavy fuel oils went down, (c) the untaxed prices of the latter to round about the level ruling in the other Community countries except Belgium.

Quarterly average for short-term contracts. Weighted average of rates recorded for single voyages to Amsterdam, Rotterdam and Antwerp.

<sup>1)</sup> The nett back is calculated by weighting the untaxed ex-refinery prices of the different petroleum products by the outputs for the different types of refinery and grades of crude.

(d) The most notable change was the substantial cut by several of the big companies in their at-pump prices for gasoline in Germany, the Netherlands and Belgium, by amounts ranging from an average \$12 per ton in Belgium to \$37 per ton in Germany, with a resulting decrease of approximately \$2 per ton in the nett back. This was bad for the independent distributors who allow discounts on the major distributors' prices. The reductions brought German and Dutch at-pump prices before tax closer to the French and Italian levels.

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- 76. The implications for the Community petroleum industry vary a good deal according to the positions of the individual companies. It should be borne in mind that,
- (a) while the big companies with geographically diversified markets are managing to break even by taking advantage of differing price trends, some 'Community companies are rather vulnerable inasmuch as they operate in only a few markets;
- (b) since most of the Community's oil comes from outside sources, both the companies' supply position and the general state of the Community market depend on the movement of the world market.
- 77. The world market remains, overall, pretty well swamped with oil. In the first place, further large reserves in the Middle East and Africa are being opened up. One development which has contributed to this has been the changes in the Aramco production apportionment system, following which Saudi Arabia's production increased by something like 20% in 1966. Meantime the producer countries generally are pressing to step up their production.

In the second place increased prospecting activity is leading to a rapid succession of new hydrocarbon strikes in various parts of the world outside the United States. For Europe the outstanding event in this connection has been the locating of major resources beneath the North Sea: a series of large strikes in the British portion of the Continental Shelf (with the unusually high success ratio of 1 in 4) points to the existence of a gasfield with a production capacity of something like 20,000m. cubic metres, while in the other areas suitable for supplying the Community quite a number of strikes have also been made, some of them evidently pretty sizeable.

However, though quantitatively the supply situation is still such as to favour competition, some factors exist which are tending to push up the companies' costs.

Firstly, the producer or host countries are putting forward new claims for higher percentages on the oil. The companies, now engaged in practically permanent negotiations with them, recently agreed to an increase of nearly 50 cents per ton in Venezuelan dues. In Syria a dispute between the Government and the Iraq Petroleum Corporation¹) over transit charges on the oil conveyed by pipeline from the fields in northern Iraq led to the blocking of pipelines with an aggregate capacity of over 40m. tons a year; this was, however, not a really desperate matter for the big I.P.C. companies as they had plenty of other sources available.

Secondly, in competing to secure new concessions companies have been offering better terms to the host countries. The latest concessions in Libya were granted on the terms usual in the past, but in Persia and more recently in Venezuela a new type of arrangement has become current, more on the lines of a contract.

Lastly, political developments in certain consumer countries have in some cases led to restriction of the potential supply.

78. Maritime freight rates behaved much as in previous years, apart from a slight rise in the AFRA level in the second half of 1966. Spot rates, as usual, showed an increase of about 30 points at the end of the year, no exceptional tightening of the market having occurred as a result of the recent Syrian pipeline crisis.

Efforts to reduce future transport costs have lately included the placing of orders for vessels of nearly 300,000 tons deadweight (indeed the possibility is even being gone into of half-million-ton ones), which will be routed via the Cape, whether loaded or in ballast, and will as a rule deliver cargoes bound for European ports by transshipment to smaller tankers.

- 79. The share of African crude in total Community procurements increased to 27.5%, while those of Venezuelan and indigenous oil diminished by 3.5% and 6% respectively; the flow from indigenous sources will contract further in the future following the cut in subsidies to German production. The share of Middle East oil has remained about the same since 1963, at 57-58%.
- 80. Community refinery capacity is expanding with the growth in requirements for internal consumption, exports and bunkering. New plants are building both at the coasts and inland. Pipeline capacity is consequently also having to be

<sup>1) 23.75%</sup> Shell, 23.75% B.P., 23.75% C.F.P., 23.75% Esso and Mobil, 5% Gulbenkian.

increased: the Genoa-Ingolstadt pipeline came into service in 1966, to be followed early in 1967 by another, the fifth, with an eventual capacity of 40m. tons, from Trieste to Ingolstadt, designed to serve the interior of Germany. In addition, it will soon be necessary to construct an extra pipeline from the North Sea to the Ruhr.

TABLE 7

Community refinery capacity and requirements of petroleum products

	'000,000 tons			Increase in '000,000 tons			
	1965	1966	1967	1965/1966	1966/1967	1965/1967	
Aggregate Community distillation capacity at end of year Internal consumption <sup>1</sup> )	288	308	352	21	43	64	
+ exports + bunkering - imports of petroleum products	224	254	281	30	27	57	

<sup>1)</sup> Exclusive of refineries' own consumption and losses, including non-energy products.

81. Some consumer taxes were increased in 1966, on gasoline, gas-oil and light fuel oil in Belgium and on gasoline, kerosene, gas-oil and light and heavy fuel oil in the Netherlands. The German taxes of DM10 on light and DM25 on heavy fuel oil continued in force.

Gas

82. The flow of natural gas, Europe's valuable new indigenous fuel, is now assuming considerable proportions: Community production is expanding rapidly and should be up by 1967 to about 25,000m. cubic metres (= 33,500,000 tons h.c.e.), as against 17,000m. in 1965.

Further additions to the Community's known reserves were recorded in 1966 in Germany, where there is now reckoned to be 250-300,000m. cubic metres awaiting development, and in southern Italy. Trial borings were discontinued in the Netherlands at the end of 1965 pending the issue of new mining regulations; elsewhere prospecting went ahead actively and with a good measure of success. Progress was made with the opening-up of the Italian, German and Dutch fields, the long-distance pipeline network in the three countries was extended, and the necessary link-ups were effected to enable the export of Dutch gas to start in 1967.

TABLE 8 Movement of fuel-oil prices in some major Community cities1)

(\$ units of account per metric ton)

	Heavy oils	Household oi (amounts over 5,00		
	Ex-refinery price including all taxes	Tax	Delivered price including all taxes	Tax
Hamburg December 1965 November 1966	19 - 20 20 - 21	7.7	28 - 30 26 - 30	3.3 3.3
Munich December 1965 November 1966	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7.7 7.7	<b>34 - 36</b> n.a.	3.3
Rotterdam December 1965 November 1966	15 - 17 17 - 19	3 5	25 - 28 27 - 29	0 <sup>3</sup> )
Antwerp December 1965 November 1966	$15.5 - 16.5$ $15.0 - 15.5^{2}$	4.5 4.5	31 - 35 37 - 39	5.5 15
Dunkirk/Le Havre December 1965 November 1966	18 - 19 16.5 - 17.5	2.2 2.2	32 - 35 31 - 34	3.1 3.1
Marseilles December 1965 November 1966	16 - 17 15 - 16	$\frac{2.2}{2.2}$	30 - 33 29 - 32	3.1 3.1
Milan December 1965 November 1966	17 - 18 19 - 20	5 5	25 - 26 <sup>4</sup> ) 29 <sup>4</sup> )	7.2 7.2
Genoa December 1965 November 1966	16 - 17 18 - 19	5 5	24 <sup>4</sup> ) 27 <sup>4</sup> )	7.2 7.2

The price position for fuel oils is highly obscure, partly owing to the substantial discounts allowed. The figures shown have been compiled from scrappy and unco-ordinated data, and are not fully intercomparable either from year to year or from country to country; they are therefore to be taken only as indicating the rough outline of developments.
 Prices hardened slightly towards the end of the year, by about 0.5 units of account per ton.
 For household use; light oils for other uses are taxed 9 units of account per ton.

For housen.
') Fuel fluido.

Contracts for the export of nearly 20,000m. cubic metres of Dutch gas by 1975 have been concluded. Negotiations for further contracts, however, are being held up by questions of price and by an inclination to wait until there are more gas producers in a position to supply the Community market. Other problems arising concern the producers' prices to the importers and the rates to be fixed for industrial consumers—matters made no easier by the non-co-ordination of the fiscal charges on the other fuels in competition with gas.

On the distribution side the position is now as follows. In 1967 Belgium will be importing about 500,000 cubic metres of natural gas, which will be cracked first before distribution, as the conversion of the networks and appliances has still some way to go. In north Germany the change-over to natural gas is proceeding apace: the Bremen, Hamburg and Hanover areas have now been connected to the gasfield at the Ems estuary, though in the regions where coke-oven gas is produced progress appears to be rather slower. German consumption in 1967 is expected to amount to about 5,000m. cubic metres. In Italy, the south and Sicily will receive a flow of some 2,500m. cubic metres from new local fields in 1967; in the north the decline in the production of the Po valley, which will not yet have reached serious proportions in 1967, will be made good by imports of liquid gas from 1968. In the Netherlands, production will double in 1966 to 3,200m. cubic metres, and again in 1967 to 6,500m.1) The upper tier of the domestic tariff, for space-heating, has been reduced in consideration of the drop in the price of household fuel oil in 1965. Whether the production forecast for 1967 is realized will depend on how the exports to Belgium and Germany, work out.

In France availabilities will not increase to any extent to speak of in 1967, since the Lacq gasfield is now being worked to normal operating capacity and the only imports will be the 500,000 cubic metres brought by methane tanker

TABLE 9
Share of natural gas in the total gas supply to all end consumers1)

(%) 1966 1967 1965 (estimated) (forecast) Germany (Fed. Rep.) 16 23 31 Belgium 3 15 45 France 48 50 Italy 72 72 73 Luxembourg Netherlands 44 67 84 Community 36 42 50

<sup>1)</sup> Including thermal power-stations.

<sup>1)</sup> Or possibly, according to the Netherlands delegation to the Council of Ministers/High Authority Joint Committee, 3,400m. in 1966 and 7,000m. in 1967.

from Arzew to Le Havre. After that, however, there may perhaps be additional quantities from the deposits lately discovered near Pau, and from 1968 Dutch gas will be coming in under a contract for the supply of 5,000m. cubic metres a year; a contract is also being negotiated for 2,500m. cubic metres of Algerian gas a year.

In contrast, the other main item in the gas supply, coke-oven gas, is declining, the amounts produced being directly governed by technological developments and the level of activity in the iron and steel industry. Disposals of coke-oven gas will continue in the neighbourhood of coking-plants and within the steel industry itself.

#### Electricity

83. Since new generating plants come into service in accordance with a schedule fixed several years ahead, the comparatively small increase in the demand for electric current in 1966 and 1967 will result in additions to standby capacity.

The Community's total installed capacity is set to expand from 104,000 MW at the end of 1965 to 111,200 MW at the end of 1966 and 118,100 at the end of 1967. At the latter date the share of the conventional thermal power-stations, which is growing steadily, will be over 70%.

The publicly-owned stations, which are covering a larger and larger share of the demand, are increasingly going over to multi-fired plant, especially in Germany and the Netherlands where the proportion of multi-fired installations rose during the period under review from 20 to 26% and from 42 to 59% respectively.

TABLE 10

Shares of the different fuels¹) in the consumption of Community thermal power-stations for the provision of electrical energy (all stations) and heating (publicly-owned stations only)²).

				1 /0/
		1965	1966	1967
Hard coal Brown coal Oil Gas		51·0 17·4 23·3 8·3	48·4 17·6 25·4 8·6	47·9 17·2 26·2 8·7
	Total	100.0	100.0	100-0

Exclusive of recovered fuels.
 Assuming an average water run-off. As both hydro-electric production and the net trade balance move in response to a deviation either way, so too does the level of activity of the thermal stations and, in particular, their consumption of their highest-cost fuel, coal.

As regards size of plant, 250 and 300 MW units are now quite usual, and the 600 MW unit is shortly to be introduced.

- 84. Installed nuclear capacity in the Community more than doubled in 1966, from 1,085 to 2,248 MWe, with the coming into service of the stations at
- (1) Gundremmingen, Germany (237 MWe);
- (2) Chinon (E.D.F. 3), France (500 MWe);1)
- (3) Chooz (Centrale Franco-Belge des Ardennes), Belgium (266 MWe).

It should be borne in mind, however, that for their first few years of life the new stations will rate as pilot units, and their capacity utilization will rise only very gradually (e.g. 1,000-1,500 load-hours in the first year). Accordingly, their contribution to the Community's electricity supply will for a time be small, roughly (gross figures):

1965, 4.7 TWh, =  $1\cdot1\%$  of total production; 1966, 5.4 TWh, =  $1\cdot2\%$  of total production; 1967, 9.1 TWh, =  $1\cdot9\%$  of total production.

85. To sum up, the state of the Community energy market at the beginning of 1967, what with the general economic slowdown and stagnating steel production in some countries, gives cause for no little concern.

<sup>1)</sup> Following a series of technical hitches, some in the conventional and some in the atomic part of the plant, the Chinon station is now undergoing a major overhaul. Demand coverage is not affected by the resulting shortfall in its production, which was in any case minute during the period under review.

#### Section 2: Energy Policy in 1966

86. Early in 1966 the High Authority published its Review of the Long-Term Energy Outlook for the Community, bringing up to date the study issued in 1963 and covering a longer period ahead, to 1980. It differed from the earlier study in two important respects: Community trends were viewed in their world context, and they were indicated in the form of alternative hypotheses, there being so much uncertainty as to the future pace of geological discovery and the policies of the other economic areas of the world.

In the light of the latest information, the *Review* underscored even more emphatically the 1963 study's conclusions concerning the structural decline of European coal.

As regards the immediate situation, the 1966 energy balance-sheet showed a still greater imbalance than before in the coal sector, while the medium-term projection—to 1970—in the first part of the *Review* made it clear that, failing fresh measures to halt the trend, the position would deteriorate further in the next few years.<sup>1</sup>)

The High Authority therefore, in accordance with the Protocol of April 21, 1964, concentrated on preparing such measures. In March 1966 it submitted a Memorandum on Coal Policy, and in April established close co-operation with the Council of Ministers and Government experts through an *ad hoc* Working Party on Coal Problems. On the basis of this work, the Council at its meeting on November 22 took a number of decisions on coal policy. The course and results of the work are described below.

The Council's go-ahead enabled a start to be made on preparing further practical proposals to supplement the action already taken under the Protocol.<sup>2</sup>)

87. The Protocol was mainly intended, pending the merger of the Communities and the framing of a common policy on energy, to make it possible to take appropriate steps and to rough out the broad lines of energy policy.

In accordance with Article 11 of the Protocol, the High Authority at the beginning of 1965 instituted, by Decision No. 3/65,3) a Community system of State aids to collieries, whereby it would itself have knowledge of all assistance furnished or planned by the Governments and would check this to make sure it

<sup>1)</sup> See E.C.S.C. Bulletin, Nos. 59 and 61.

<sup>2)</sup> See Thirteenth General Report, No. 86, and Fourteenth General Report, No. 80.
3) See Official Gazette No. 31/65, or Fourteenth General Report, Annex to Chapter II.

was compatible with the proper functioning of the Common Market for coal. The implementation of the Decision during 1966 is described in the Chapter following. 1)

In addition, Article 12 of the Protocol specifies that the Council shall devote special attention to the matter of the Community's supplies of coking coal. An account is given in last year's Report of the High Authority's studies in this connection and of the consultations under Article 10 of the Protocol.<sup>2</sup>)

88. To further the implementation of the Protocol in full by embodying the substance of its provisions in a statement of general objectives for coal, the High Authority early in 1966 drew up, simultaneously with its annual report on the energy position in the Community, a Memorandum on the Coal Production Target for 1970 and on Coal Policy, setting forth the main trends in the coal market and outlining the measures it considered most appropriate.<sup>3</sup>)

# THE MEMORANDUM ON THE COAL PRODUCTION TARGET FOR 1970 AND ON COAL POLICY.

89. Article 46 of the Treaty provides that the High Authority "shall periodically set out the General Objectives with respect to modernization, the long-term planning of production and the expansion of production capacity." As was noted in last year's Report, the establishment of General Objectives for coal at a time when the energy sector is in a state of complete flux involves a number of special problems for the High Authority. The scope for sales of Community coal and the production level to be maintained are in effect dependent on decisions by the Governments, which can act more or less as they see fit with regard both to imports and to rates of tax on competing fuels; only their financial assistance to the collieries has to be in line with Community criteria and, though organized by each Government individually, subject to High Authority superintendence or authorization. So the establishment of a production target and a policy for achieving it is very much bound up with the Governments' own current and contemplated arrangements.

Accordingly, to be able to draw up the General Objectives required by the Treaty, the High Authority has to try to get the Governments to act along roughly similar lines, so as to secure real co-ordination of the member States' policies on coal. This was the main object of the Memorandum on the Coal

<sup>1)</sup> See Nos. 143 ff. below.

<sup>2)</sup> See Fourteenth General Report, Nos. 94 ff.

<sup>3)</sup> See No. 448 below.

<sup>4)</sup> See Fourteenth General Report, No. 300.

Production Target for 1970 and on Coal Policy, in submitting which the High Authority urged that such co-ordination was absolutely imperative, since without it the Common Market for coal would before long become unworkable, with serious consequences for the Common Market for steel and the General Common Market too.

90. From its examination of the factors determining the position in and outlook for the coal market, the High Authority put the total sales outlets for Community coal in 1970 at somewhere between 175m. and 200m. tons (as reckoned in national statistics). The lower figure represented the level of disposals if no fresh action was taken; it would mean a production cutback of round about 45m. tons between early 1966 and 1970, or alternatively a smaller cutback accompanied by short-time working and a substantial accumulation of stocks. The higher figure, 200m. tons, could only be achieved given exceedingly favourable sales conditions and a series of very expensive measures appreciably affecting the other energy sources.

Having regard to all the considerations involved, the Memorandum suggested that the Community's best course would be to accept a target of 190m. tons, entailing a cutback of some 30m. tons from 1965, twice the reduction achieved in the previous five years (15m. tons between 1960 and 1965). This total tallied quite well with the French and Dutch forward production programmes and the latest Belgian and German figures for 1970, which were a good deal lower than those issued a few months earlier. The High Authority considered it a reasonable level to choose, and recommended that the necessary measures be taken to keep the contraction within these limits, partly so that the adjustment of the coalmining industry could proceed more or less in step with the redevelopment of the areas concerned.

A production level of 190m. tons, allowing for the scheduled productivity increases meantime, would require a labour force 200,000 smaller in 1970 than in 1965, Such a very considerable reduction, though of course including a certain amount of natural wastage, would involve a major problem of labour redeployment and, above all, area redevelopment. At the same time, over-rapid scaling-down would make it very difficult indeed simultaneously to recruit the substantial numbers of young and competent men who would be needed to enable the remaining collieries to operate more efficiently.

For these radical changes to go forward under optimum conditions, the decline of coal must be permitted to proceed by degrees, and comprehensive programmes must be prepared as soon as possible so as to allow reabsorption to be arranged as necessary while they were in progress. A phased reduction of 30m. tons by 1970 was thus a fair proposition, enabling the labour force to be gradually brought down to the corresponding level during this time.

Considerations of security of supply suggested the same conclusion: a Community of industrialized countries whose whole society was completely dependent on energy could not afford not to keep up sufficient production of its own to meet any accidental failure of supplies or other contingencies. So far as could at present be foreseen, coal was still essential to security.

On these two grounds, then, the Memorandum advocated a policy which would favour a production level some way above the lower end of the possible sales range calculated. This policy would not of course give the collieries a firm assurance of selling 190m. tons of Community coal in 1970, but would consist in taking steps to see that there was a good chance of their doing so.

# 91. The Memorandum then outlined the policy to be adopted on production and marketing.

With regard to production proper, it emphasized that all-out rationalization, by the use of the very latest techniques and by further concentration of pits and workings, was an absolute "must": it was vital that the closures which were to bring Community production to 190m. tons by 1970 should have the maximum effect. Fuller use could be made of the financial aids permitted by Decision No. 3/65 for purposes of "positive rationalization," and also there should be a drive to improve productivity in order to lessen the turnover of manpower and make for a more stable and skilled labour force.

The High Authority for its part was willing to give the public authorities responsible and the employers' and workers' organizations, in addition to its normal contributions under the Treaty, all necessary assistance with the planning and effecting of appropriate measures for overcoming the social problems involved and working out a manpower policy calculated to ensure a skilled and stable labour force, so much less of a burden on the industry's costs than any other. In particular it was ready to help arrange consultations under Article 10 of the Protocol on measures proposed in this connection.

With regard to the selling of the 190m. tons suggested, it would of course be necessary to take into account how far this was consistent with the importation of coal from third countries and with competition from alternative fuels.

In theory, the two devices for promoting internal sales were direct protection, in the form of peripheral duties or quotas, and indirect protection, in the form of tax devices or subsidies. High tariffs, it was considered, were here not the answer, as they would give a handle to substitution on the one hand and unfairly push up the steel industry's costs on the other, and moreover would conflict with the line adopted in the preparations for the Kennedy talks. More systematic recourse to quantitative restrictions, however, should not be ruled

out: the 1964 Protocol provided for Government/High Authority consultations as to the level of imports deemed to square with the sales potential of Community coal, on which basis it should be possible to arrive at an agreed position on a set of restrictions varied to fit the end uses of the coals concerned. In particular, something would need to be done to maintain an assured flow of coking coal. Also, an examination should be made whether it was really necessary to import house coal at a time when the problem of selling these grades was becoming acute, especially in the Benelux countries.

On the question of indirect protection by means of tax measures, the Memorandum recommended that this should be carefully considered: if introduced, it should be specially tailored to the trend in the energy market as sales of Community coal became more and more confined to the two big coal-consuming sectors, the thermal power-stations and the iron and steel industry.

In the case of coking coal and coke for the iron and steel industry, subsidization was clearly the method. This was one of the uses for which coal was the sole and irreplaceable fuel, and subsidization offered the only means of ensuring that the steel industry would continue to burn Community coal and at the same time keep its costs down to the absolute minimum as necessitated by the furious competition in the world steel market.

Similarly, subsidization could be employed to even out the cost disparity per unit of calorific value for the thermal power-stations between Community coal and the competing fuels; various arrangements would be possible for keeping the resulting charge on public funds to a minimum.

### WORK OF THE AD HOC COMMITTEE ON COAL PROBLEMS

- 92. When the Councils resumed their sittings, the President of the High Authority laid the main findings of the Memorandum before the E.C.S.C. Council at its meeting on March 7, along with the High Authority's annual report on the energy position in 1965 and prospects for 1966. The Council thereupon set up an ad hoc Committee on Coal Problems, consisting of Government and High Authority representatives, with instructions
- (1) to make a thorough study of the recent movement and current state of the Community coal market, on the basis of the High Authority's account to the March meeting;
- (2) to assess the probable course of developments there up to 1970 (or after) if no further remedial action were taken;

(3) to submit proposals, in line with the aims and provisions of the Treaty of Paris and the 1964 Energy Protocol, as to ways and means of tackling existing and foreseeable difficulties there, and in particular the problem of the surpluses.

The Committee, chaired by the High Authority representative, started work forthwith.

93. After a first interim report to the Council's May meeting, the Committee produced for the meeting on July 12 a fuller set of conclusions, accompanied by High Authority proposals for the institution of a Community system of aids towards the marketing of Community-produced coking coal and coke.

The Council failed to reach unanimity on the idea. However, wishing to have some points elucidated, it directed the Committee to go further into the matter, in accordance with its terms of reference and in the light of Ministers' comments during the discussion, and in particular into the problems of adjusting production to demand and of securing a sale for Community coal. The High Authority for its part, to prepare the ground for the Council's next meeting, held talks with the Governments in the six capitals at the end of September and beginning of October.

At this point the European Parliament at its October session placed it on record in a Resolution that

"the House

"notes that there is no reason to defer the establishment of a common energy policy until the merger of the Treaties;

"recalls the terms of the Protocol of April 21, 1964, the sole object of which is to enable a transitional settlement to be instituted for problems of energy policy pending the merger of the European Communities;

"asks, accordingly, that a transitional settlement be devised for European coke;

"supports the High Authority's endeavours to work out transitional arrangements of this kind;

"appeals to the Governments not to blink the fact that the coke problem must be settled at European level if complications are not to arise in the eventual adoption of a European energy policy;

"emphasizes that European-level arrangements will also be needed with respect to coal for household uses."1)

The ad hoc Committee duly reported once more to the Council.

<sup>1)</sup> See Official Gazette No. 201/66.

# FINDINGS OF THE COMMITTEE; DECISIONS BY THE COUNCIL ON NOVEMBER 22, 1966

## The Community Coal Market: State and Outlook

94. The Committee's report restates, supplements and updates the analysis of the position and outlook given in the High Authority's Memorandum.

The Committee made a year-by-year study of the production and sales forecasts to 1970. It noted in the first place that some national 1967 production figures had been revised downwards, and also some sales figures upwards in anticipation of an improvement resulting from measures taken to assist coal in the countries concerned. The latest estimates from the Governments of each successive year's production, sales, imports from third countries and trade exchanges with other Community countries suggested that the position might be in balance for the Community overall from 1969, and for some member countries from 1967 or 1968.

And indeed, the Committee reported, even in 1966 production did come somewhat more nearly into line with sales potential, since the figure for that year was now expected to work out at 206m. tons instead of the 215m. indicated in the July report. Nevertheless, a good deal of doubt was felt, particularly on the High Authority side, concerning the national forecasts of disposals, which were regarded as over-optimistic in the case of some consumer sectors—a point, incidentally, to which the High Authority had already drawn the Governments' attention. Assuming rather lower levels of home sales, the disparity between forecast production and forecast disposals was likely to amount to between 5m. and 7m. tons a year, or 3% of production. Faced with such an imbalance, the industry would have no option but to cut back further, unless it wished to add still more, and substantially, to existing stocks.

The member countries must therefore continue scaling down production in order to eliminate the overplus. At the same time, as matters now stood, the rate of contraction was mainly governed by social and regional considerations, inasmuch as the whole economy of certain areas was based upon coal and the creation of new employment opportunities there was peculiarly difficult.

### Action to be Taken

### Periodic review of national estimates

95. Accordingly, further steps would be needed in the Common Market for coal to enable the producer countries to effect their cutbacks at a reasonably moderate pace. Clearly, whether the position was in fact brought into balance

as hoped must depend on how far the forecasts of national production, imports, home disposals and trade exchanges proved accurate.

Now even if they did prove accurate as to production, home sales and imports from outside the Community, any shrinkage in intra-Community trade would be liable to disturb the balance for the Community as a whole, leading to big surpluses which would involve either a further ruinous accumulation of stocks or increased recourse to short-time working. On the other hand, a rise in trade exchanges unaccompanied by an expansion in sales potential within the Community would in effect mean simply the shifting of the supplier country's difficulties to one of its partners.

The report therefore proposed that the member States should periodically, in accordance with the 1964 Protocol, compare and adjust their forward estimates of home sales, production, imports and trade, in order to help balance the overall Community position.

The report then went on to discuss specific measures with regard to each of the main types of coal.

### Steam-raising coal

96. Steam-raising coal, it was noted, was mostly an internal problem of the individual countries. There seemed no real possibility of stemming the decline in its consumption outside of the thermal power-stations; in the power-station sector, however, there did appear to be a fair chance of ensuring its continued and increasing use, and so retaining a valuable outlet for Community coal.

There being little intra-Community trade in steam-raising coal—chiefly because of the high transport costs and very keen competition from petroleum products and natural gas—efforts to promote its consumption were at present on a national basis; these should be co-ordinated at Community level, and when the time came would of course need to be dovetailed with the eventual common energy policy.

#### House coal

97. The report recalled that intra-Community trade in house coal amounted to nearly 4,600,000 tons, and was an important item in the balance-sheet for the grades concerned.

The forecasts for the next few years (subject to the reservations just mentioned) indicated a surplus of 200,000 tons a year—not an unduly alarming figure as against total disposals of some 16m. tons. The surplus was, however, recurrent in a single country, for which it would be a problem if the producers there did not somehow find means of increasing their sales.

At the same time, these tonnages, and the points made in connection with them, depended very much on weather conditions, really marked aberrations in which could cause a big swing either way in this highly sensitive sector. There was a 30% likelihood of consumption in fact working out 2,400,000 tons or more above or below the level forecast.

This being so, the report proposed that, as usual going on the assumption of average weather conditions, the Governments of the producer countries should at regular intervals compare their estimates of home sales, production, imports and trade, discuss the overall Community position and seek to balance it by adjustments to their calculations.

Regarding possible difficulties in consequence of mild winters, leading to unduly large additions to stocks, the report suggested that if cuts in production were not sufficient there should be cuts in imports from third countries, though with all due regard for bilateral trade agreements in force and for the need to see that the consumer was kept properly supplied.

# Coking coal

98. Sales of coking coal and coke to the iron and steel industry were being imperilled by the fact that coking fines from third countries were priced a good deal lower, so that steelmakers in those member countries where there was no strict system of import quotas were tending to take non-Community fines instead.

Though in this case, unlike that of steam-raising coal, the problem did admit of a purely "coal" solution, in the form of a fixed import duty—the only alternative to indigenous coking coal being imported coking coal—the report considered that subsidization was technically and economically preferable. Some member States had decided since the Council's July meeting, or were about to decide, to make it possible for their steel industries to purchase coking coal at the same or roughly the same price no matter what its origin. The report pointed out that these separate national measures offered no general answer to the problem of intra-Community trade, and that moreover some national-level arrangements were not possible for member States with no coalmines or coking-plants of their own.

99. The report went on to outline the measures the Committee would suggest for coking coal. On this matter the Council, while accepting the foregoing, requested the Committee to submit detailed practical proposals for its next meeting.

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The report indicated that the action to be taken with regard to coking coal and coke should enable the Community producers

- (a) to supply Community iron and steel plants with coking coal, and independent coking plants with coking coal for the manufacture of metallurgical coke, at prices in the neighbourhood of the delivered prices for third-country coking fines, in order to match the competition from the latter;
- (b) to supply the Community iron and steel industry with coke at delivered prices in the neighbourhood of those for coke made from third-country coking coal.
- 100. The assistance so furnished should be subject to agreed common rules: in particular, it should be below a fixed ceiling per ton supplied and preferably payable on a flat-rate basis, and in no circumstances should any discrimination result either in the terms on which the different steel enterprises obtained their procurements or in conditions of competition as among the different coal and coke producers.

The cost of assistance by a member State to its coal and coke producers in respect of sales to iron steel plants within the same country should be borne by that State. As regards the cost of assistance towards sales to iron and steel plants in other member countries, the High Authority considered the only solution was to institute a multilateral compensation scheme among the Six, operative for a limited period and for a limited tonnage out of the total volume of such sales.

The Council, then, meeting on November 22, considered these findings, with their various new points and observations; it adopted the main conclusions, and instructed the Committee

- (a) to go further into the Community's coal position, including especially that for house coal, and report back at the Council's next meeting;
- (b) to go further into the possibilities for additional assistance to Community collieries to enable them to bring their prices for coking coal and coke for delivery to the Community iron and steel industry to a level consonant

with the dictates of the present situation, and submit detailed proposals to the Council in this connection at its next meeting.<sup>1</sup>)

### CONSULTATIONS UNDER ARTICLE 10 OF THE PROTOCOL

101. In addition to this basic spadework in extension of the foundations laid by the 1964 Protocol and Decision No. 3/65,<sup>2</sup>) the Council and the High Authority engaged in a series of consultations under Article 10,2 of the Protocol. The general scope of the consultation procedure is described in last year's Annual Report.<sup>3</sup>)

In 1966 the consultations were on the various measures planned by the German Government. Some of these, already referred to in last year's Report, were the subject of a consultation on March 7, namely the proposed arrangement

- (a) to provide an extra 4m. tons' storage capacity, partly from public funds;
- (b) to secure a production cutback of approximately 2m. tons by means of short-time working, the men concerned, however, to be fully compensated by the collieries.
- 102. On May 20 the German Government wrote requesting another consultation on a number of further steps it wished to take for the purpose of restoring some degree of order in the coal market. These consisted of
- (a) a closure allowance of DM15 per ton of capacity, exempt from certain property and capital gains taxes (Vermögensabgabe, Kreditgewinnabgabe), to be payable through a specially-constituted private corporation, the Aktionsgemeinschaft der Deutschen Wirtschaft, to pits due for closure outside the Rationalisierungsverband scheme;
- (b) a new Act to stabilize the share of coal in the thermal power-stations' total fuel consumption at 50% up to December 31, 1970. To this end, the Bill submitted for consultation (supplementing that similarly submitted in 1965) provided for a ten-year subsidy on Community coal consumed by the power-stations, and restrictions on their consumption of fuel oil;
- (c) a quicker and simpler procedure at the Government's own end for turning down applications for import licences;

<sup>1)</sup> Just after the end of the period under review, on February 16, 1967, the Council gave its consent to the establishment by the High Authority of an assistance scheme for sales of coking coal and coke to the iron and steel industry.

<sup>2)</sup> See No. 143 below.
3) See Fourteenth General Report, Nos. 94 ff.

(d) retention of the taxes on fuel oil to April 30, 1971, and withdrawal of the arrangement whereby the import duties on fuel oil were to have been progressively reduced from May 1, 1967.

The Council duly considered all these measures at its meeting on July 12. The High Authority took the opportunity to stress once more that in its view these consultations under Article 10 of the Protocol were of the greatest importance, the full and frank discussion there being a first step towards a co-ordinated energy policy.

On November 3 the German Government once more requested a consultation, this time on financial aid by the Federal and Land North Rhine/Westphalia authorities to make up wage losses to underground mineworkers in respect of certain idle shifts introduced.

103. The High Authority's work in co-operation with the Governments along the new lines laid down in the 1964 Energy Protocol is thus gradually enabling appropriate measures to be devised for dealing with the problems arising out of developments in the coal sector, since the Treaty obviously does not provide ready-made solutions for in many cases quite unprecedented difficulties. What the Treaty does do, however, is to indicate the proper procedure to adopt, and allow the Institutions on this basis to work out the best means for coping with the situation. That, precisely, is the object for which the High Authority has been consistently striving.

#### CHAPTER THREE

# THE COMMON MARKET FOR COAL AND STEEL

### Section 1: The Common Market for Coal

STATE OF THE COMMON MARKET FOR COAL IN 19661)

### General Situation

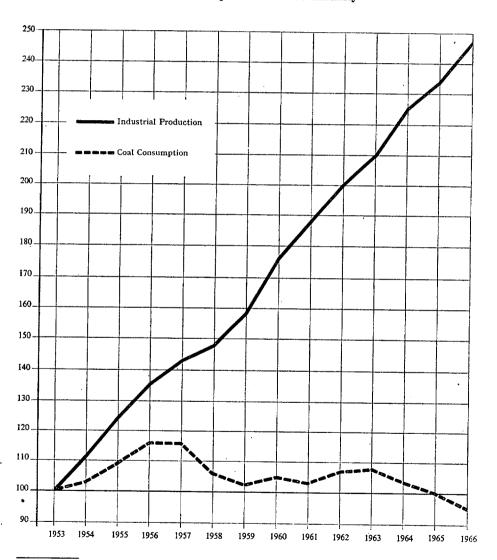
104. As indicated in the foregoing Chapter, the position of coal in the Community worsened sharply in 1966, in consequence of further substantial changes in the pattern of the energy market coupled with a variety of adverse cyclical factors.<sup>2</sup>) The share of coal in total energy consumption dwindled to 34%, as compared with over 50% as recently as five years ago, while there was also an appreciable absolute drop in sales, due to the general decline in demand for solid fuels.

Economic expansion having picked up, with a 5.5% growth in industrial production in 1966, overall energy consumption rose by 3.2% to 618m. tons h.c.e.

2) See No. 60 above.

<sup>1)</sup> The coal figures in this Chapter are those officially issued by the member countries. The statistical series given here and in the Annex are therefore intercomparable with those in previous editions. For Germany (less the Saar) and the Netherlands coal production is reckoned after conversion of low-grade products in accordance with the method of the country concerned; for all other Community coalfields, including the Saar, it is calculated ton for ton.

For convenience in drawing up the energy balance-sheets, the data used in the foregoing Chapter, on Energy Problems, relate to production in tons h.c.e. (hard-coal equivalent), calculated by a new method of converting low-grade products which was adopted by the High Authority's Committee of Coal Statisticians on September 10, 1965.



<sup>1)</sup> Exclusive of building, foodstuffs, beverages and tobacco.

The increase was mainly in oil requirements, which went up by another 10%, as against 13% the previous year. Gas sales jumped 19%, but still represent only a small share of the total, 4.4%.

As regards electric current, the growth rate, 6.5%, seems to be levelling off somewhat from that in 1960-65, which will mean a further shrinkage in the outlets for coal. In 1966, moreover, a good water run-off resulted in extra hydro-electric production rendering unnecessary the consumption of 6m, tons of thermal fuels, including 3-4m. tons of coal, while in addition industrial expansion slackened off in three countries—Germany (Fed. Rep.), Belgium and Luxembourg—where the share of coal in total energy consumption is comparatively large.

105. With all these factors combining against coal, the collieries had to redouble their efforts to get production down closer to the steadily declining level of demand.

Imports from third countries were reduced in 1966 by 1,500,000 tons. To appraise this adjustment correctly in its relation to the movement of Community internal requirements, account must be taken of considerations of

- (a) price, having regard to the competitive position of imported coal;
- (b) grade, as for instance with sized anthracites for private households;
- (c) external trade relations, as in the case of dealings with countries having State-controlled trading systems.

The endeavours to reduce the mountainous availabilities by import and production cuts failed, however, to bring supply into line with demand. Pithead stocks in the Community as a whole rose over the year by 10,400,000 tons h.c.e., while in Germany a further 3m. tons piled up at the special storage depots recently organized in the neighbourhood of the consumer centres. By the end of the year the industry had 47m. tons of unsold coal on its hands, not counting dealers' and consumers' stocks: this is 3,800,000 tons above the previous record level of 43,200,000 reached in 1959, and the more serious in that production is considerably smaller today than it was then, while the outlets have been contracting rapidly (see *Table 11*).

#### Internal Demand

106. Internal coal requirements in 1966 totalled 221,500,000 tons, a 6.9% drop (-16,500,000 tons) from the year before. This is about the rate at which the coal market is now contracting, apart from corrections for any unusual

TABLE 11

Movement of the overall hard-coal position in the Community

('000,000 metric tons)

	1964	1965	1966
Community consumption Changes in consumers' stocks	$\begin{array}{c c} & 253.0 \\ + & 0.2 \end{array}$	238·4 — 0·4	+ 220·7 + 0·8
Intra-Community disposals Exports to third countries	253·2 . 2·8	238·0 2·2	221·5 2·0
Total demand	256.0	240.2	223.5
Production (incl. low-grade products in tons of saleable coal) Imports from third countries	230·1 31·1	219·7 29·1	206·2 27·6
Total supply	261.2	248.8	233.8
Changes in pithead stocks Changes in storage depots' and importers' stocks	+ 6.0	+ 8·6 + 0·9	$\begin{array}{ c c c c c } + & 7 \cdot 3 \\ + & 3 \cdot 0 \end{array}$

weather conditions. In the two big sectors where coal had previously still been doing fairly well, the coking-plants and the power-stations, the curve has recently flattened out or begun to fall.

Activity in the coking sector, which had been running pretty steadily, with some fluctuations, since 1960, in 1966 showed a sharp downturn of 5.2%, which had it not been for substantial additions to stocks would in fact have This was due to the trend in the iron and steel industry, which takes three-quarters of the coke produced. For quite some time now developments there have been out of step with the movement of the index for industry overall. Pig-iron production, after rising in 1964-65, fell in 1966 by 2% for the Community as a whole and by over 6% in Germany, and although in one country, Italy, it did increase further, by 14%, this did not greatly assist disposals of Community coal, since the Italian coking-plants rely principally on imported fines. Meantime the drive to improve blast-furnace efficiency (by ore sintering, fuel-oil injection and so on) is going ahead steadily, in addition to which the reduction of the coke rate can proceed faster when the plants are operating below capacity. In consequence, the cut in the coke rate in 1966 amounted to 37 kg., from 702 kg. per ton of pig-iron produced to 665, a notably bigger saving than in the preceding years.1)

<sup>1)</sup> See No. 158 below.

108. The thermal power-stations' consumption of coal, which until 1964 had been climbing steeply, has since then been showing signs of levelling out. In 1965, even corrected for the above-average water run-off, which caused it to work out exceptionally low, it showed hardly any increase over the year before—though admittedly the figures in this case were affected by the low industrial growth rate (less than 4%) and small rise in total requirements of electric current (6.5%). In 1966 electricity requirements again went up by only 6.5%, despite reviving economic activity and a 5.5% increase in industrial production. Coal consumption remained stationary, as in the previous year, with most of the additional demand being met by the hydrocarbons.

 $TABLE\ 12$  Fuel consumption of Community thermal power-stations

('000,000 metric tons h.c.e).

	1965		1966		Change 1966/1965	
Fuel	Tonnage	%	Tonnage	%	Tonnage	%
Hard coal Brown coal Oil Gas	54,242 18,510 24,785 8,820	51·0 17·4 23·3 8·3	53,400 19,400 28,014 9,494	48·4 17·6 25·4 8·6	$ \begin{array}{c cccc} - & 842 \\ + & 890 \\ + & 3,229 \\ + & 674 \end{array} $	- 1.6 + 4.8 + 11.3 + 7.6
Total	106,357	100	110,308	100	+ 3,951	+ 3.

The power-station sector does constitute an assured market for solid fuels up to a point, inasmuch as some of its plant—more in some countries than in others—cannot be fired with anything else. This is true, however, only of 46% of the Community's total thermal generating capacity, the majority of it in the two main coal-producing countries, Germany (Fed. Rep.) and France: side by side with this there is a great deal of dual- and multi-fired plants whose operators will normally use whichever of the competing fuels is currently the cheapest, except where special arrangements exist to promote sales of coal (such as those recently enacted, but not yet in force during the period under review, in Germany).

109. Outside of the coking-plants and the power-stations, which account between them for nearly two-thirds of all coal disposals within the Community, the slide continued even faster than before. Sales of solid fuels to industry

other than iron and steel, which are exposed to the full blast of competition from other energy sources, showed the biggest year-to-year drop yet, of 16%; the decrease was most marked in the two countries where coal is still used on a substantial scale in industry, Germany (Fed. Rep.) and France, amounting to 2,700,000 tons (-19.7%) in the former and 900,000 tons (-10.6%) in the latter.

Sales to the railways and the gasworks also plunged, this time by nearly 20% as compared with 10% in 1965. In the case of the gasworks, 85% of which are in Germany (Fed. Rep.), an intensive investment drive is in progress to modernize the distribution network and scrap the uneconomic municipal works.

Lastly, the household sector, until early 1964 one of coal's strongholds, is now definitely going the same way as the rest. Though 1966 was an average year for temperatures, coal sales were 6% lower than in 1965, and oil and gas consumption respectively 10% and 15% higher, or in absolute figures

coal -4,100,000 tons h.c.e.

oil +7,100,000 tons h.c.e.

gas +1,700,000 tons h.c.e.

# Intra-Community Trade

110. The volume of intra-Community trade in hard coal and briquettes increased slightly in 1966, to nearly 18m. tons, 700,000 more than in 1965. As regards briquettes there was little change: the rise was due to an upturn of 1,500,000 tons (12.8%) in deliveries of coal from Germany (Fed. Rep.), principally to Italy, but also to France and the Netherlands, and on a minor scale to Belgium. On the other hand there was a steep drop of 400,000 tons in Belgian sales to France, and rather less marked decreases in those to Germany (Fed. Rep.) and the Netherlands; Dutch sales also fell by about 200,000 tons, mostly consignments to France.

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The shrinkage in trade in coke-oven coke which has been in evidence since 1964 continued, the total volume in 1966 working out at 8,800,000 tons, one million (10%) less than in 1965. This particular trade is governed by the level of activity in the iron and steel industry, and the decrease was chiefly in procurements by France and Luxembourg; Belgian and Dutch purchases also went down somewhat (see *Table 13*).

 $TABLE\ 13$  Intra-Community procurements of solid fuels

('000 metric tons delivered)

Purchaser country				Change 1966/1965		
		1965	1966	Tonnage	%	
Hard coal and briquettes Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	Total	1,268 4,425 7,271 485 115 3,757	1,050 4,600 7,200 1,185 100 3,850	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{rrrrr}  & - & 17.2 \\  & + & 4.0 \\  & - & 1.0 \\  & - & 13.0 \\  & + & 2.5 \\ \hline  & + & 3.8 \end{array} $	
Coke-oven coke Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	Total	481 625 4,441 265 3,812 191	465 565 3,840 240 3,540 150	- 16 - 60 - 601 - 25 - 272 - 41 - 1,015	- 3·3 - 9·6 - 13·5 - 9·4 - 7·1 - 21·5 - 10·3	

# Imports from Third Countries

111. Hard-coal imports from third countries in 1966 totalled 27,600,000 tons, 1½ million less than in 1965. More than two-thirds of this (20m. tons) came, as usual, from the United States, and the decrease was largely in procurements from this source, though purchases from Britain—mostly of anthracites for private households, especially in the Netherlands—were also affected. There was a slight rise in incomings of Polish coal.

Of the year's imports, 3,700,000 tons were of house coal, 12m. of coking coal, and most of the rest for use at power-stations.

112. A breakdown by countries of destination shows sizeable cuts in imports by Germany, Belgium and the Netherlands.

 $TABLE\ 14$  Hard-coal imports from third countries, by exporter countries

('000,000 metric tons) Country 1961 1964 1965 1966 United States 11.9 20.520.9 20.0 United Kingdom 2.54.1 2.6 2.0 Poland 1.8 1.6 1.8  $2 \cdot 0$ Soviet Union 1.9 3.6 3.0 3.0 Other sources 0.7 1.3 0.8 0.6Total 18.8 31.1 29.1 27.6

 $TABLE \ \ 15$  Hard-coal imports from third countries, by importer countries

('000,000 metric tons) Country 1961 1964 1965 1966 Germany (Fed. Rep.) 5.6 7.47.67.0 Belgium 0.8  $3 \cdot 2$ 2.7 $2 \cdot 1$ France 2.45.95.0  $5 \cdot 1$ Italy 6.8 9.410.2 10.5 Netherlands  $3 \cdot 2$  $5 \cdot 2$ 3.5 2.9 Community 18.8 31.129.1 27.6

# Exports to Third Countries

113. The flow of exports continued to dwindle. Shipments of hard coal totalled only 2m. tons; the fall in orders was mainly concentrated in Switzerland, while the other markets, such as Austria, remained rather steadier.

Exports of coke-oven coke fell from 3,300,000 tons to 2,700,000. About half the total went to the Scandinavian countries, and of the remainder approximately the same amounts to Austria and to Switzerland.

TABLE 16

Hard-coal and coke exports to third countries (Community)

('000 metric tons)

Purchaser country	1966			
- utchaser country	Hard coal	Coke		
Scandinavia Switzerland Austria Other destinations	212 500 754 518	1,255 370 390 650		
Total	1,985	2,665		

## National Supply and Demand Positions and Levels of Producers' Stocks

114. Additions to stocks in 1966 amounted to 7,300,000 tons of coal and 2,400,000 tons of coke-oven coke, or 10,400,000 tons hard-coal equivalent in all, plus a further 3m. tons sent in Germany (Fed. Rep.) to the storage depots close to the consumer centres. The total accumulation during the year was thus 13,400,000 tons, compared with 10,100,000 the year before.

Stocks increased everywhere, but the pattern varied from country to country.

In Belgium home demand fell by 6·1%. Progress with rationalization and closures brought an 8% reduction in capacity, which combined with short-time working resulted in a cutback of 12% in actual production, but even so, and even though imports from third countries also went down, the surplus was not lessened: sales to other Community countries had meantime slumped heavily, and the net outcome was a rise of 700,000 tons in pithead stocks.

In the Netherlands a drastic slash of 11.8% in production, together with reduced imports, did offset a 7.3% contraction in home demand, so that only a small tonnage of coke had to be put to stock.

In France, partly in consequence of a high water run-off, home demand went down by 4.6%, while production decreased very little, by only 2%; the volume of trade both inside and outside the Community remained pretty well unchanged. 2,800,000 tons of coal were put to stock in 1966.

Country

Community

Belgium

France2)

Netherlands

Italy

The position was worst in Germany (Fed. Rep.), where coal has an appreciably bigger share of the market to lose and is losing it much faster. the fall in home demand was 9.1%, or another 11,400,000 tons of coal unsold. The rate of decrease in production remained around 6.3%, or 8.8% counting short-time working; the latter had to be stepped up to a level representing the forfeiture of 3,300,000 tons, as compared with 1,600,000 in 1965. trade was rather better, with intra-Community sales up by 1,500,000 tons and imports from third countries slightly down, the German industry's stocks mounted over the year by 6,600,000 tons h.c.e., plus the 3m. referred to above.

Producers' stocks in the Community as a whole at the end of 1966 stood at 32,700,000 tons of coal and 6,400,000 of coke, amounting to 41,500,000 tons h.c.e. in all.

TABLE 17 Producers' stocks of hard coal and coke

('000,000 metric tons h.c.e.) Additions to End 1964 End 1965 End 1966 stocks in 1966 Germany (Fed. Rep.)1) 10.1 18.3 24.96.6 1.8 2.6 3.4 0.8 6.8 8-1 10.72.6 0.60.40.70.31.31.6 1.8 0.2

31.1

41.5

10.4

20.1

### Production

Community hard-coal production totalled 204,900,000 tons in 1966, 13,200,000 less than the year before and 23,600,000 less than in 1964.1)

The decline, which is in progress in all the coal-bearing countries of the Community, is due purely to the steady shrinkage in demand; the personnel shortage, especially of hewers and underground tradesmen, which was still in evidence to a somewhat lesser extent in 1966, has not affected production.

Exclusive of 4m. tons of undistributed stocks at depots at end 1966 (3m. tons placed there during the year). Exclusive of 1,500,000 of importers' stocks at end 1966.

<sup>1)</sup> For the provisional 1966 figures see Statistical Annex, Table 1.

TABLE 18

Trend in hard-coal production

('000,000 metric tons)

Country	1953	1959	1962	1964	1965	1966¹)
Germany (Fed. Rep.)	140-9	141.8	141.1	142-2	135-1	126.5
Belgium	30.1	22.8	21.2	21.3	19.8	17.5
France	52.6	57.6	$52 \cdot 4$	53.0	51.3	50.4
Italy	1.1	0.7	0.7	0.5	0.4	0.4
Netherlands	12.3	12.0	11.6	11.5	11.4	10.1
Community	237-0	234.9	227.0	228.5	218.0	204.9

<sup>1)</sup> Estimated.

As in previous years, intensive efforts were made to increase operating efficiency, and also to take the fullest account of consumers' wishes and convenience by improving preparation, loading and transport facilities. A detailed account of the work done in this connection follows on a later page.<sup>1</sup>)

# Prices and Price Alignments

### Prices of Community coal

116. 1966 also saw a slight diminution in the Community collieries' average earnings. This was due to a combination of factors.

In the first place, whereas for some years past any adjustments to schedule prices had mostly been upwards, from the beginning of the coal year 1966-67 matters went the other way, more particularly in the case of the household grades. Belgian prices for house coal, hitherto the highest in the Community, underwent a substantial all-round cut on June 20, though the effect for the home consumer was reduced by the simultaneous raising of the transmission tax to the same level as for domestic fuels generally. Foreign coal remained cheaper, however, and alignment was increasingly resorted to, both in Belgium and elsewhere.

Schedule prices for the industrial grades remained for the most part unchanged, but actual revenues were everywhere affected by more extensive alignment. Alignment was also very prevalent in the case of coking coal; the

<sup>1)</sup> See Nos. 119 ff. below.

Belgian producers eventually published a new set of coking-coal prices, with effect from January 1, 1967, which to some extent incorporated alignment rebates already allowed.

### Prices of third-country coal

117. American f.o.b. prices, noted in last year's Report as having risen slightly, hardened further in 1966, especially for steam-raising coal. Transatlantic freight-rates, on the other hand, fell off, single-trip charges working out lower than at any time since 1962, so that by and large the European landed prices remained much the same.

#### Price alignments

118. With stocks mounting in consequence of the slowness with which the supply of Community coal is being brought into line with demand, producers sought at any rate to keep these to a minimum by selling more of their coal at aligned prices. The total amount so sold in the coal year 1965-66 was 14,700,000 tons, compared with 10,900,000 tons in the previous twelve months, and for the first time sales by alignment on third-country quotations (7,900,000 tons) exceeded sales by alignment on Community schedule prices (6,800,000 tons). The proportion of aligned to total sales was thus level with the peaks recorded in 1961 and 1962, while the actual discounts themselves were considerably larger than before. The same state of affairs prevailed in the first half of the coal year 1966-67.

Sales by alignment may be broken down by consumer sectors roughly as follows:

	'000,000 tons	%
iron and steel industry	9.3	63
other industries	4.0	27
private households	1.4	10
		400
	14.7	100

The trend is due in part to pressure from the iron and steel industry to obtain Community coking coal and coke on approximately the same terms as third-country coal and coke produced therefrom, and in part, in the case of steam-raising coal, to the more and more powerful competition from petroleum products.

#### THE RATIONALIZATION DRIVE AND THE COST TREND

# Technical Aspects of Rationalization<sup>1</sup>)

119. Both at enterprise and at industry level the rationalization and reconstruction drive went ahead in 1966 in all coalfields of the Community, though with varying degrees of intensity and success.

#### Coal-winning

120. Longwall working being the method most used in Community pits and expected to remain so for some time to come, rationalization of coal-winning was naturally concentrated mainly on improvements in this direction.

The proportion of coal won from fully-mechanized (power-cut and power-loaded) faces rose in 1966 by another 1.9%, to 71%. This is, however, just about the ceiling: there is no real prospect of any further productivity increase to speak of from this quarter. Attention is accordingly now being devoted not so much to maximum mechanization of winning as to efficiency improvementss in the working as a whole. These consist more particularly in the introduction of powered ("self-advancing") supports, mechanization of the highly labour-intensive operations at the face ends, and fuller utilization of the face equipment, partly by general streamlining and partly by increasing the number of production days per face and coal-winning shifts per day.

 $TABLE\ \ 19$  Proportion of production from fully-mechanized faces

(%)

	1959	1962	1964	1965	1966¹)
Ruhr Germany	27.3	55.6	67.2	71-1	74.5
(Fed. Rep.)	25.1	56.2	$69 \cdot 2$	73.5	76.3
Belgium	22.5	45.6	54.4	56.0	57.0
France	45.9	49.3	$58\cdot 2$	59.8	61.0
Italy Netherlands	46.0	72.1	76.9	78.9	<del>79</del> ·6
Community	30.3	54.0	65.2	69.1	71.0

<sup>1)</sup> Estimated.

<sup>1)</sup> For technical research proper, see Nos. 279 ff. below.

- 121. Big new increases in output per man/shift are expected to result from the introduction of remote-controlled or automated mining, which involves the use of self-advancing supports. At present the focus is on making the equipment concerned completely reliable in operation, after which it will be necessary to settle just where the resulting productivity improvements will be large enough to justify the very substantial capital expenditure involved. It is an unquestioned fact that only a selection of the existing coal measures can be mined by remote control or automation, which will mean that the Community's economically workable reserves, already becoming more and more limited as operations are increasingly confined to the best seams, will diminish still further with the adoption of the new methods.
- 122. For the same reason, work is being stepped up on the development of new high-efficiency coal-winning methods. A number of technical successes were achieved in 1966, as in the case of hydraulic mining; it will, however, be some time before it can be known whether this is a paying proposition or not. Manless and prop-free working, by means of large boreholes, has also been found to be practicable in certain seams, and looks as if it might prove remunerative.

### Other operations below ground

123. The various outbye operations, now generally recognized to have a very definite bearing on overall productivity, are being subjected to intensive streamlining and reorganization. Particularly good results have been achieved with regard to materials haulage, and in practically all the other sectors too (roadway drivage, main and gate road transport, maintenance and so on) performance has improved.

To sum up, the great aim at present remains more efficient longwall working and, particularly, more efficient powered supports. In addition, special attention is now coming to be given to the all-important matter of layout, meaning the outbye dispositions and physical and organizational communication with the face.

#### Inter-colliery rationalization

124. Two types of rationalization particularly relied on in 1966, as in previous years, were the closing of uneconomic pits while allowing the coal there to be mined from another nearby pit istead, and the running of two adjacent-pits together to form one (see *Table 20*). Quite considerable expense—exactly how much is impossible to compute statistically—was also saved in a number of

cases by establishing central workshops and stores serving several collieries, and in others again by reorganizing and centralizing the administration.

These measures too, by reason of their economic, social and other repercussions, are taking some time to carry through, but can be expected to lead to further productivity increases and cost savings in due course.

# Industrial Aspects of Rationalization

125. While the number of pits in operation very nearly halved between 1957 and 1966, production decreased by only 14%, the incidence of the closures being to a great extent offset by more efficient utilization of the remaining capacity. The position varies, however, from country to country. In Germany (Fed. Rep.) the original Rationalisierungsverband was established with the specific object of closing down some pits while enabling the industry to continue producing much the same amounts as before, but as the coal market has gone to pieces the German producers have now had to change course: the programme of the new Aktionsgemeinschaft is designed actually to reduce the industry's effective production capacity.

TABLE 20	
Progress of rationalization in	the Community

Year .	Production ('000,000 tons p.a. ton for ton)	Pits in operation at end of year	Average daily output per pit (tons)	Average underground o.m.s. (kg.)
1953	242.3	475	1,685	1,441
1957	254.3	416	2,085	1,594
1961	235.8	291	2,805	2,059
1963	229.8	271	3,165	2,331
1965	223.9	243	3,380	2,461
1966	209.8	216	$3,545^{1}$ )	2,603

<sup>1)</sup> Estimated.

- 126. Colliery capacity is governed by three main factors, all closely interconnected:
- (a) amount of economically workable coal present;
- (b) layout and equipment;
- (c) size and efficiency of the labour force.

Now as regards (a), less and less of the coal present can now in fact be rated as economically workable, partly because the industry's revenues have been suffering so badly. This can well impair production capacity, for the capacity of a given deposit is not a constant: it depends on how much coal there is to get, what it will fetch in the market, what the geological and technical operating conditions are like, and, on the business side, to what extent coal is competitive vis-à-vis other fuels, and how equipment costs and wages have been moving. The position in these respects can change rapidly with changing circumstances, with direct effects on the colliery's profitability and the amount of coal worth mining there. The probable lifetime of many pits can be appreciably affected.

As regards (b), generally speaking fuller exploitation of the scope for more efficient layout and equipment at the pits remaining in operation has sufficed to offset the loss of capacity represented by the closures. There is no means of telling how this factor is likely to influence future capacity.

As regards (c), recruitment remains a problem despite reduced production and the fact that the remaining collieries can count on a certain inflow of men from those that have closed and on foreign labour. The only possible means of coping with this difficulty would be a long-term recruitment and training policy, which would be far from easy to organize for a variety of reasons, not least the cost involved and the workers' inclination to prefer employment in other industries. Since the drift away from mining appears likely to continue, the personnel aspect must be expected, notwithstanding prospective productivity increases, to turn out another factor tending to lower production capacity.

## Germany (Fed. Rep.)

127. As can be seen from Table 21, the programme for the Saarbergwerke, under which there are to be seven large pits with an annual production of 13-14m. tons, is well on the way to completion. In the Ruhr, technical capacity will be little changed by the closures effected or to be effected under the Promotion of Colliery Rationalization Act; a series of other closures, however, to be systematically put in hand by the Aktionsgemeinschaft Deutsche Steinkohlenreviere, which was set up for the purpose in November 1966, will secure a substantial diminution in capacity from 1967 on.

TABLE 21
Progress of rationalization in Germany

		Pits in o	Average daily	Average underground			
Year	Ruhr	Aachen	Lower Saxony	Saar	Total	output per pit (tons)	o.m.s. (kg.)
1957	140	9	5	18	172	3,060	1,658
1962 1965	106 89	6 6	$egin{array}{c} 3 \ 2 \end{array}$	$\frac{12}{9}$	127 106	4,205 4,850	$2,459 \\ 2,815$
1966	79	6	$\begin{bmatrix} & 2 \\ 2 \end{bmatrix}$	8	95	$5,125^{1}$ )	$3,045^{1}$

<sup>1)</sup> Estimated.

### Belgium

128. The reduction of 9,500,000 tons in 1957 capacity originally planned was exceeded by 700,000 tons. Further closures, and hence a further contraction in capacity, may be expected to follow, owing to exhaustion of the economically workable reserves.

TABLE 22
Progress of rationalization in Belgium

	Pits in	n operation at end o	Average daily output	Average underground	
Year	South	Campine	Total	per pit (tons)	o.m.s. (kg.)
1957	113	7	120	865	1,253
1962	54	7	61	1,310	1,818
1965	47	7	<b>54</b>	1,440	1,874
1966	40	5	45	$1,490^{1}$ ).	2,000

### 1) Estimated.

#### France

129. Closures are proceeding, by and large, in accordance with the Government's production programme, under which production is to be cut to 46-47m. tons by 1970. Capacity is being reduced at the same time, a course always avoided in the past.

	. P	Pits in operation at end of year				Average underground
	Nord/ Pas-de-Calais	Lorraine	Centre/Midi	Total	daily output per pit (tons)	o.m.s. (kg.)
1957 1962 1965 1966	63 46 38 35	11 8 7 7	34 27 25 22	108 81 70 64	$\begin{array}{c} 1,745 \\ 2,225 \\ 2,580 \\ 2,735^{1})\end{array}$	1,682 1,922 2,039 2,098

#### 1) Estimated.

### Italy

130. The reconstruction of the Sulcis mines in Sardinia is now pretty well finished, and work is in progress on the extension of the power-station which is to be the coalfield's main customer.

#### Netherlands

131. The phased amalgamation of two large bituminous mines, already referred to in last year's Report, was finally completed in 1966, bringing the number of pits in production down to 11. With a start now being made on the closure of a third, the total decrease in annual production should amount to 3½-4m. tons.

# Costs1)

### Colliery productivity

132. Underground output per man/shift in the Community rose in 1965 by 2.8%, from 2,395 to 2,461 kg. This was practically the same rate of increase as in 1964 (2.7%), so at least the progressive loss of momentum observable

<sup>1)</sup> To comparabilize the cost series for the different countries, production and underground o.m.s. have had to be computed ton for ton. The underground o.m.s. figures as calculated by the national systems (for Aachen, the Ruhr, Lower Saxony and Dutch Limburg) are given in Table 1 of the Statistical Annex.

since 1961 became no worse, but the improvement was by no means sufficient to make any real difference to the parlous state of the coal industry. It was again only about half that achieved for industry as a whole.

A very much better performance was put up in 1966, when, according to the provisional figures, the Community average went up by about 150 kg., or roughly 6%, to 2,610 kg.—about the same increase as in the rest of industry.

133. O.m.s. in the Belgian, Aachen and Saar coalfields in fact rose in 1965 by 5-7%. In Dutch Limburg and the Ruhr, on the other hand, it merely crawled up, by 2-3% at most, while in France it actually showed a slight drop of about 0-3%, due to a 2-8% decrease in the Nord/Pas-de-Calais collieries, where reorganizations and reconversions were in progress.

The better showing in 1966 was mainly the result of the 7-8% leap in German and Belgian o.m.s. following technological improvements and numerous closures of uneconomic pits. French and Dutch productivity rose by 3-4%.

#### Costs

134. Quite apart from the coal industry's troubles on the sales and competition side, a variety of circumstances combined in 1965 to push up its costs more steeply than ever, the increase working out at 5.4% for the Community overall and from 3% to 6% in the different coalfields.

The main reason was the lag between wages and productivity. Gross hourly wages went up, on an average, twice as fast as productivity: that is to say, labour costs, which account for over half the total cost per ton produced, went up for the Community as a whole by more than 4%, despite the steps taken by the Governments to relieve the collieries of part of their inflated social-security charges.

The lag in 1965 was greatest in France and smallest in Belgium (see Table 24).

In almost all the member countries gross hourly wages rose less steeply in the coal industry than in industry as a whole; the national average increases were 1-2% higher for the latter than for the former, except in France where the two were about the same.<sup>1</sup>)

<sup>1)</sup> See Nos. 450 ff. below.

		TABLE	24	
	Year-to-year			
and	gross hourly	wages of un	iderground n	nineworkers

		0.1	n.s.		G	ross hourly	wages1)	
Country	1963	1964	1965	1966³)	1963	1964	1965	1966*)
Germany (Fed. Rep.) Belgium France Netherlands	+ 6.5 + 0.1 + 1.9 + 0.9	+ 3·8 - 3·1 + 4·4 + 3·4	$\begin{array}{c c} + & 3.6 \\ + & 6.3 \\ - & 0.3 \\ + & 2.0 \end{array}$	$\begin{vmatrix} + & 8 \cdot 0 \\ + & 7 \cdot 2 \\ + & 2 \cdot 9 \\ + & 3 \cdot 0 \end{vmatrix}$	$\begin{vmatrix} + & 7.3 \\ + & 8.4 \\ + & 10.5 \\ + & 5.2 \end{vmatrix}$	+ 5.7 + 6.0 + 8.2 + 14.3	+ 8·6 + 8·7 + 5·8 + 6·8	+ 2·4 + 8·8 + 3·7 + 5·5

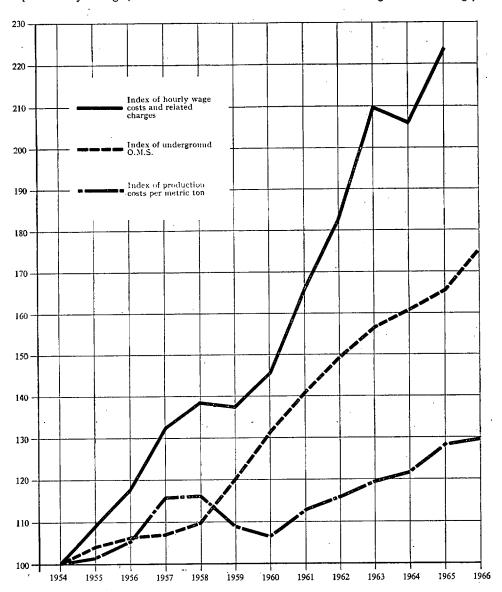
Underground wage-earners.
 Provisional figures.

- The movement of costs, and more particularly labour costs, in the coal industry is not determined solely by that of gross hourly wages in relation to productivity: it also depends on "employers' related charges," i.e., first and foremost, social-security payments. Generally speaking, up to 1963 these "indirect labour costs" had been rising much faster than actual wage costs (see Table 25), but in 1964 the position changed considerably when the German and French Governments made arrangements to take some of the weight of the miners' social-security scheme off the industry's shoulders. can be seen from the table, the indirect charges in the two countries again rose faster than emlpoyer' hourly wage costs and related charges together, notwithstanding what was being done to lessen the social-security burden; in Belgium and the Netherlands, on the other hand, Government action produced the opposite effect.
- The Community industry's equipment and materials costs per ton of coal produced showed an increase of about 3% in 1965. The in some cases rather sketchy data available indicate that this was due partly to actual price increases for the equipment itself, partly to reduced production, and partly (what precise part is not clear) to advancing mechanization, which of course means more machinery.
- Such particulars as are to hand for 1966 suggest that the coal industry's costs will prove to have risen in that year a good deal more slowly than before (see Table 26). Owing to the wage/productivity lag, some increase is still to be expected in Belgium, France and the Netherlands, but a considerably smaller one than in 1965; in Germany (Fed. Rep.) there may turn out to have been a slight drop.

#### GRAPH No. 2

#### Trend in Underground O.M.S., in Employers' Hourly Wage Costs and Related Charges (Underground and Surface Together), and in Production Costs per Metric Ton

(Community averages; costs calculated in dollar units of account at ruling rates of exchange)



#### Earnings

Proceeds per ton for the Community overall went up in 1965 by 1.4% Examination of the trends in the individual countries and (see Table 26). coalfields shows that this was chiefly due to a price increase for German coal from January 1, 1965 (for most coals an across-the-board increase of DM 3.00 per ton). At the same time it is apparent that the schedule prices so raised were not always charged in full, and that the effect of the increase was partly cancelled out by the many discounts allowed. The other Community coalfields recorded falls of 2-3% in their revenues.

It should further be noted that the pile-up of stocks presented the collieries with an additional financial worry in 1965 and 1966. By September 1966 pithead stocks were up to 31m. tons, representing in themselves nearly \$500m. and involving the producers not only in liquidity difficulties but in substantial expenses with regard to interest payments and storage and handling costs.

Provisional figures for 1966 indicate an average decrease of about 1% in the Community collieries' earnings during the year (see Table 26), due for the most part to pressure of competition from other energy sources.

#### Results

The cost/earnings imbalance having steadily worsened in the last few years, including 1965, the finances of all but a handful of Community collieries are in a very bad way: without direct State aid a great many of them would by now not even be able to meet their running expenses. 1966 brought no real improvement, as is apparent from what follows.

#### COMMUNITY SYSTEM OF STATE AID

An account was given in the Thirteenth General Report') of the reasons and principles on which the High Authority based itself in instituting a Communityco-ordinated system of State aids to the coalmining industry with effect from 1965.2) Last year's Report contained a description of the initial implementation of the relevant Decision,1) which, it may be briefly recalled,

See Thirteenth General Report, Nos. 97 ff.
 Decision No. 3/65: see Official Gazette No. 31/65.
 See Fourteenth General Report, Nos. 83 ff.

TABLE 25

Trend in employers' hourly wage costs and related charges!) and in share of indirect labour costs therein

(underground and surface)

		related charges of which:		Year-to-year change	++++++++++++++++++++++++++++++++++++++
, , , , , , , , , , , , , , , , , , ,	uin	s and related cha	of wh indirect la	1954 = 100	110.3 114.8 142.5 142.6 166.6 186.1 227.1 257.5 268.8
	Belgium	Employers' wage costs and related charges	tal	Year-to-year change	+++++   19.6 19.6 1.4 1.4 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
		Етр	Total	1954 = 100	103.7 110-5 132-2 137-2 135-3 138-8 143-9 176-9 176-9 196-1
		rges	of which: indirect labour costs	Year-to-year change	+ + + + + + + + + + + + + + + + + + +
1	ed. Rep.)	s and related cha	of wh indirect la	1954 = 100	106.1 100.0 122.0 163.4 181.7 193.9 218.3 241.4 264.6 211.0
	Germany (Fed. Rep.)	Employers' wage costs and related charges	tal	Year-to-year change	++++++++++++++++++++++++++++++++++++++
		Епр	Total	1954 = 100	109-0 115-9 128-6 140-8 148-3 156-6 173-1 189-9 207-2 228-0
			Year	•	1955 1956 1957 1958 1960 1960 1961 1962 1963

(Continued on next page)

TABLE 25 (contd.)

		Fra	France			Nethe	Netherlands	
	Emj	oloyers' wage cost	Employers' wage costs and related charges	ırges	Emp	loyers' wage cost	Employers' wage costs and related charges	ırges
Year	To	Total	of w) indirect la	of which; indirect labour costs		Total	of w) indirect la	of which: indirect labour costs
	1954 = 100	Year-to-year change	1954 = 100	Year·to·year change	1954 = 100	Year-to-year change	1954 = 100	Year-to-year change
1955   110.4	110.4 123.4 141.9 159.4 170.8 185.0 207.6 227.1 261.1 261.1 259.2 273.8	++++++++++++++++++++++++++++++++++++++	113.7 132.5 159.3 182.3 195.6 226.4 226.4 200.8 367.7 291.6	++++++++++++++++++++++++++++++++++++++	110-9 122-1 139-9 147-2 157-8 157-8 171-0 187-8 202-6 231-7	++++   ++++++ 0.11 0.12 0.14 0.16 0.16 0.16 0.17 0.17 0.17 0.17 0.17 0.17 0.17 0.17	111.9 131.0 144.0 144.0 159.5 159.5 186.9 222.6	++++ +++++ 11.1.9 1.7.1 1.7.1 1.7.2 1.7.3 1.7

'1 ror cennitions of the terms "employers' wage costs and related charges" and "direct and indirect labours costs," see Statistiques Sociales No. 1/82, published by the Statistical Office of the European Communities.

TABLE 26

Indices of production, underground o.m.s., employers' hourly wage costs and related charges (underground and surface), production costs and proceeds of coal sales

Year	Production index <sup>1</sup> )	n index¹)	Index of underground o.m.s. <sup>1</sup> )	lex rground s.¹)	Index of employers' hourly wage costs and related charges <sup>2</sup>	mployers' age costs I charges <sup>2</sup> )	Index of production costs costs per ton	lex tion costs er ton	Index of proc	Index of proceeds per ton
	1954 = 100	Year-to-year	1954 = 100 Year-to-year	Year-to-year change	1954 = 100 <sup>3</sup> ) Year-to-year change		$1954 = 100^{3}$ Year-to-year change	Year-to-year change	$1954 = 100^3$ Year-to-year change	Year-to-year change
1955 1956 1957 1958 1959 1960 1961 1963 1964	102-1 103-3 102-6 102-0 97-3 97-0 95-4 95-0 95-0 95-0	++      +	104-1 106-3 107-0 109-7 120-0 131-4 140-9 149-6 166-4 166-7 165-2	++++++++++++++++++++++++++++++++++++++	109-0 117-6 132-4 137-5 137-5 165-8 165-8 209-7 228-7	++++ +++++ + + + + + + + + + + + + + +	106.3 116.6 116.1 116.1 116.1 118.7 119.5 128.2 128.2	++++  +++++ +**************************	101.9 107.3 115.6 114.9 109.5 107.9 112.8 117.9 112.8	+++   ++++

1) New statistical series computed ton for ton.

1) For a definition of the term "employers" wage costs and related charges, "see Statistiques Sociales No. 1/62, published by the Statistical Office of the European Communities.

1) Bosen outlites in dollars at ruling rates of exchange.

4) Provisional figures, partly estimated on the basis of the first six months.

- (a) sets forth the conditions under which the disproportionate burden of socialsecurity benefits payable by the coalmining industry may be lessened by aid from public funds;
- (b) empowers the High Authority, after consultation with the Council of Ministers, to allow the part-financing by Governments, provided this does not interfere with the proper functioning of the Common Market, of exceptional expenditure by collieries on positive rationalization (productivity improvements), negative rationalization (closure of pits or workings) and area redevelopment;
- (c) requires the member States to declare to the High Authority each year all financial action they are intending to take, directly or indirectly, on the coal industry's behalf (for 1966, this was to be done by November 1, 1965).

# Implementation of Decision No. 3/65 in 1966

141. All the member Governments duly declared their intentions. In consequence, however, of the industry's increasing troubles and their implications for the Governments' economic and financial policies, the declarations were in some cases late or incomplete owing to estimation difficulties, insufficient data or delays in statistical evaluation. The Belgian Government in particular, as the position in the Belgian industry deteriorated over the year, was obliged several times to step up the amount of assistance furnished and alter the allocation arrangements. The High Authority had more than once to contact Governments asking for additional particulars.

For these reasons, it was not until mid-1966 that the High Authority was able to report to the Council, and then not in full detail, on the member States' plans for aiding the coal industry in 1966.

An account follows of the action taken by the member States in connection with social security, rationalization and redevelopment operations, and allied matters.

### Assistance with social-security benefits (Article 2,2)

142. Article 2,2 of the Decision allows State aid towards the payment of socialsecurity benefits, to offset the disproportionately heavy burden on the coal industry in this respect. The overburdening is the effect, in the main, of the considerable shrinkage in the colliery labour force, as a result of which the relation between the charge per actively-employed mineworker and the benefit per payee has, with the contraction in production, become more and more unbalanced: the Governments' measures are designed to bring this relation into line with that in other industries.<sup>1</sup>)

 $TABLE\ 27$  Assistance with social-security benefits

Country	Assistane Articl		Year-to-year change		
Country	1965	1966	Amount	%	
Germany (Fed. Rep.)  DM '000,000 \$ '000,000 \$ per metric ton	2,117.5 529.4 3.76	2,272.4 568.1 4.33	$+ 154.9 \\ + 38.7$	+ 7.3	
Belgium BF '000,000 \$ '000,000 \$ per metric ton	5,508.1 110.2 5.57	5,871.6 117.4 6.71	$\begin{array}{c} + \   363.5 \\ + \   7.2 \end{array}$	+ 6.6	
France FF '000,000 \$ '000,000 \$ per metric ton	1,230.2 249.2 4.86	1,336.8 270.8 5.35	+ 106.6 + 21.6	+ 8.7	
Netherlands Fl. '000,000 \$ '000,000 \$ per metric ton	51.0 14.1 1.21	76.0 21.0 2.04	$\begin{array}{cccc} + & 25.0 \\ + & 6.9 \end{array}$	+ 49.0.	
Community \$ '000,000 \$ per metric ton	902.9 4.04	977.3 4.66	+ 74.4	+ 8.2	

Table 27 gives an idea of the degree of overburdening and the extent to which it increased between 1965 and 1966.

One object of the Governments' assistance is to make it easier to tailor production to the reduced sales potential. It is also clear from the table that larger sums had to be paid out in 1966 than in 1965 inasmuch as the effective personnel strength had become still smaller and the benefits, with rising wages, still greater.

<sup>1)</sup> See Fourteenth General Report, No. 85.

Differences between the figures mentioned in last year's Report¹) and those shown in the table are due either to corrections or to subsequent action by the Governments: thus in the Netherlands a special measure was adopted in 1966 with respect to 1965, while in Germany (Fed. Rep.) a more accurate calculation was arrived at of the coal industry's share in the mineworkers' social-insurance scheme overall. The changes, however, were within the limits laid down in Article 2,2 of DecisionNo. 3/65 for compatibility with the Common Market.

The High Authority's appraisal of the member States' assistance towards the payment of disproportionately high social-security charges is that it is not such as to interfere with the proper functioning of the Common Market.

TABLE 28
State aid under Articles 3-5

		Year-to-year change		
1965	1966	Amount	%	
81.8 20.4 0.14	306.2 76.6 0.59	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ 274	
886.0 17.7 0.89	2,600.0 <sup>1</sup> ) 52.0 3.06	+ 1,714.0 + 34.3	+ 183	
214.8 43.5 0.85	330.5 66.9 1.32	+ 115.7 + 23.4	+ 54	
81.6 0.37	195.5 0.89	+ 113.9	+ 140	
	81.8 20.4 0.14  886.0 17.7 0.89  214.8 43.5 0.85	81.8	Articles 3-5 cha  1965 1966 Amount  81.8 306.2 + 224.4 + 56.2  20.4 0.14 0.59  886.0 2,600.0¹) + 1,714.0 + 34.3  0.89 3.06  214.8 330.5 + 34.3  214.8 330.5 66.9 + 23.4	

<sup>.....</sup> 

<sup>1)</sup> See Fourteenth General Report, No. 86.

# Assistance with rationalization (Articles 3-5)

- 143. The reasons for the contraction in coal consumption are well known. The collieries' finances are going from bad to worse, under the combined impact of falling revenues, due to the steadily increasing competition from other energy sources and from imported coal, and of rising wage costs, the biggest single item in production costs as a whole. Consequently, it is necessary that the scaling-down of production should continue, though with the minimum of social and regional complications. It is clear, in any event, from the declarations under Articles 3-5 of Decision No. 3/65, what line the Governments are taking in the matter. As can be seen from Table 28, the assistance given under this head was appreciably larger in 1966 than in 1965.
- 144. Differences between the 1965 figures shown and those given in last year's Report¹) are likewise due in some cases to corrections and adjustments and in others to further steps taken later in the year. The High Authority fully appreciates that the position in the industry can change so quickly as to compel the Governments to revise their estimates in line with the needs of the moment, so as to prevent social or regional difficulties.

All assistance declared for 1966 was under Articles 4 and 5; no Government stated its intention to avail itself of Article 3, concerning positive rationalization by capital projects for improving productivity.

# Germany (Fed. Rep.)

145. The German Government, invoking Article 4, granted, firstly, closure allowances and, secondly, reliefs on the payment of the capital levy and capital-gains tax due under the equalization of burdens scheme (Lastenausgleich).

The closure allowances, payable through the *Rationalisierungsverband*, were the same as in 1965, viz. DM 12.50 per ton of saleable coal produced annually by the colliery concerned between 1959 and 1961. The total sum involved in 1966 was DM 103,160,000, divided as follows:

DM 65,160,000 in respect of a capacity of 5,256,000 tons scrapped in the Ruhr;

DM 38,000,000 in respect of a capacity of 3m. tons scrapped in the Saar.

<sup>1)</sup> See Fourteenth General Report, Nos. 88-89.

At the same time the enterprise effecting the closure is entitled to partial exemption from its obligations under the *Lastenausgleich*; the relief so granted amounted in 1966 to a total of DM 115m.

The increase in the closure allowances was due to the larger number of closures planned: the amount per ton remained the same as before. The High Authority noted that the payments covered only part of the expense resulting from the closures, and that the assistance with the *Lastenausgleich* contributions (which are based on State obligations incurred in previous years) was not of a nature to make possible pricing arrangements which would distort conditions of competition.

- 146. Under Article 5, the German Government further provided DM 45m. (as compared with DM 30,387,000 in 1965) to help finance the moving of stocks. This was part of the total of DM 194m. to be made available, by an agreement between the Government and the Notgemeinschaft Deutscher Kohlenbergbau G.m.b.H., over a period of four years: the agreement having been approved by the High Authority in 1965, no problems arose, though the High Authority reserves the right to request that appropriate action be taken should the coal bought and stored by the Notgemeinschaft be subsequently sold on terms liable to interfere with the proper functioning of the Common Market.
- 147. The German Government wrote on November 3, 1966, stating that despite strenuous efforts the position of the German coal industry had undergone a further worsening in 1966, obliging a number of collieries to have extensive recourse to short time in order to prevent yet another pile-up of stocks. The Government was accordingly prepared, as part of the drive to bring production into line with sales, and also with a view to reducing the growing number of idle shifts and consequent drop in miners' pay, and so making for continuity of employment, to furnish in co-operation with the Länder concerned the sum of DM 280m. for the years 1966-68, for the purpose of enabling 13 "catch-up shifts" due to be worked in lieu of public holidays falling on a weekday during this period to be omitted. The DM 280m. was to be allocated as follows:

2/13 in 1966;

5/13 in 1967;

6/13 in 1968.

The amount disbursed in this connection in 1966 would work out at DM 43m.

The High Authority is now studying this arrangement to establish whether it is in accordance with the requirements of Decision No. 3/65 and compatible with the proper functioning of the Common Market.

148. With regard to closures not effected through the Rationalisierungsverband, provided the colliery site is for sale the colliery is to be entitled to a closure allowance of DM 15 per ton of capacity where production was over 100,000 tons in the calendar year preceding the closure, and DM 10 per ton where it was less, while the Federal Government will assume two-thirds of the obligations under the Lastenausgleich. The allowances will be paid through a new private corporation, the Aktionsgemeinschaft der Deutschen Wirtschaft, which is financed mainly by partially tax-exempt funds from industry generally, and whose function is to work up the economic value of the mining areas by converting colliery sites and buildings so as to make them suitable for use by prospective successor industries.

### Belgium

149. The Belgian Government is furnishing assistance under Article 5 for the purpose of adjusting production to the state of the market. The present arrangements are not the same as those in 1965, and there is indeed a difference between the first and second halves of 1966.

Collieries entitled to subsidization are classed under two heads,

- (a) ordinary cases, viz. collieries operating at a loss but not, or not as yet, scheduled for closure, and currently continuing as usual;
- (b) special cases, viz. collieries included in the 1966-67 closure programme.

In the first half of 1966 the actual losses of the special cases were covered in full, and the expected losses of the ordinary cases in full up to BF 20 per ton and 90% beyond that. In the second half-year the arrangement was that the special cases' actual losses were in any event to be covered in full, and so were the ordinary cases' actual losses.

The original appropriation for 1966 was BF 1,637,600,000, of which BF 1,209,700,000 was to be allocated to the ordinary cases and BF 427,900,000 to the special cases.

150. Present information is that the total subsidy required will amount to at least BF 2,600m.

Actual disbursements in the first six months of 1966 are shown in *Table 29*.

As some necessary data were missing, the High Authority requested the Belgian Government to supply them.

TABLE 29

Subsidies under Article 5 in Belgium (1966, first six months)

Coalfield		Half-year's production	Special cases	Ordinary cases	То	tal
	:	('000 tons)	(BF '000,000)	(BF '000,000)	BF '000,000	BF per ton
Campine South		4,500 4.701	26.4 282.1	414.9 424.6	441.3 706.7	98.07 150.33
	Total	9,201	308.5	839.5	1,148.0	124.77

#### France

151. The French Government, having come to the conclusion that assistance with social-security benefits was not sufficient in itself to dispose of the coal problem, that to avoid economic difficulties account must be taken of the different regional structures, that the process of adjustment would need to be phased over a considerable period, and that the financial assistance provided must be designed not merely to make up losses but also to help overcome the manpower and training problems, announced its intention of directly subsidizing the industry to the tune of FF 330,500,000 (less FF 15m. allocated to Provence), broken down as shown in Table 30.

Article 5 of Decision No. 3/65 was invoked in support of the proposed assistance. In view of the highly individual economic patterns in the three French coalfields, their geographical positions and the particular problems con-

TABLE 30
Subsidies under Article 5 in France (1966)

Coalfield	Subsidies (FF '000,000)	1966 production programme ('000,000 tons)	FF per ton
Nord/Pas-de-Calais	66.0	25.5	2.59
Lorraine Centre/Midi	66.0 198.5	15.2 10.3	$\substack{4.34\\19.27}$
Total	330.5	51.0	6.48

fronting them, it was necessary to differentiate the subsidies to allow the phasing of the adjustment process. The total amount disbursed was larger than in 1965, and differently allocated to allow for the disparate regional situations and the specific targets fixed.

152. The Centre/Midi collieries received 60% of the assistance given, but as they are so remote, and produce only comparatively small tonnages for sale within a comparatively small area, the High Authority felt the subsidies to them could not possibly distort conditions of competition in the Common Market generally.

The remainder was shared exactly equally between the other two coal-fields: the incidence was, however, quite different, working out for the Nord/Pas-de-Calais at FF 2.59 per ton and 1% of revenues, and for Lorraine at FF 4.34 per ton and 7% of revenues. The Nord/Pas-de-Calais was the main beneficiary of the increase in aid in 1966, but it was considered impossible that any interference with competition should result, particularly considering the liquidity difficulties which were encountered in 1965, largely owing to stagnating productivity and the very low level of aid per ton.

The subsidy to Lorraine was very little higher than in 1965. Assistance on this scale can offset only a fraction of the operating losses there, so that the collieries are afforded no chance to alter their pricing arrangements; moreover, sales of Lorraine coal to other Community countries have so far been extremely small in relation both to the total volume of intra-Community trade and to consumption elsewhere in the Community. There is therefore no risk of distortion of competition vis-à-vis other Community producers.

### Netherlands

153. The Dutch Government, now faced, by reason partly of the trend in the energy market but mainly of the huge increase in competition from natural gas, with the problem of reorganizing and redeveloping the Limburg coalfield, has decided to pay the collieries a subsidy per ton of coal produced, but has not yet declared the details to the High Authority.

### Other assistance

154. Article 1 of Decision No. 3/65 requires the member States to declare "all financial assistance which they propose to grant to the coalmining industry, in direct or indirect form, in the course of the following calendar year." The

measures mentioned below do not come under the Decision, and were examined by the High Authority simply for conformity with the Treaty.

In Germany an Act was passed on September 5, 1966 (Bundesgesetzbuch Part I, p. 545) to maintain the share of Community coal in the production of electric current at 50% and restrict to some extent the power-stations' consumption of fuel oil, up to the end of 1970. Subsidies, estimated at DM 30m. for the first year and thereafter mounting to a probable DM 150m. in 1970, are to be paid to power-stations consuming the amounts of Community coal indicated in the Act. This constitutes not direct but indirect aid to the Community coal industry.

Various other arrangements instituted in different member countries for the purpose of either lessening the burden on the collieries or promoting coal consumption have also been examined by the High Authority, which has concluded that they do not come under Decision No. 3/65 and do not contravene the Treaty.

#### Consultations

- 155. In accordance with Decision No. 3/65, the Council of Ministers at its 103rd meeting, on March 7, 1966, held a consultation on the member States' arrangements for assistance to the coal industry in 1965. The High Authority thereupon, by Decisions Nos. 5, 6 and 7/66, of March 16, 1966,¹) authorized the German, Belgian and French Governments to furnish direct assistance for the calendar year 1965 as declared, on the lines set forth in last year's Report.²) Article 2 of the three Decisions required the respective Governments to forward to the High Authority by not later than May 31 all particulars of the assistance so furnished, including precisely what amounts had been disbursed and to whom, and of the nature and scale of the rationalization operations undertaken.
- 156. The Governments having duly supplied the information concerned, comparison of the forward estimates submitted under Article 1 of Decision No. 3/65 and the actual figures submitted under Article 2 of Decisions Nos. 5, 6 and 7/66 showed that taken overall they pretty well tallied: some alterations had been made in the allocation of the moneys as among the different coalfields, but not such as could affect the proper functioning of the market. In Germany the amounts paid in subsidy had been smaller than the original estimates; in Belgium

<sup>1)</sup> See Official Gazette No. 54/66.

<sup>2)</sup> See Fourteenth General Report, Nos. 82 ff.

they had been larger, but not very much larger (BF 886,000,000 instead of BF 825,400,000), and in any case still in conformity with Decision No. 6/66; in France, though they had worked out at a higher rate per ton because production had contracted faster than expected, they were in fact the same amounts as in the estimates.

The Council again consulted, at its 105th meeting, on July 12, concerning the member States' assistance under Decision No. 3/65 for 1966. The High Authority by Decisions Nos. 17 and 18/66, of September 14, 1966,¹) authorized the German and French Governments respectively, in accordance with Articles 3-5 of Decision No. 3/65, to furnish the assistance described above²) for the calendar year 1966; the Governments of the other two coal-producing countries, Belgium and the Netherlands, were meantime pressed to provide the High Authority as soon as possible with full details of their plans for aiding the collieries there.

# General operation of the colliery aid system in 1966

- 157. From the information at present to hand on State aid to the coalmining industry in 1966, the position would appear to be roughly as follows:
- (a) approximately 86% of the assistance given went to offset the disproportionate burden of social-security benefits, as compared with about 90% in 1965;
- (b) the absolute amounts involved in this connection continued to rise, and must be expected to go on rising for some time to come, since the decrease in production, and hence in the number of actively-employed mineworkers, automatically sends up the number of pensioners and others drawing insurance benefits;
- (c) aid under Articles 3-5 accounted for a much smaller proportion of the total, but was nevertheless larger than in 1965. The increase was due not only to the more extensive action taken, but also to the deterioration resulting in the collieries' finances from rising costs, poorer-quality coal (mechanization tending to push up the proportion of low-grade products) and ever-growing competition from rival fuels.

See Official Gazette No. 54/66.
 Decision No. 17/66 naturally did not cover the German Government's intended action with regard to the "catch-up shifts," of which the High Authority was only notified on November 3.

On consideration of the particulars available, the High Authority came to the conclusion that the assistance given in respect of social-security benefits was in conformity with Decision No. 3/65. It also found that in the case of France and Germany the subsidies granted to aid rationalization and/or avert disruption of the economic and social balance of the areas concerned were not calculated to make such a difference to sales, either in the Community or in the national or regional markets, as to distort conditions in the Common Market for coal; in the case of Belgium and the Netherlands it was not able to pronounce, the relevant information not being in its possession at the end of January.

### Section 2: The Common Market for Steel

### GENERAL STATE OF THE MARKET IN 1966

158. Community crude-steel production in 1966 amounted to 85,100,000 tons, slightly lower than in the previous year (86m.) though higher than in 1964 (83m.). Production, therefore, has not varied much over the last three years; utilization of capacity, on the other hand, has.

In 1966 the plants were operating at below 79% of capacity, as compared with the following rates in the preceding years:

1960	96%
1961	92%
1962	88%
1963	83%
1964	90%
1965	84%

Idle capacity in the Community as a whole worked out at 22m. tons, as against 3m. in 1960.

At the same time the imbalance in the world market worsened further owing to the installation of more and more new plants: whereas from 1955 to 1960 world potential exclusive of mainland China and the United States rose at about 16m. tons a year, since 1960 it has been averaging a good 23m. The largest increases have been in Japan, in the traditional steel-importing countries and in the Soviet Union; the Community's potential too has been growing steadily.<sup>1</sup>)

The resulting glut in the international market has led to a further slide in world prices, which in conjunction with intensifying internal competition has caused prices within the Common Market also to sag heavily. In consequence, the companies have been earning so much less that it is now doubtful whether they can afford the necessary capital expenditure on rationalization and modernization.

<sup>1)</sup> See No. 270 below.

159. Steel consumption by the Community manufacturing industries went up in 1966 from 71,500,000 tons to 71,800,000—a negligible increase compared with the 5% and 4% recorded in 1964 and 1965 respectively. The main cause of the slowdown was the drop in the level of general economic activity in Germany.

Producers', dealers' and consumers' stocks of rolled products increased in 1966 by some 200,000 ingot tons, whereas 1965 had seen a rundown of 1,700,000. The new accumulation threw the position in the Community steel market still further out of balance.

160. Steel exports kept up fairly well in 1966, at 16m. ingot tons. This is 2,800,000 tons, or just under 12%, less than in 1965, but the very high 1965 figure was due principally to an exceptional jump in sales to the United States, which dropped again in 1966 to the same level as in 1964.

Sales to other Western European countries, hitherto the Community's best customers, appear to be declining; so too do those to Latin America, the cause in this case being definitely the new producer countries' evident determination to become as far as possible self-supporting in steel and to sell as much as they can to their neighbours as well.

World availabilities of iron and steel products in the last few years having been well in excess of the relatively slowly-growing import demand, export prices for practically all rolled steels have suffered. As a further considerable increase in steelmaking capacity is in prospect in a number of countries, the years ahead are almost certain to see still larger tonnages on offer and a still larger number of sellers crowding into the market.

161. Imports rose only marginally, to 2,700,000 ingot tons, from the substantially reduced level of 2,400,000 tons to which they had abruptly descended in 1965. This stabilization would have been impossible had it not been for the peripheral protection introduced in 1963.

In Italy imports decreased further with increasing home production; in France and Germany they went up somewhat, and in Belgium and Luxembourg taken together there was also a slight upturn. The breakdown by provenance works out at about 20% from Eastern Europe and 80% from the West, compared with 22% and 78% respectively in 1960.

In view of the supply and demand situation described above, both inside and outside the Community, the High Authority in its quarterly guidance programmes repeatedly urged enterprises to gear production more to the real level 162. Community schedule prices remained largely unchanged in 1966.

The few individual and regional increases at the end of 1965 were not maintained. Under the steadily-growing pressure of world prices, the tonnage sold by alignment on these more than doubled, and of course, to get a really accurate picture, we should also bear in mind the tonnage sold by alignment on Community competitors' schedules which had themselves been aligned down to the world level. This progressive generalization of world prices—which are frequently rock-bottom ones—is resulting in stiffer competition than ever within the Common Market, where, as we have seen, demand is smaller than aggregate Community potential.

- 163. With the market in such disarray, the High Authority was compelled to renew the peripheral protection instituted in 1963 and 1964, and also various other measures designed more specifically to get the internal market on to a sounder footing. The whole corpus of arrangements in this connection was comprehensively discussed at the Council of Ministers' meeting on November 22.1)
- 164. The forecasts for 1967 indicate a slight further increase—say 1.8%—in internal steel consumption, a drop in exports, and no rise in crude-steel production. Since potential is meantime due to increase by another 4m. tons, this last will mean a yet lower rate of capacity utilization, very possibly a mere 75%.

### RAW MATERIALS

165. For iron ore, the trend of the last few years—the progressive elimination of the most uneconomic mines and shrinkage in the production of Community ore—continued in 1966, and the proportion of imported ore (Fe content) rose from 59% to 60%, compared with just under 42% in 1960. The pattern is likely to change still faster in the near future, as the Swedish mines have announced big new price cuts for 1967, ranging up to 14.5% for the grades in most general use, while the covenanted maritime freight rate has been reduced by 31%.

Increased internal recoveries of scrap led to a further easing in the market, consumers being enabled to buy further afield in the Common Market at lower prices, and imports decreasing accordingly. Overall, consumption of scrap in the blast-furnaces and steelworks together showed a slight relative diminution in 1966.

<sup>1)</sup> See No. 47 above and Nos. 200 ff. below.

### Iron Ore

#### Market situation

166. Gross extraction of iron ore in the Community declined by a further 7.3% in 1966, from 78,700,000 tons to 73m. The decrease in Germany was 12.7%, in France 7.4% and in Italy 8.5%; Luxembourg's production increased by 3.4%, and Belgium's from 91,000 tons to 125,000.

The concentration of production on the best mines continued: in Germany one mine closed outright and four others curtailed their operations, while in France there were two closures, in Lorraine, and eight cutbacks. The number of workers employed went down by 3,200 between December 31, 1965, and the end of October 1966.

Productivity again rose, both in the opencast and in the deep mines.

TABLE 31

Output per man/shift in the iron-ore industry (gross extraction, workers and apprentices together)

Year	Germany (Fed. Rep.)	France	Italy	Luxembourg
		A. Deej	p mines	
1955 1960 1965 1966 (1st 10 months)	4·25 5·86 9·46 10·73	10·08 14·84 21·64 23·25	3·01 4·51 6·20 6·62	7·55 9·17 14·55 16·67
		B. Openc	ast mines	
1955 1960 1965 1966 (1st 10 months)	13·24 28·88 43·82 42·95	25·42 36·61 41·20 40·65	8·26 7·67 13·90 14·24	41·34 62·32 70·10 86·96

167. Imports of third-country ore were rather lower in 1966 (first nine months) than the year before, 38,900,000 tons as against 40,300,000. With indigenous production falling, however, the share of imported ore in total consumption showed a further increase, from 41% to 42% of the gross tonnage and, as noted, from just on 59% to just on 60% in terms of Fe content.

Exports to third countries remained round about the same low level as in 1965, at 262,000 tons for the first nine months as compared with 267,000.

Intra-Community trade in iron ore dropped by 1,300,000 tons during the same period, mainly in consequence of smaller sales from France to Germany, Belgium and Luxembourg, where there is stiff competition from high-grade foreign ores.

168. The average Fe unit price of imported ores c.i.f. Community ports went down in the first half of 1966 from 17.7 to 17.3 cents. The movement is continuing, in consequence of the plentiful supply on offer in the world market.

The average price ex mine of Lorraine ore fellfurther, by about 6%, from 9.697 cents at the end of 1965 to 9.121 at the end of October 1966; in comparing these figures with those for imported ore, however, it is necessary to bear in mind the higher related costs resulting from the lower ferrous content of the French product.

### Outlook and action

169. Expanding capacity in various third countries resulted in a further overplus of high-grade ore in the international market, which seems likely to persist for some time to come. New mining projects are under way, principally in Australia, from which the Japanese steel industry is obtaining supplies, and in the United States, where production of taconite (a comparatively low-ferrous ore) is increasing; meantime a number of large-capacity overseas mines are working up and adding to their smelting plant and export shipping installations.

The downward movement in the prices of imported ores must therefore be expected to continue in the foreseeable future, especially now that improved transhipment facilities are available at the deep-water ports. With these already able to handle vessels of 100,000 tons, substantial savings in transport costs are possible, which more than offset the general rise in the shipping industry's overheads (wages, insurance, etc.). The biggest savings are to the countries whose supplies have furthest to come, such as Japan.

In the long term, however, the ore surplus is likely to diminish, and the market, which was badly disrupted at the end of 1966 by the slump in prices, should recover in a few years' time. Adequate tonnages of high-grade ore from economically workable seams will continue to be on offer in the world market: there is no risk of a turnround in this respect. On the other hand, with both ore and steel prices so low, the Community's overseas suppliers are not at present prepared to engage in capital spending, and it may well be that some mines producing less than top-quality ore or caught in an adverse cost trend will have to go out of business.

The Community mines will certainly still have a struggle to withstand foreign competition even if and when the market does recover. There does, however, remain some further scope for efficiency improvements and consequent cost savings.

The iron and steel plants using home ores can only remain competitive  $vis-\dot{a}-vis$  those provisioned from abroad and enterprises in third countries if the higher processing costs of the indigenous product are counterbalanced by lower procurement costs. Of particular importance in this connection, aside from the ex mine price, are the rail transport costs involved and the matter of burden preparation and production streamlining, measures concerning which are being studied by the High Authority.

In some Community producer areas which used until a few years ago to rely wholly or in large part on ore mined in the country concerned, the plants are now more and more making up their burden with a mixture of home and foreign ores. In thus sacrificing security of supply by allowing the proportion of Community to total Fe to dwindle (it now stands at 40%), the steelmakers have of course been motivated to some extent by the fact of increased steel production and hence increased ore requirements, but another consideration has been that the processing costs of indigenous ore have become unprofitably high, not only where the consumer plant is a long distance from the orefield, but even, in some cases, where it is quite close at hand. This trend is expected to continue, and it is estimated that by 1970 the share of indigenous ore in the Community's total demand coverage will be down to only 35% (Fe content), if that.

170. High Authority action to ease the process of adjustment for the iron-ore industry consisted mainly in aiding technological research and helping to enable redundant miners to obtain other employment. Also, some of its Decisions concerning concentrations, capital expenditure and transport may have the effect of improving matters for the mines.

The High Authority continued its policy of permitting special domestic rail tariffs for the carriage of ore to the consumer centres, by means of which the high cost of transporting home ore over long distances has been somewhat reduced.

# Scrap

### Market situation

171. There was little change during 1966 in the state of the Common Market for scrap. Requirements rose hardly at all, steel production being stagnant and pig-iron production slightly down. Scrap recoveries from within the Common Market showed an increase over 1965 (see *Table 32*).

Specific consumption decreased further, both at the blast-furnaces and at the steelworks, the input rates working out at 22·1 kg. per ton of pig-iron produced as against 23·9 in 1965, and 402 kg. per ton of steel produced (all production processes together) as against 403 in 1965 and 406 in 1964 (see *Table 33*).

Internal scrap recoveries were 400,000 tons higher than in 1965, which with the 400,000 tons taken from stock by the steel enterprises themselves enabled imports from third countries to be halved, from 1,324,000 tons to 628,000: German and French imports fell steeply, and Italian imports by 34%.

TABLE 32

Scrap requirements and availabilities of the Community iron and steel industry

(exclusive of independent steel foundries)

('000 metric tons)

·	1965	19661)	Percentage change 1966/1965
Requirements			
Pig-iron production Scrap consumption at the blast-furnaces Scrap consumption per ton of pig-iron	62,793 1,498	· 61,344 1,354	(— 2·3) (— 9·6)
produced (input rate) Crude-steel production Scrap consumption at the steelworks	(23.9 kg) 85,220 34,348	(22.1 kg) 84,365 33,938	(— 7·5) (— 1·0) (— 1·2)
Scrap consumption per ton of crude steel produced (input rate)	(403.1 kg)	(402.3 kg)	( 0.2)
Total scrap consumption	35,846	35,292	( 2.5)
Availabilities			
Net own arisings, less sales Purchases of scrap :	20,808	20,19 <b>3</b>	( 7.2)
(a) from within the Common Market (b) from third countries	13,659 1,324	14,060 628	$(+\ 2\cdot 9)$ $(\ 52\cdot 6)$
Total availabilities	35,791	34,881	( 2.5)
Changes in stocks at plants	— 62	- 398	

As regards intra-Community trade, there was a drop of about 250,000 tons in Italian procurements from Germany and France.

TABLE 33

Specific consumption of scrap in different types of production plant (Community average)

(kg. per metric ton)

Year Blast- furnaces <sup>1</sup> )	Steelworks (excl. independent steel foundries)*)					
	Basic Bessemer	Open- hearth	Electric- furnace	Other types	, Tota	
1961	53	76	691	944	204	401
1962	40	82	683	962	208	408
1963	38	95	690	977	228	415
1964	32	98	674	980	219	406
1965	24	101	$\bf 662$	980	230	403
1966	22	106	671	986	228	402

Per ton of pig-iron; incl. consumption of electric pig-iron furnaces.
 Per ton of crude steel, by production processes.

172. Belgian, French and Italian scrap prices declined by between 80c and \$3.00. German prices were cut by \$2.25 at the beginning of November.

In the United States, the main exporter country, massive availabilities and poor export sales caused the composite price to drift down over the year from \$34.17 in January to \$27.50 in December. Britain, also with large amounts on offer, temporarily derestricted the export of a number of further categories of scrap.

## Export regulations

173. The prohibition on the export of Community scrap to third countries, which had been reimposed on June 1, 1964, remained in force.

# Winding-Up of the Scrap Price Compensation Scheme

174. The total amount booked as at closure on December 31, 1965, on the basis of the contribution rates finally and legally established, 1) was 545m. dollar units of account. This was approximately 6m. units below the figure computed at the provisional closure in 1963 under Decision No. 7/63.2) The difference was

2) See Official Gazette No. 54/63.

<sup>1)</sup> See Decision No. 19/65, Official Gazette No. 224/65.

accounted for largely by corrections to the compensation credit balances following check-ups and recovery of sums fraudulently obtained; the finalized 1965 balance-sheet, however, also included reserve items for defaulting debtors and contested cases to a total of 9,700,000 units of account.

From the figures at closure it appeared that some 10,400,000 units of account were owed to the compensation fund by about 70 firms in all, while 4,400,000 units were owed by it. The creditor firms were paid in full by February 1966, from payments by debtors and funds in hand. The winding-up process then entered the concluding stage, that of retrieving the remaining moneys due, settling cases in dispute and going ahead with the various civil actions for fraud, the incomings from which will be used to pay refunds to all the enterprises covered by the scheme when it was in operation. A first set of refunds, to amount to between one and two million units of account, is planned for early 1967.

By the end of 1966 all the German, French, Belgian and Luxembourg debtor firms had paid up in full or agreed to redemption arrangements which would enable them to do so within a reasonable time. In the Netherlands one debtor firm has still not done so and is contesting the case before the Court of Justice. This leaves 34 small and medium-sized Italian firms, most of which will be very hard put to it to settle the substantial debts they have incurred, amounting in all to 7,400,000 units of account. The High Authority is trying to work out with the Italian Government how the moneys can be recovered without, if at all possible, obliging plants to close and so causing social hardship.

175. The Court of Justice in 1966 delivered judgment in eight scrap compensation cases, six of them concerning Italian firms. Four of these appeals were successful or partly successful; the other two, and one by a French enterprise, were dismissed. On the action for negligence brought in 1963 by 23 French firms, the Court found for five of the appellants and directed the High Authority to make good the loss sustained by them, estimated at 10,000 units of account; the other 18 either withdrew their claims or were nonsuited.

176. The position as regards actual frauds perpetrated has been described in detail in previous Reports.¹) We here therefore merely give a brief outline of developments in the meantime.

The amount of scrap of disputed status was originally put at 229,889 and later at 259,247 tons. From the fuller particulars furnished by the national authorities and the scrap dealers themselves, it emerged that of this quantity

<sup>1)</sup> See Ninth General Report, Special Annex, and Eleventh General Report, Annex III.

67,435 tons had been in order for compensation purposes after all; on the other hand, further investigation brought to light discrepancies in respect of another 64,997 tons. The total quantity now in dispute is thus 256,811 tons, consisting of 77,946 tons admitted for compensation as coming from military establishments, 107,129 supposedly imported from third countries, and 71,736 recorded as ship-breaking scrap.

With respect to 147,434 tons the scrap dealers agreed, following action taken against them, to repay the sum involved plus interest, the total amounting to 4,150,989 units of account: of this 3,588,489 has been disbursed to date, the remainder to be paid on an instalment basis. Of the amount already paid in, however, 194,358 units of account is having to be held over, as the payors are appealing.

With respect to the remaining 109,377 tons, the proceedings against eight dealers are still in progress; in most of them appeals are pending.

# Pig-Iron

### Production

177. Community pig-iron production<sup>1</sup>) in 1966 totalled 61,700,000 tons, a decrease of 2.4% from the previous year. The biggest drop was in Germany (Fed. Rep.), but the figures were also down in all the other member countries except Italy, which showed a rise of over 11%.

TABLE 34
Trend in pig-iron production<sup>1</sup>)

('000,000 metric tons)

Country	1960	1964	1965	1966	Percentage change 1966/1965
Germany					
(Fed. Rep.)	25.74	27.18	26.99	25.40	- 5.9
Belgium	6.52	8.12	8.44	8.35	- 0.2
France	14.01	15.84	15.77	15.52	- i.2
Italy	$2 \cdot 72$	3.51	5.50	6.28	+ 11.4
Luxembourg	3.71	4.18	4.15	3.96	- 4.6
Netherlands	1.35	1.95	2.36	$2 \cdot 21$	- 0.6
Community	54.04	60.78	63-20	61.72	- 2.4

<sup>1)</sup> For the years 1961-63, see Fourteenth General Report, Table 28.

<sup>1)</sup> Blast-furnaces and electric furnaces together; including spiegeleisen and high-carbon ferro-manganese.

Further progress was made in the enrichment of the blast-furnace burden. Consumption of sinter worked out in 1966 at 1,138 kg. per ton of pig-iron produced,¹) as compared with 1,086 kg. in 1965 and a mere 694 in 1960, and the proportion of high-grade imported ore used also increased. Consequently, the industry was able once again to reduce its consumption of coke, the coke rate at the blast-furnaces falling to 669 kg. per ton,¹) as against 702 in 1965 and 883 in 1960; meanwhile fuel-oil consumption rose to 1,500,000 tons,¹) or 24 kg. per ton of pig-iron, as against 919,000 in 1965 and 67,000 in 1960

TABLE 35

Community pig-iron production by types¹)
(Community)

('000 metric tons)

Туре	1960	1961	1965	1966
Steelmaking pig of which:	49,742	50,023	58,602	57,170
basic Bessemer	39,476	39,543	39,590	37,750
open-hearth	10,266	10,980	19,012	19,420
Foundry pig	2,963	3,075	3.326	3,250
Spiegeleisen	290	269	165	150
High-carbon ferro-manganese	475	512	643	600
Other types	571	730	466	500
Total	54,041	54,607	63,202	61,720

<sup>1)</sup> For the years 1962-64, see Fourteenth General Report, Table 29.

178. Relatively little pig-iron is produced for the market, commercial disposals working out in 1966 at only just over 6% of total production. All but 1 or 2% of the steelmaking pig produced is consumed direct at the works, though not the foundry pig, only a third of which goes in this way.

#### Trade

179. Intra-Community trade in pig-iron decreased further in 1966, to perhaps 650,000 tons in all, as compared with 719,000 in 1965. The trend was observable in all the member countries, particularly in Germany (Fed. Rep.) owing to the stagnation at the iron foundries and in Italy by reason of a big increase in the country's own pig-iron production.

<sup>1)</sup> Estimated figure.

 $TABLE\ 36$  Sales of pig-iron inside and outside the Common Market

('000 metric tons)

Types	1960	1961	1965	1986	Percentage change 1966/1965
Steelmaking pig	1,970	2.057	1,021	950	- 7.0
Foundry pig	$2,181 \\ 216$	2,201 183	2,138 119	$\begin{bmatrix} 2,100 \\ 100 \end{bmatrix}$	$-1.8 \\ -16.0$
Spiegeleisen High-carbon	210	100	119	100	10.0
ferro-manganese	361	403	462	450	- 2.6
Other types (alloy and special pig)	327	297	281	300	+ 6.8
Total	5,055	5,141	4,021	3,900	<b>— 3</b> ·0
of which sales to third countries	414	441	335	360	+ 7.5

Exports to third countries were slightly up, to 360,000 tons; imports from third countries were about the same as before, at 783,000 tons.

### Prices

180. With a very few minor exceptions, the basis prices of pig-iron and high-carbon ferro-manganese as shown in the schedules lodged with the High Authority remained unchanged throughout 1966.

TABLE 37

Tonnages of pig-iron sold by alignment on third-country quotations as declared to the High Authority

('000 metric tons)

Туре	1960	1961	1962	1963	1964	1965	1966
Steelmaking pig	270	361	362	385	112	88	196
Foundry pig Spiegeleisen	(342)	$\substack{\textbf{(352)}\\\textbf{43}}$	$\begin{array}{c} 512 \\ 66 \end{array}$	724 63	94 16	104 13	76 10
High-carbon ferro-manganese	66	51	63	191	114	106	145
Other types	1)	<u> </u>	60	107	4	4	
Total	714	807	1,063	1,470	340	315	427

<sup>1)</sup> Included with foundry pig.

Though alignment on quotations from countries with State-controlled trading systems is forbidden, the volume of declared sales by alignment on other third-country quotations increased: the tonnages concerned were mostly of steelmaking pig and high-carbon ferro-manganese. As regards foundry pig sales by alignment remained about the same as in 1965, some 100,000 tons, notwithstanding the specific duty of \$7.00 per ton.

The Community average import prices declined, particularly those for foundry pig, which are now pretty well back to the same level as in 1963.

TABLE 38

Average import prices of pig-iron before duty (according to external trade statistics)

(\$ per metric ton)

	Hematite	Foundry pig		High-carbon	
Year steelmaking pig	steelmaking pig	Hematite	Phosphorous	ferromanganese	
1962	47.48	53.17	49.79	127.97	
1963	40.36	47.67	43.47	117.77	
1964	44.58	51.31	44.53	112.74	
1965 1966	46.19	53.13	43.70	121.35	
lst quarter	41.03	49.97	41.18	123.72	
2nd quarter	38.64	51.14	41.26	122.20	

# Effects of market safeguards

3) See Official Gazette No. 206/65.

181. The High Authority in 1964 issued a Recommendation to the member Governments that they impose a specific duty of seven dollar units of account per ton on imports of foundry pig,¹) at the same time instituting a quota arrangement allowing them to import limited tonnages at a 5% rate of duty.²) At the end of 1965 the two measures were renewed unchanged for 1966.³)

As a result of this protection, imports fell, prices steadied and the Community producers' sales and production rose slightly; in addition, the arrangement, being temporary in character, was an incentive to the producers to press ahead with rationalization and make a start on the reorganization of their industry.

See Recommendation No. 2/64, Official Gazette No. 8/64; also No. 48 above.
 See Recommendation No. 1/64, Official Gazette No. 8/64; also Table 39 following.

TABLE 39 Foundry pig imports and quotas

(metric tons)

	Imports		Quotas			
	1964	1965	1964	1965	1966	
Germany				<u> </u>		
(Fed. Rep.)	154,110	69,872	40,000	71,000	71,000	
Belgium/	,	,	,	12,000	71,000	
Luxembourg	59,340	56,868	30,000	25,000	25,000	
France	9,366	8,600	8,600	10,000	10,000	
Italy	215,241	224,779	168,000	161,000	161,000	
Netherlands	25,430	9,754	11,500	10,000	10,000	
Community	463,486	369,872	258,100	277,000	277,000	

### Steel

### Production

182. Community crude-steel production was down by 1% in 1966, to 85,100,000 tons, with the plants operating at less than 79% of capacity, as compared with 84% the year before. The position differs considerably from one country to another: in Italy, and to a lesser extent in the Netherlands, production continued to increase, but everywhere else it either stagnated or declined, particularly in Germany (Fed. Rep.). The better showing by the Italian and Dutch industries is largely due to their flourishing coastal plants.

TABLE 40

Community crude-steel production<sup>1</sup>)

('000,000 metric tons)

Country	1960	1964	1965	1966	Percentage change 1966/1965
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	$34 \cdot 1$ $7 \cdot 2$ $17 \cdot 3$ $8 \cdot 5$ $4 \cdot 1$ $1 \cdot 9$	37·3 8·7 19·8 9·8 4·6 2·7	36·8 9·2 19·6 12·7 4·6 3·1	35.3 $8.9$ $19.6$ $13.6$ $4.4$ $3.3$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Community	73.1	82.9	86-0	81.5	— 1·0

<sup>1)</sup> For the years 1961-63, see Fourteenth General Report, Table 34.

183. The pattern of Community steel production underwent further changes in 1966, the share of oxygen steelmaking increasing from 19·2% to 23·2% of the total, at the expense of the other processes.

 $TABLE \ \ 41$  Pattern of crude-steel production by processes

(% of total production)

	1961	1962	1963	1964	1965	1966
Basic and acid Bessemer	48·4	47·0	45·8	42·1	37·6	35·5
Open-hearth	36·8	36·2	34·5	33·7	31·2	28·9
Electric-furnace	11·5	12·0	12·2	11·6	12·0	12·4
Oxygen-blown	3·3	4·8	7·5	12·6	19·2	23·2

184. Production of special steels (high-carbon and alloy steels) did rather better than crude-steel production overall, with an increase of 5.3%; this brought its share in the total up from 7.45% to 7.92%. The breakdown by countries, however, shows some startling contrasts (see table).

TABLE 42
Production of special steels

('000 metric tons)

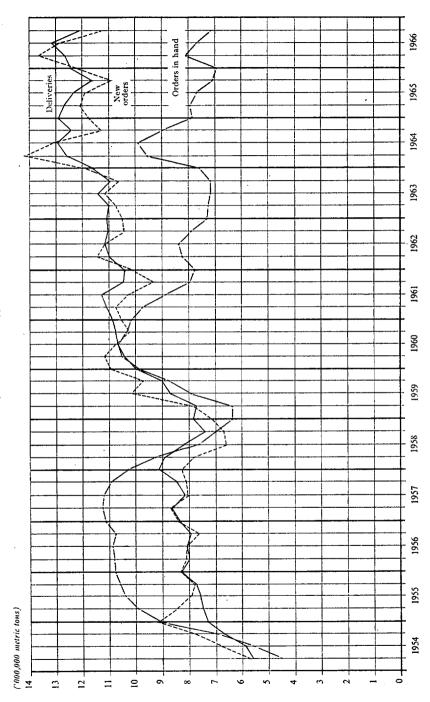
Country	1960	1961	1962	1963	1964	1965	1966¹)	Percentage change 1966/1965
Germany (Fed. Rep.) France Italy Benelux	2,968 1,470 1,337 199	2,855 1,544 1,567 216	2,527 1,485 1,337 202	2,481 1,483 1,192 194	3,047 1,601 1,076 252	3,108 1,765 1,320 216	3,032 1,889 1,600 226	$\begin{array}{c cccc} & & & & & \\ - & & 2\cdot 4 \\ + & 7\cdot 0 \\ + & 21\cdot 2 \\ + & 4\cdot 6 \end{array}$
Community	5,975	6,183	5,550	5,350	5,976	6,409	6,747	+ 5.3
Total crude-steel production	73,076	73,511	73,011	73,218	82,856	85,991	85,157	
Share of special steels in total crude-steel pro- duction (%)	8-17	8-41	7-60	7-31	7-21	7-45	7.92	

<sup>1)</sup> Provisional figures.

GRAPH No. 3

Position of E.C.S.C. Steel Plants with Respect to New Orders,
Deliveries and Backlog of Orders in Hand

(Intra-Community)



### Consumption and stocks

185. Real consumption of steel by the manufacturing industries rose a fraction, except in Germany (Fed. Rep.), but only a fraction—about 0.4% for the Community as a whole, compared with 4.5% in 1965. In Germany (Fed. Rep.), where it had been expanding briskly for two years (+12.1% in 1964 and +5.6% in 1965), it now dropped 2.0%, mainly in consequence of reduced activity in the capital-goods industries. In France the poor 1965 growth rate of 1% improved to 4%, while in Italy the trend was the other way about, with the growth rate falling from 8% to 3%. In Belgium and Luxembourg conditions remained much the same, and consumption rose about 2%; in the Netherlands there was a slight further increase, by 2.2% as compared with 1.6%.

 $TABLE \ 43$  Community crude-steel supply and demand position<sup>1</sup>)

	1960	1964	1965	1966²)				
Index of industrial production (1960 = 100) Index of consumption by the manufacturing industries (1960=100)	$100.0 \\ (+ 12.2\%)$ $100.0 \\ (+ 11.2\%)$	$(+ \begin{array}{c} 127.7 \\ (+ \begin{array}{c} 7.0\%) \\ \hline 120.2 \\ (+ \begin{array}{c} 6.4\%) \\ \end{array})$	$(+\begin{array}{c} 132.8\\ (+\begin{array}{c} 4.0\%) \\ \hline 125.3\\ (+\begin{array}{c} 4.2\%) \\ \end{array}$	$(+\begin{array}{c} 141.0 \\ (+\begin{array}{c} 6.2\%) \\ \hline (+\begin{array}{c} 126.1 \\ 0.6\%) \end{array}$				
Requirements	C	('000,000 metric tons crude-steel)						
Real consumption Changes in stocks Exports	$56.8 \\ + 4.6 \\ 14.4$	$egin{array}{c} 68.4 \\ + 4.1 \\ 13.9 \end{array}$	$\begin{array}{c c} -71.5 \\ -1.7 \\ 18.8 \end{array}$	$+\begin{array}{c} 71.8 \\ 0.2 \\ 16.0 \end{array}$				
Total	75.8	86.4	. 88.6	88-0				
Availabilities								
Imports Rolling-mill scrap Crude-steel production	$\begin{array}{c} 2 \cdot 4 \\ 0 \cdot 3 \\ 73 \cdot 1 \end{array}$	$\begin{array}{c} 3 \cdot 3 \\ 0 \cdot 2 \\ 82 \cdot 9 \end{array}$	2·4 0·2 86·0	2·7 0·2 85·1				
Total	75-8	86.4	88.6	88-0				

<sup>1)</sup> For the years 1961-63, see Fourteenth General Report, Table 37.
2) Estimated.

186. The only steel-consuming sectors in which growth kept up well in all the member countries were the electrical-engineering and motor industries, and to a lesser extent the shipyards. On the mechanical-engineering side the

year's figures were reasonable good in France and Italy, but less so in Germany (Fed. Rep.). The state of the building trade remained fairly steady, except in Italy, where it struck a bad patch. Activity in the processing industries showed a downturn in most of the Community countries.

As in previous years, the High Authority in its guidance programmes urged the steelmakers to proceed with caution and seek to adjust their production to the real level of demand. Nevertheless, stocks did accumulate to some extent: whereas in 1965 there had been quite a sizeable rundown, of some 1,700,000 ingot tons, in 1966 they climbed again by about 200,000 tons, thereby further unbalancing the market.

As can be seen from Graph 3, fluctuations in this connection have been diminishing in scale since the introduction of the Common Market, but at the same time the work load of the Community's production apparatus, represented by the level of orders in hand from within the Common Market, has decreased: delivery dates, which between 1954 and 1960-61 were three months and more, have now shortened to less than two.

### Trade

Intra-Community trade rose in 1966 to 13m. tons rolled steel weight, as against 11,800,000 in 1965 and 12,300,000 in 1964. Shipments to France in the first nine months were up again from 2,600,000 tons to their 1964 level of 2,900,000, and shipments to Italy from the unusually low 1965 figure of 900,000 tons to 1,300,000; there were also slight increases in sales to Germany (Fed. Rep.) (from 3,300,000 to 3,400,000), the Netherlands (from 1,300,000 to 1,400,000) and Belgium and Luxembourg (from 700,000 to 900,000).

TABLE 44 Intra-Community trade in steel1)

(shipments, first nine months)

('000 metric tons)

From	Germany (Fed. Rep.)	Belgium/ Luxem- bourg	France	Italy	Nether- lands	Total	Percentage change
Germany (Fed. Rep.) Belgium/Luxembourg France Italy Netherlands	1,589·0 1,166·6 264·3 387·7	323.3 $$ $313.6$ $7.0$ $235.3$	1,331·0 1,283·0 — 166·9 86·4	539·6 210·0 397·6 — 110·8	648·6 649·0 96·3 9·0	2,842·6 3,731·0 1,974·1 447·1 820·3	$\begin{vmatrix} +15.8 \\ +9.8 \\ +0.9 \\ +15.3 \\ +60.5 \end{vmatrix}$

<sup>1)</sup> For further details see Statistical Annex, Table 30.

189. Exports to third countries worked out at 12m. tons rolled steel weight. This was 16% below the 1965 figure of 14,300,000: the latter, however, had been a freak variation, due mainly to unusually large sales to North America, which now dropped again, though still remaining rather higher than in 1964. The other export flows moved similarly, though in lesser degree.

 $TABLE \ \ \, 45$  Exports of rolled products to third countries

('000 metric tons)

То	January-September 1965	January-September 1966
Britain North America of which: United States Denmark, Finland, Norway Spain Switzerland Sweden East Asia South America Eastern Europe Republic of South Africa Austria	202 3,349 2,728 1,001 864 813 579 538 532 296 328	270 2,360 2,030 830 880 720 500 440 290 25 60

All the member countries' exports decreased, Italy's by 34.5%, the Netherlands' by 14.2%, Germany's (Fed. Rep.) by 8.6%, Belgium/Luxembourg's by 19.4% and France's by 7.7%.

In the longer-term context, Community exports between 1960 and 1964 varied around 10m. tons a year; in 1954 they amounted to 6m. and in 1955 to 7m.

190. Community imports from third countries rose slightly, from 1,900,000 tons to 2m. For the Community overall this represents a 13% increase, but the movement varied widely in the different countries, 27% up for Italy, 20% down for Belgium/Luxembourg, and 10% up for the rest.

### Prices

191. The general downward drift in prices observed in 1965 continued, the reason, as before, being the supply/demand imbalance within the Community coupled with the depressed world prices resulting from the similar imbalance

<sup>1)</sup> See No. 160 above.

TABLE 46
Imports of rolled products, by main supplier countries

('000 metric tons)

From	January-September 1965	January-September 1966
Britain Austria Countries with State-controlled trading systems of which: Soviet Union Japan Sweden	206 372 303 152 112 163	190 430 360 100 190 200

outside. Matters were made worse, however, in 1966 by the slowdown, if not actual decrease, in steel consumption in most of the Community countries, as a result of which consumers and dealers were disinclined to buy much, particularly in face of the tighter credit restrictions introduced during the year. The steep drop in the prices actually being charged is evident from the alignments on third-country quotations and on the lowest Community prices, which are themselves aligned on world prices. This circumstance also underlies all the other departures from published schedules allowed under Article 60 of the Treaty and the High Authority's implementing Decisions.

The price slump is not reflected in the official schedules, which by and large remained pretty well the same as the year before: indeed, some enterprises which in 1965 aligned on world prices actually introduced certain minor increases at the beginning of 1966.

TABLE 47

Lowest schedule prices published

(\$ per metric ton)

	1963	1964	Decembre 1965	January 1966	January 1967
Reinforcing rods (B) Merchants bars (B) Sections Wire rod (B) Plate Hot-rolled sheet (B) (F)	81.00 95.00 97.75 (F) 75.00 95.00 (B) 112.20	94.00 96.00 97.75 (F) 90.00 106.30 (n) 130.00 124.75	80.00 90.00 90.00 (B) 89.00 (B) 108.00	80.00 90.00 90.00 (B) 89.00 97.00 (B) 108.00	81.00 92.00 93.00 (B) 96.00 99.00 (B) 115.00

(B) = Belgium; (F) = France; (N) = Netherlands.

These are the prices of firms traditionally accustomed to export their production: now, with world prices so poor they are trying as far as possible to sell within the Community instead, while the other Community producers are taking the opportunity to align on their schedules, as being lower than their own.

The price spread reflects the marked effect of the big cuts by some Belgian producers in 1963, late 1965 and 1966.

TABLE 48

Spread of schedule prices
(at beginning of year)

(French schedule price = 100)

Country	1962	1963	1965	1966	1967
France	100	100	100	100	100
Germany (Fed. Rep.)	110	105	104	103	104
Belgium <sup>1</sup> )	103	92	100	93	96
Italy	113	107	107	107	105
Luxembourg	109	104	103	102	103
Netherlands	110	100	104	99	99

<sup>1)</sup> Lowest Belgian price.

# Alignments on third-country quotations

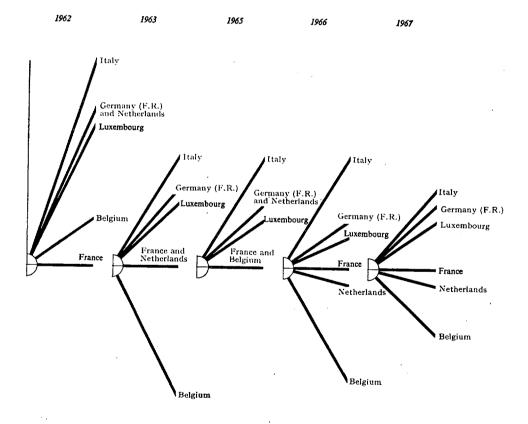
192. Sales by alignment were more than twice as high as in 1965, averaging about 98,000 tons a month: this is, however, still below the monthly figures for 1962, 1963 and 1964 (see Table 49).

The rise was mainly in aligned sales of ship plate, which alone accounted for something like 30% of the total. Coils, which also showed a substantial increase, to 460,000 tons, continued the largest single item with 39%, followed by plate, sheet, semis and ingots with about 5% each.

It should be added that there were also many sales by alignment on the schedule prices of Community enterprises which have lately lowered these to the level of the ruling international prices (plus duty): consequently the tonnages declared to the High Authority represent only a part of the true total.

GRAPH No. 4

# Spread of Steel Prices (at beginning of year)



 $TABLE\ 49$  Alignments on third-country quotations

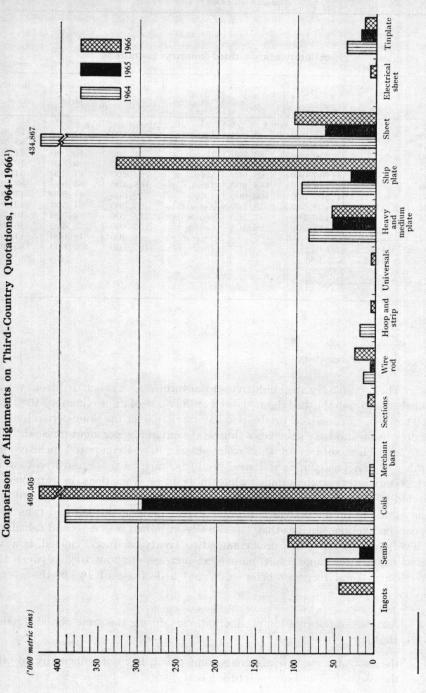
(metric tons)

Year	Whole year	Monthly average	1966	Monthly total	of which : ship plate	Monthly total less ship plate
1958 1959 1960 1961 1962 1963 1964 (FebDec.) 1965 1966 November 1962 = December 1963 = December 1963 =	= 353,965 = 383,200	14,000 31,000 20,000 38,000 108,000 188,000 100,000 73,250 41,260 98,108	January February March April May June July August September October November December	134,100 85,700 51,300 46,900 104,200 168,400 56,500 85,000 55,200 123,600 99,200 167,400	55,700 	78,400 85,700 41,300 40,600 37,000 83,400 44,900 63,700 50,700 86,200 81,200 165,400

#### Turnover and costs

- 193. The Community steel industry's total turnover, as calculated from various published and unpublished data, showed an increase of approximately 10% from 1960 to 1965. Crude-steel production having risen over the same period by 18%, the drop in the industry's revenues thus works out at 8% per ingot ton sold. This figure as such is subject to some reservations: it was computed inclusive of a number of non-Treaty iron and steel products, such as tubes and iron castings, and certain other transactions, while in addition variations in turnover are affected by a good many factors, as for instance a switch to the making of more highly-finished products, which to some extent cushion the fall and cause it to appear, on average, smaller than, specifically, it in fact is. A second calculation by a different method, this time confined to Treaty products, yielded, however, almost exactly the same result, namely an increase of about 10% between 1960 and 1965 in total turnover before tax, and a decrease of 7% in the average takings per ingot ton.
- 194. Analysis of the trend in production costs during the same period, 1960-65, shows that
- (a) the cost of some raw materials went down, but not sufficiently to offset the rise in fuel and manufacturing costs;

GRAPH No. 5

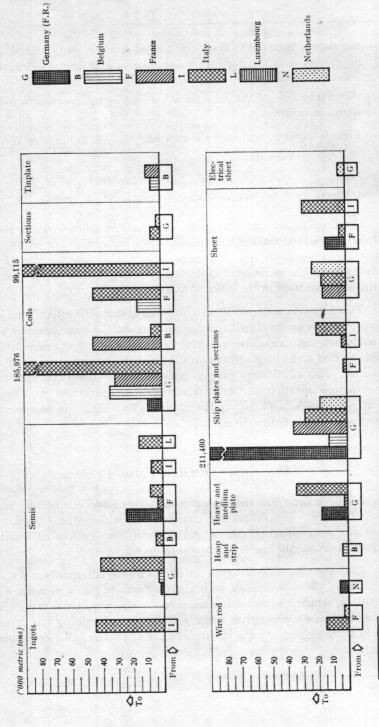


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1) 2,000 tons and over.

GRAPH No. 6

Alignments on Third-Country Quotations, 19661)



1) 2,000 tons and over.

- (b) the rise in production costs per ton of crude steel produced appears to have been a factor, but not a very big one, in the deterioration of the industry's finances;
- (c) the main cause of the marked worsening in the position was the heavy slump in earnings.

Figures so far to hand for the first half of 1966 indicate no improvement whatever.

# ACTION BY THE HIGH AUTHORITY IN THE STEEL SECTOR

195. The Community producers' efforts to sell as much steel as they can in an already saturated market have resulted in a price slide not paralleled in any of the other major steel-producing areas of the world: whereas prices in E.C.S.C. are back around the same level as thirteen years ago, those in the United States and Britain have risen in the interval by something like 40%.

This is a very dangerous state of affairs, since the effect is to jeopardize precisely what is so absolutely vital at the present juncture, namely a vigorous rationalization and modernization drive, without which the Community industry is liable to find itself lagging perilously behind its competitors in other parts of the world. This adjustment process is involving, and will continue to involve, large-scale readaptation and area redevelopment operations, and Community-level action is needed to weigh up the impact of the changes in prospect and make due provision for dealing with it.

# Short- and Medium-Term Problems

196. In the short term the object must be to restore a better quantitative balance between production and consumption within the Common Market, so that the price situation can be got on to a sounder footing and the funds found for mounting the necessary capital projects.

The longer-term need is that the efforts by the enterprises and the member States should be co-ordinated with the Community's new General Objectives for 1970, in which the focus is primarily on the industry's rationalizing and making itself mor competitive, while refraining from adding any more than it can help to an aggregate capacity already ample to cover all foreseeable requirements.¹)

<sup>1)</sup> See Nos. 322 below.

The High Authority has long been urging concentration on quality and specialization, and the further stepping-up of the movement towards large-capacity plants using the very latest techniques.

This can only be achieved by joint action on the part of the official levels concerned with the steel sector. The Governments as the holders of general economic and social responsibility and the High Authority as the Executive of E.C.S.C. will have to co-ordinate their efforts, with the assistance and advice of the industry, in order to institute a Community steel policy on these lines.

# Retention of Existing Trade Safeguards

- 197. At the end of 1963, when the High Authority informed the Council of the need to safeguard the Common Market against the inflow of abnormally low-priced steel imports from third countries, the following protective arrangements were introduced:
- (a) all member States to charge import duties level with those of Italy, which average 9%
- (b) a temporary specific duty to be charged on imports of foundry pig-iron;
- (c) only limited tonnages to be allowed in from countries with State-controlled trading systems;
- (d) Community producers to be prohibited from aligning their own prices on quotations from such countries.

Measures (a) and (b) were instituted by High Authority Recommendation.

With some minor changes, this system has been retained.1)

#### Short-Term Action

198. Having regard to the general state of the Common Market for steel, the High Authority has come to the conclusion that comprehensive measures are called for, to take the form, first of all, of some restraint on production, for as short a time as possible, with the aim of getting it back into step with consumption at an early date.

The Treaty permits action of this kind only in co-operation with the Council. The High Authority announced itself willing to consider any procedure calculated to produce the desired effect, but added that the restraint it had in mind

<sup>1)</sup> See Nos. 47 ff. above.

would be to some extent selective, to enable a start to be made forthwith on making the industry's capacity less of a patchwork of old and new than it now is, with obsolete written-off plant in service alongside the very latest equipment still in process of development.

At the High Authority's proposal the Council in December 1966 took the necessary procedural decisions, and an examination was at once begun of the lines on which such a system might be organized, though without prejudice to possible other modes of action, as for instance on prices. As had already been done on the coal side, the Council set up an ad hoc Committee on Steel Problems, to go into the situation, consider all means of tackling the difficulties, and submit proposals to it in due course.

- Pending the outcome of the Committee's deliberations, the High Authority took certain steps of its own, first giving the Council particulars of its intentions. These were aimed at reinforcing the effectiveness of its existing arrangements with regard to market intelligence and pricing, concerning which it has specific responsibilities under the Treaty. They consisted of
- an Official Notice under Article 46 of the Treaty stating that its quarterly (a) guidance programmes of production, consumption, exports and imports (hitherto compiled to show only the crude-steel figures, broken down by countries) would in future be further subdivided by types of product, and would be sent direct to the enterprises individually, to enable each firm to draw the relevant conclusions as to the tonnages it could reasonably produce;1)
- (b) a Decision under Article 47 requiring enterprises to furnish fuller particulars than previously concerning the prices they charged, notably by declaring all tonnages invoiced at aligned prices, i.e. not only those aligned on quotations from third countries, as heretofore, but also those aligned on the schedule prices of Community competitors.2) The date for the first declaration will be set by a later Decision.

# Long-Term Action

The High Authority considers it essential, if the difficulties in the Common Market for steel are to be successfully overcome, that measures should be taken to ensure better co-ordination of investment. The basic Treaty arrangement is that the High Authority issues opinions on the compatibility or otherwise of

See Official Gazette No. 219/66.
 See Decision No. 21/66, Official Gazette No. 219/66.

all projects involving capital expenditure above a specified figure with the General Objectives of the Community, and assists certain projects deemed to be especially valuable by means of loans. The High Authority feels, however, that there is room for more active co-ordination, and accordingly at the same time issued another Decision requiring enterprises also to provide fuller details of their investment programmes.<sup>1</sup>)

The High Authority has been informed by some of the member Governments that they are preparing plans for their respective steel industries to get them back on the rails economically. Now as it is accepted by all that such plans can only work if they fit smoothly into the Community pattern as a whole, which itself has to be viewed in the broader context of the world market, the High Authority considers this is a clear case for the implementation of Article 26 of the Treaty, with its emphasis on the need for "harmonizing the action of the High Authority and that of the Governments, which are responsible for the general economic policy of their countries." Accordingly, it has proposed that all the national plans for the steel sector should be periodically discussed in the light of the General Objectives, whenever circumstances seem to require it, in order to secure the necessary co-ordination between the national-level and the Community-level approach.

#### Steel Price Checks

201. The High Authority continued its efforts to obtain the Governments' co-operation in the carrying-out of check-ups on steel prices.<sup>2</sup>) On November 22 it submitted to the Council a first list of specific individual cases in which their help was essential if it was to gain evidence of disobedience to Article 60 of the Treaty and to its own Decisions in implementation of the Article. The list is to be examined by the ad hoc Committee on Price Information and Price Checks set up on April 30, 1964.

# Promotion of Steel Consumption

- 202. The High Authority went ahead in 1966 with its activities in the matter of
- (a) research promotion;
- (b) information;
- (c) modernization of regulations and standards.

See Decision No. 22/66, Official Gazette No. 219/66; also No. 262 below.
 See Fourteenth General Report, No. 173.

203. Technical research has always been one of the main foci of the Steel Utilization Congresses. The points made there in this connection have helped to clarify the issues in a number of projects, notably those concerning the uses of iron and steel products and certain still unsolved problems in steel processing. Details of these projects will be found on a later page.<sup>1</sup>)

#### The 1966 Steel Congress

204. The High Authority's third Steel Congress, held in Luxembourg from October 25 to 27, 1966, was devoted to "Steel in Agriculture," a theme of much topical interest since, with the agricultural Common Market now in being and mechanization advancing by leaps and bounds, the whole structure of farming is changing. The Congress heard and debated accounts, from different angles, of the scope for mechanization, and hence for steel utilization, in the manufacture of farm buildings and equipment and in the processing and packaging of produce. The exchange of information on the methods used in the different countries proved most enlightening; it was found in particular that those concerned had as yet no proper idea of the full potentialities awaiting exploitation in this connection.

The Congress yielded a wealth of suggestions for the High Authority's, the steelmakers' and the farm-equipment manufacturers' benefit. The High Authority is going carefully into these, and will decide in due course which it can usefully incorporate in its programme.

205. In the Congress's view, agricultural modernization and mechanization demanded the organization of a corps of agricultural engineers, inasmuch as for the sake of proper choice of material and simplification of combine machinery it would be necessary to have men expert both on the geological, climatic and other factors involved and on the technical design and construction side. This new speciality could be developed either by working up co-operation between the two sectors, or by establishing a specific training stream with this in view.

With regard to standardization, the Congress urged manufacturers to join in a general cost-saving drive by instituting standards at every stage in the production cycle: on the basis of standardization of the actual steels, the manufacturers should in their turn standardize the various parts and components concerned, so that the end user would have a wide choice of possible permutations and combinations, and could thus employ the equipment best suited to the needs of his particular farm, without being tied to any one system. Every support should therefore be given to all standardization projects in the Community.

<sup>1)</sup> See Nos. 279 ff. below.

The question of modernizing and lining up building regulations was again discussed, this time more especially with reference to farm buildings. The Congress expressed the hope that steps would be taken to bring the existing regulations into line with current technological progress.

The proposal that a standing body be set up to consider the openings for steel utilization in the emergent countries received specially careful attention. It was unanimously agreed by those concerned that the prime need in these countries in the coming years would be to feed the population. This meant, above all, working up agriculture there, principally by mechanization: on the other hand, mechanization could only proceed in step with the development of the economic structure overall. Marketing of production, mechanization of the production apparatus and paying-off of the necessary equipment procured must all go on together. It was accordingly urged that there should be close co-operation between development planners, manufacturers and local users, to enable proper account to be taken of all the many considerations involved.

#### International housing design competition

206. The High Authority's international competition for the best-designed prefabricated dwelling¹) evoked a considerable response, over 3,000 intending entrants registering by the beginning of the year. In March 1966 the High Authority increased its appropriation for prize money and defrayment of the finalists' expenses to 120,000 dollar units of account. 484 designs in all were received, comprising a total of more than 5,400 plans for the judges to examine; by November 15, ten entries had been short-listed as the most promising, and the entrants concerned were then invited to take part in Stage II.

The judges' deliberations and final announcement made it clear that the competition, bringing in as it had a wide variety of ideas and approaches, on which a great many people had done a great deal of work, had been the occasion for fuller evaluation than heretofore of the problems of building in steel and the potentialities of steel for production-line building.

207. Nevertheless, the judges stated frankly that, in their view, none of the designs was the perfect answer to the problems of prefabricated building in steel. The entries in fact simply went to confirm that the transition from individual to mass production was going to be just as difficult a business for the building industry of today as it had been, for instance, for the motor industry of a generation ago. Quite a number of the concepts embodied in the designs might well help

<sup>1)</sup> See Official Gazette No. 163/65, and Fourteenth General Report, No. 183.

matters forward in this respect, but the real breakthrough would be achieved only by systematic research and co-ordination of previous advances. This of course was quite outside the scope of the competition, and indeed beyond the possibilities of any one group, or even perhaps any one nation. The judges would be forwarding practical suggestions to the High Authority in this connection in due course, probably after the competition was over.

#### Discussions with steel consumers

208. The High Authority has been arranging a succession of meetings with representatives of different steel-consuming sectors for the purpose of comparing notes on particular points in connection with steel utilization. The sectors so contacted up to now have been the foundries, the steel constructional engineering industry, the farm machinery manufacturers, the makers of chemical equipment, and the shipyards; the matters discussed have been principally recent technical and economic developments in these industries and the impact of the High Authority's action with regard to steel consumption.

#### Modernization of regulations

209. In 1965 the High Authority took steps to prepare the way for the modernization of certain fire safety regulations. By July 1966 a full inventory of all existing regulations in the Community concerning precautions against fire in steel structures had been compiled, while a group of independent experts convened by the High Authority had drawn up a report setting forth the lines on which the arrangements in force could usefully be amended to conform with recent advances in knowledge regarding the behaviour of steel components in the event of fire. In mid-August the High Authority laid its proposals on the subject, together with the six national assessments, before the Council of Ministers, which thereupon set up an ad hoc committee to examine the proposals and report back.

#### Next Steel Congress

210. To afford a fresh stimulus to metallurgical research, the High Authority decided to hold its fourth Steel Congress on the subject of steel's behaviour under intense stress. Preparations are under way for the new Congress, which is to meet on July 9-11, 1968, and is to be a high-level scientific affair: delegates will include representatives of the chemical and chemical-equipment industries as well as of the steel industry and the research establishments, and particular attention will be devoted to the latest findings on corrosion effects and the corrosion resistance of the metal in the course of various chemical processes.

# Section 3: Implementation of the Rules of Competition

#### GENERAL REMARKS

211. The number of projected cartels and concentrations coming before the High Authority in 1966 was again very large. As can be seen from the particulars of the cases in which authorization was given, enterprises were out even more than in the previous year to face up to the stiffening competition by organizing link-ups and co-operation agreements for purposes of rationalization; as a result, the size of the operators in the already oligopolistic steel market further increased, and their number further diminished.

One or two general observations should be made in this connection on the subject of competition as such, which is becoming a matter of some concern, quite apart from the particular cases dealt with by the High Authority in the course of the year. More specifically, the trend towards industrial concentration has been the subject of much debate in business and political circles of all kinds, as well as in the academic world.

- 212. It is no part of the purpose of the present section to go into details of the conclusions reached in this debate, in so far as there have been any. There appears on the face of it to be pretty general agreement that concentrations can be a help in coping with tougher economic conditions, that they are usually preferable to cartels, that they are not the universal remedy for all possible ills, and that while they tend to reduce the number of market operators they can result in more active competition among those that are left.
- 213. The High Authority's policy with regard to cartels and concentrations is based on passages in the Treaty which are often considered unduly constricting and no longer appropriate to present circumstances. This is not the place to discuss this question in detail: the point to be borne in mind is that the High Authority has continued to construe and apply the Treaty's provisions on cartels and concentrations—in full conformity, incidentally, with the basic provisions, and in particular with Articles 2-5—in a manner which has enabled the economy to move with the times.

With this end in view, the High Authority some time ago worked out and submitted to the Council of Ministers a new set of arrangements with regard to exemption from prior authorization for certain types of concentration; the intention is that these should supersede Decision No. 25/54, currently still in force,

with the object of making the criteria for exemption more relevant to the position obtaining today.<sup>1</sup>) The special working party which the Council set up to study the proposed system has now almost finished its examination, and the adoption of the new arrangements may be expected to follow shortly.

In making its individual rulings, the High Authority has already been able to benefit in some measure from the comprehensive studies on competition lately commissioned by it.<sup>2</sup>) These have meantime been pressed ahead actively, with the assistance of leading market research specialists; they were a most necessary step, since it is becoming increasingly obvious that so far as Treaty products are concerned competition needs to be viewed in the context not merely of the Common Market but of world conditions. It is intended to publish the findings in due course.

214. In assessing the cartels and concentrations described below, the High Authority has had to bear in mind, among other things, the following considerations.

- (a) In seeking to preserve an adequate degree of competition in an oligopolistic market, what matters is not so much which is the biggest producer, but the relationship of the bigger producers to one another and to the smaller producers. The important thing is to see that there are always a sufficient number of operators of roughly equal size in the Common Market, and that no restrictive practices are allowed to interfere with competition: in other words, for the Common Market to function properly the oligopoly must always be sufficient in number and not top-heavy (top-heaviness resulting in one or two firms assuming market leadership on quantities and prices).
- (b) For purposes of rationalization, concentrations usually fill the bill better than cartels, quite apart from the fact that cartels are liable to crumble in a way which is impossible with concentrations. An interesting example is the Stab- und Formstahlkontor of Essen, which was authorized on July 21, 1965,³) but in fact never really took effect: the organizers decided to abandon the arrangement and the High Authority withdrew its endorsement.⁴) It should be made clear that the High Authority has no power to press enterprises to undertake a concentration in preference to a cartel.

<sup>1)</sup> See Fourteenth General Report, No. 195.

<sup>&</sup>lt;sup>2</sup>) *Ibid.*, No. 194. <sup>3</sup>) *Ibid.*, No. 202.

<sup>4)</sup> See No. 219 below.

All it can do is to draw their attention, in a general way, to the advantages of the one over the other: apart from that, its function is to rule on the applications as submitted.

The High Authority devoted careful attention in 1966 to the social implications of the projected cartels and concentrations laid before it, arranging for its Labour Problems Department to examine case by case the possible effects on the jobs and terms of employment of workers in the enterprises concerned.

#### CARTELS

# Buying and Selling Organizations

Saarlor

215. The joint selling of fuels from the Lorraine and Saar collieries through the Franco-German joint-stock company Saar-Lothringische Kohlenunion or Union Charbonnière Sarro-Lorraine, ("Saarlor"), the authorization for which expired at the end of 1965,1) was re-authorized in February 1966 up to December 31, 1968.2)

Saarlor in 1964 sold about 15% of the Saar's production and 4% of Lorraine's. The High Authority raised no objection to Saarlor's field of operations being extended to include Italy.

#### Kohleeinkaufsgesellschaft der Saarhütten mbH ("Koeg")

216. This company is a joint coal-buying agency set up by a number of Saar steel enterprises, Röchlingsche Eisen- und Stahlwerke of Völklingen, Dillinger Hüttenwerke of Dillingen, Halbergerhütte of Brebach, Neunkircher Eisenwerk (formerly Stumm Brothers) of Neunkirchen, and the Burbach division of ARBED of Luxembourg, to effect purchases of solid fuels and all related transactions on their behalf.

It has a registered capital of DM 20,000, divided equally among the five enterprises. Their coal procurements in 1964 totalled 4,025,000 tons, of which 3,420,000 came from the Saar coalfield.

2) See Official Gazette No. 25/66.

<sup>1)</sup> See Tenth General Report, No. 273.

The High Authority by Decision No. 12/66, of June 22, 1966, taken under Article 65,2 of the Treaty,¹) gave permission for the joint buying of coal by Koeg, having come to the conclusion that the arrangement would considerably improve the distribution of coking coal among the Saar steel plants, was not more restrictive than its purpose required, and would only marginally affect competition in the Common Market.

#### Oberrheinische Kohlenunion (O.K.U.)

217. The authorization of the joint-selling agreements entered into by the South German wholesalers, which was due under Decision No. 3/62°) to expire on March 31, 1967, was extended by Decision No. 23/66, of November 23, 1966, up to the end of March 1972,°) but only in respect of dealers actually operating in South Germany.4)

#### Joint steel-selling agreements

218. Four groups of steel firms, accounting among them for practically the whole of the German steel industry, have concluded separate agreements for the joint selling by the group concerned of certain finished products. On June 28 and 29, 1966, they applied for authorization to set up four selling agencies for these products, subsequently, between then and the end of November, amending their applications on certain points and adding some further supporting facts and figures.

On November 3, 1966, ARBED, Cockerill-Ougrée, Forges de la Providence, Aciéries de Beautor and Sidmar<sup>5</sup>) entered into a joint-selling agreement with respect to cold-rolled sheet and strip, and applied for authorization under Article 65,2.

From a preliminary examination the High Authority on December 15 came to the conclusion that these authorizations could be granted subject to certain restrictions and conditions. Decisions to that effect will be adopted and published shortly; until then the agreements cannot take effect.

<sup>1)</sup> See Official Gazette No. 126/66.

<sup>2)</sup> See Eleventh General Report, No. 344.

<sup>3)</sup> See Official Gazette No. 224/66.

<sup>4)</sup> See Fourteenth General Report, No. 199.

<sup>5)</sup> See Eleventh General Report, No. 346.

# Specialization Agreements

Stab- und Formstahlkontor, Essen

219. The four German steel companies<sup>1</sup>) which earlier secured authorization for the specialization and joint-selling scheme known by this name later announced that they were giving up the arrangement. The High Authority accordingly in September 1966 rescinded its Decision of July 21, 1965.<sup>2</sup>)

Usinor/Sollac

220. The Union Sidérurgique du Nord de la France, Paris ("Usinor"), and the Société Lorraine de Laminage Continu, Paris ("Sollac"), the latter also acting on behalf of its associates, concluded an agreement whereby they were for a time to purchase from one another or to have rolled in one another's mills such tonnages of hot-rolled wide strip or cold-reduced sheet as they were unable to produce themselves, and were meanwhile not to install any fresh capacity of their own in these sectors. The point was to enable Usinor's available strip and Sollac's available sheet mills to be fully utilized before investing in more plant: the two firms were to become free to restart capital spending as soon as real production showed an increase of more than 2,500,000 tons annually for hot-rolled wide strip and 1,250,000 for cold-reduced sheet.

The price charged for the tonnages so purchased or commissioned was to be the amount of the production costs plus a portion of the gross profit.

The agreement left both companies in sole charge of their respective sales set-ups and sales policies. It was to expire by not later than December 31, 1974; in 1970 the parties were to confer as to whether it should be extended or partly extended beyond that date.

This arrangement having the same aim and the same effects as a fixed-term specialization, it can be rated for the purposes of Article 65 as "strictly analogous" to a specialization agreement; by making for more efficient utilization of existing capacity and saving considerable amounts of capital it will "contribute to a substantial improvement in production," and since it is subject to limitations as to both duration and tonnage, and in no way interferes with the two companies independence regarding sales policy, it is "not more restrictive than is necessary for its purpose." It further fulfils the Article's requirements in that the text

2) See Official Gazette No. 177/66.

<sup>1)</sup> See Fourteenth General Report, No. 202.

of the agreement, and particularly the clause concerning the prices the companies are to charge one another, does not at all suggest future concerted pricing by them of all their hot-rolled wide strip and cold-reduced sheet, and so of "a substantial part of the products in question within the Common Market."

The High Authority therefore on December 15, 1966, issued Decision No. 29/66 authorizing the agreement up to December 31, 1971, with certain stipulations as to declaration.<sup>1</sup>)

# . Concerted Practices, Agreements and Cartels in the Steel Market

- 221. High Authority check-ups during 1964 and 1965 revealed that between 1962 and 1965 fourteen Community producers of reinforcing rods and wire rod and one producers' federation had been engaging in concerted practices and agreements designed and serving to determine the prices of these products. The High Authority in 1966 issued Decisions banning these activities and fining the enterprises under Article 65,5.
- 222. High Authority check-ups in 1966 showed that numerous steel firms had been trying to overcome their market difficulties by seeking to arrange cartel-type agreements through their federations, in an effort to achieve a more balanced supply and demand position. Nothing lasting had been achieved. In two cases investigations were started. The High Authority discussed the matter with representatives of the industry, and following a Parliamentary question and debate at the May 1966 Session (reply to verbal question No. 2) the Parliament's Internal Market Commission was kept informed.

#### CONCENTRATIONS

# Coal/Coal

# Lothringen/Erin

223. By a Decision of December 14, 1966, the High Authority gave permission for Bergbau-Aktiengesellschaft Lothringen, Bochum, wich is controlled by ARBED of Luxembourg, to take over the Erin colliery and coking-plant at Castrop-Rauxel. This will counterbalance the production loss resulting from

<sup>1)</sup> See Official Gazette No. 238/66.

the closure of the integrated Lothringen-Graf Schwerin works early in 1967; the latter's production being about the same as Erin's, the market position of ARBED will remain practically unchanged.

#### Steel|Steel

#### · ARBED/HADIR

224. By a Decision of March 2, 1966, the High Authority gave conditional permission for the concentration between Aciéries Réunies de Burbach-Eich-Dudelange and Hauts-Fourneaux et Aciéries de Differdange-St. Ingbert-Rumelange. The applicants had been notified on the previous December 16 that conditional authorization would be forthcoming.¹)

The operation consisted in the acquisition by ARBED of a 60% holding in HADIR hitherto owned by the French Pont-à-Mousson/Marine group. ARBED's 1965 production amounted to 3,600,000 tons and HADIR's to 1,400,000. Their finished products largely complemented one another's, the only categories for which the concentration would appreciably increase their combined share of the Common Market being wide-flanged beams, merchant bars and hoop and strip; even then the only really big increase would be for wide-flanged beams, and the total share resulting for these, 23%, could not seriously impair competition, since the other market operators' shares were about the same.

Authorization was granted on condition that ARBED required HADIR to terminate by not later than December 31, 1968, its sole-rights contracts with the marketing firms Davum, Davum-Exportation and Davum-Anvers and their subsidiaries in the Community, and to conclude no further contracts of a similar nature with them in future. HADIR was to make its holdings in these firms by the same date, on a basis altogether ruling out any future connection, direct or indirect, with them and the companies concentrated with them, and was for this purpose also to withdraw its representatives from their administrative boards.

Similarly, HADIR was to make over its holding in Dillinger Hüttenwerke, in the Saar, and withdraw its representatives from the latter's board of directors.

ARBED was further to see to it, unless special exemption was granted, that no Pont-à-Mousson representative was allowed to sit on its board of directors, board of management or board of auditors, or on those of any enter-

<sup>1)</sup> See Fourteenth General Report, No. 208.

prise concentrated with it. The Pont-à-Mousson representatives currently on those of HADIR must relinquish their positions before HADIR's next general meeting.

With regard to this prohibition of interlocking directorates, the companies did request special exemption, asking that one Pont-à-Mousson representative should be permitted, for a limited period, to sit on ARBED's board of directors. In view of ARBED/HADIR's French interests and the personal standing and experience of the gentleman concerned as President of HADIR, the High Authority agreed to allow this for a period of five years.

#### Joint control of Stahl- und Röhrenwerk Reisholz GmbH

225. In May 1966 the High Authority gave permission for an arrangement whereby the Thyssen group, headed by August Thyssen-Hütte AG., made over the firm of Hilden and its subsidiary Wuragrohr GmbH, of Wickede, owned by Thyssen's subsidiary Phoenix-Rheinrohr AG, to Stahl- und Röhrenwerk Reisholz GmbH, which is controlled by the Thyssen-Bornemisza group, Phoenix-Rheinrohr receiving in return one-half of the share capital of Reisholz. Reisholz is thus now jointly controlled by the two groups. Within it, they wish to reorganize and rationalize their interests in precision tubemaking and related lines.

Reisholz being a small affair in comparison with the two groups' operations generally, the fact that they are acting together there does not constitute concentration between them: concentration exists only between Reisholz and the Thyssen group and between Hilden, with Wuragrohr, and the Thyssen-Bornemisza group. Moreover, since Reisholz makes most of its own crude steel and its production of electric steel is comparatively small, the new set-up will make no difference either to the parties' sales and supply position or to conditions of competition in the market for electric steels.

#### Hoesch/Dortmund-Hörder/Hoogovens

- 226. The terms of the agreements submitted to the High Authority with respect to this project were as follows:
- (a) Koninklijke Nederlandse Hoogovens en Staalfabrieken, Ymuiden, to convey to Hoesch; Dortmund, its controlling interest in Dortmund-Hörder Hüttenunion, Dortmund, receiving in return a minority holding in Hoesch;

- (b) Hoogovens and Hoesch to engage in a division of labour whereby Hoogovens will produce mainly crude steel and semis and Hoesch work up its finishing and processing activities;
- (c) Hoesch to refrain from installing any further capacity for the production of crude steel and semis, and after 1970, when Hoogovens has expanded its own capacity in this respect, to procure such tonnages as it needs from Hoogovens;
- (d) Hoogovens and Hoesch to co-ordinate and as far as possible co-finance their future capital spending;
- (e) their respective boards of management to confer together regularly with a view to promoting co-operation;
- (f) the agreements to be concluded for an indefinite period, and not to be terminable before December 31, 1980.
- 227. Having carefully studied these provisions, the High Authority came to the conclusion that *de jure* and *de facto* their effect was to produce, over and above the concentration between Hoesch and Dortmund-Hörder, a concentration between Hoogovens and Hoesch. Its view was based in particular on the following considerations.
- (1) The minority holding Hoogovens is acquiring in Hoesch makes it the principal shareholder, since the rest of Hoesch' capital is widely distributed among the public. In addition, Hoogovens is securing two Hoesch directorships, which are to be held by the chairman and another member of its board of management.
- (2) The co-operation between the Hoogovens and Hoesch boards will mean permanent liaison between the two managements, and regular concerting of their sales policies.
- (3) The fact that Hoesch is discontinuing investment while Hoogovens is to step up its crude-steel capacity and eventually supply Hoesch will result in the two enterprises becoming in the long run mutually dependent as outlet and source.

The High Authority accordingly concluded that the agreements would establish a permanent bond between the two enterprises, entailing a large measure of legal and economic interdependence and mutual control.

228. The High Authority noted that, by the terms of the agreements submitted to it, the control would not become fully effective for some years, and that the other arrangements for tying up the enterprises' business interests were also to

be phased over quite a considerable period: the long-term supply links were only to be established from 1970, and such aspects as co-financing of investment would similarly take a long time to produce tangible results.

- 229. At the same time, the High Authority took into consideration the fact that, this being a cross-frontier concentration, the contracting parties would be faced with points of municipal company and fiscal law which might cause them to be more circumspect in the fixing of their legal relation to one another than would two enterprises both in the same country.
- 230. The business position of the Hoogovens/Hoesch group is as follows. It is the Community's second biggest producer of pig-iron (9.3%) and crude steel (9.9%). It tops the table for pilings, with about one-third, but has two major competitors running it close, and a number of other smaller ones, which is adequate given the rather unusual structure of this particular market.

The concentration considerably strengthens the group's position in the flat-products sector, making it the largest producer of hot-rolled wide strip and the second largest of sheet. However, having regard to the substantial shares of its nearest competitors, to the sizeable proportion of its production which it processes itself and exports, and to the high degree of concentration in these sectors generally, there is no objection to the operation on these grounds.

231. The High Authority on July 13, 1966, issued a Decision authorizing the Hoesch/Dortmund-Hörder and Hoesch/Hoogovens concentrations, on condition that, unless express permission was given to the contrary, all existing interlocking directorates as between the firms concerned and other steel companies were ended and no new ones created in the future.

#### Lorraine-Escaut/Usinor; Longwy/Denain Nord-Est

232. On July 20, 1966, the High Authority authorized mergers between the two steel firms Lorraine-Escaut and Usinor and between their respective holding companies Aciéries de Longwy and Denain Nord-Est, on condition that no executives of the steelmaking and marketing enterprises directly or indirectly affected by the mergers should at the same time hold corresponding positions in similar enterprises unconnected with the mergers.

The Usinor/Lorraine-Escaut merger has been necessitated by the technological and business trend in the French steel industry, and is not frowned on by the French authorities. To operate successfully in the enlarged markets

of today and stand up to world competition, the two companies feel it is vital to concentrate on producing from large-capacity, thoroughly up-to-date plants with specialized installations. The new merged enterprise will be styled the Union Sidérurgique du Nord et de l'Est de la France ("Usinor"), and will have a registered capital of F 754,725,000.

At holding-company level, Denain Nord-Est (itself the product of a merger between the holding companies Denain-Anzin and Forges du Nord et de l'Est, authorized by the High Authority on March 10, 1965)¹) is to merge with Lorraine-Escaut's principal shareholder Acieries de Longwy, the enterprises considering this desirable inasmuch as their participations are mutually complementary. The new company, known as Denain Nord-Est Longwy, will have a capital of FF 459,612,000.

The new Usinor, jointly controlled by Denain Nord-Est Longwy and the Gorcy group, has a market share amounting to 7.6% of the Community's 1964 crude-steel and 6.6% of its 1964 rolled-steel production; the group's crude-steel potential is expected by 1968 to work out at 7.03% of the Community total.

#### August Thyssen-Hütte/Stahlwerke Bochum

233. Also on July 20, 1966, the High Authority gave permission for Stahlwerke Bochum, hitherto controlled by Otto Wolff, to be in future controlled jointly by Wolff and August Thyssen-Hütte, Wolff to have sole rights in the sale of Bochum's high-grade sheet.

August Thyssen-Hütte is a steelmaking concern controlling, among other enterprises, the big dealer firm Handelsunion; Wolff is a dealer firm already having joint control with Thyssen of Rasselstein, producers of cold-reduced sheet.

Competition between the two in respect of cold-reduced sheet was already restricted by the fact of their participation in Rasselstein. Their combined production of this product amounted in 1965 to about 12% of the Community total, the share of Bochum alone being at least 2%. This "group effect" being already in existence, it could not be adduced as an objection to the new concentration, particularly as Woltf, a competitor of Handelsunion, was to retain the sole marketing rights.

Apart from the group effect, the joint control of Bochum by Thyssen and Wolff is not in law or practice tantamount to a concentration between the two latter.

Bochum's position has suffered so severely from developments in the market for dynamo and other sheet that the firm is having to give up hot-rolling altogether and stick exclusively to the cold process. This reorganization of

operations is to proceed under the joint technical superintendence of Thyssen and Wolff, while Thyssen is to be responsible for supplying coils and Wolff for the sales side.

The arrangement will strengthen the two parties' position with respect to dynamo sheet. The Common Market has only a few other big producers, whose customers, the electrical-engineering firms, are also highly concentrated and becoming more so. With a market pattern of this kind, comprising a producer oligopoly and consumer oligopsony, there is no reason to consider the concentration undesirable.

#### August Thyssen-Hütte/Neviges

234. In the assessment of the concentration just described, the Thyssen group's dynamo-sheet production was calculated inclusive of that of Walzwerk Neviges, whose sole product this is. Neviges, though at that date not controlled outright by Thyssen, was economically very dependent on it in virtue of links-up established in respect of production and disposals. A little later, on November 23, 1966, the High Authority gave permission for August Thyssen-Hütte to assume control of Neviges.

#### Joint venture: Coloracier S.A.

235. In September 1966 the High Authority authorized the joint launching of a new steel-producing enterprise, Coloracier, which appears likely to give a fillip to competition in the market for coated sheet treated by recently-perfected methods. The plant, which is to cost approximately FF 20m., will have an annuel capacity of about 60,000 tons.

The founder enterprises are Construction et Galvanisation de Montataire, Montataire (controlled by Usinor), Produits d'Usines Métallurgiques, Rheims (jointly controlled by Espérance-Longdoz and the Rousseaux group), and Aciers Fins de l'Est, Paris (concentrated with the Régie Renault). On November 23 the High Authority gave permission for Cockerill-Ougrée, Seraing, to become a member of the group of companies controlling Coloracier.

# Usinor/Laminoirs de Strasbourg

236. Authorization was given for this concentration in November 1966. The situation was that Forges de Strasbourg, a member of the Pompey group, was hiving off its production of steel, which was to be carried on by an independent

enterprise, Laminoirs de Strasbourg: Usinor, bitherto Forges de Strasbourg's supplier of rough metal, wished to continue acting in that capacity to Laminoirs de Strasbourg, and at the same time acquire a controlling interest therein.

The effect will be to boost Usinor's position in the market for galvanized sheet. However, since for technological reasons galvanized sheet is produced by only a few enterprises, all of them also in strong market positions and all possessing modern, large-capacity continuous-galvanizing installations, the concentration was not calculated to impair the play of competition in this connection.

#### Hainaut-Sambre/Neuves-Maisons, Châtillon

237. Permission had been asked by the Société Métallurgique Hainaut-Sambre, of Couillet, to acquire a majority interest in Aciéries et Tréfileries de Neuves-Maisons, Châtillon, of Paris. This was to entail concentration between the two; at the same time, Forges de Châtillon-Commentry et Neuves-Maisons, which had previously controlled Neuves-Maisons, Châtillon, was to remain the largest minority shareholder and also to take up a substantial participation in Hainaut-Sambre, though not a big enough one to give it either sole or partial control.

The concentration will give the two enterprises an increased share in Community production of merchant bars (4.4%) and wire rod (3.2%), but since even in Belgium and France there are other producers operating on this scale competition will not be seriously affected. Accordingly, the High Authority granted permission on December 14, 1966.

#### Cockerill-Ougrée | Providence

238. By a Decision of November 23, 1966, the High Authority gave permission for Cockerill-Ougrée, Seraing, to merge with Forges de la Providence, Marchienne-au-Pont, and for the new enterprise Cockerill-Ougrée-Providence to be jointly controlled by the Société Générale de Belgique and the Cofinindus/Brufina group.

The merger brings Providence and its subsidary Aciéries et Laminoirs de Beautor, previously controlled by the Société Générale alone, under the joint control of the latter and Cofinindus/Brufina, while Forges de Thy-Marcinelle and the Société Minière et Métallurgique de Rodange, previously controlled by Cofinindus/Brufina alone, are now concentrated with the Société Générale, Providence and Beautor.

The share of the group, to which Sidmar also belongs, is thereby increased for pig-iron to 9.5% of the Community's 1965 production, for crude steel to 7.8% and for merchant bars to 8.7%.

#### Coal/Chemical and Petroleum Sector

- 239. The High Authority authorized several concentrations arranged in connection with the collieries' efforts to diversify into the oil refining and the coal chemistry and petro-chemistry sectors. They included a number of joint ventures by the Saar and Lorraine mining companies. The operations were as follows:
- (1) acquisition of a majority holding in Erdölwerke Frisia, Emden, by the Saarbergwerke (Decision of March 30, 1966);
- (2) joint formation of the limited-liability companies

Saarland Raffinerie, Klarenthal, Saar, Société de l'Oléoduc de la Sarre, Paris,

Société de l'Ammoniac Sarro-Lorrain, St. Avold, Moselle, France, and Harnstoff- und Düngemittelwerk Saar-Lothringen, Perl, Saar, by the Charbonnages de France and Houillères du Bassin de Lorraine and the Saarbergwerke (Decision of May 18, 1966);

(3) take-over of Petrosaar Handelsgesellschaft für Mineralölprodukte, Saarbrücken, by the Saarbergwerke and Frisia (Decision of September 28, 1966).

None of these operations was of a nature to affect the companies' positions in the coal market in any way infringing the requirements of Article 66,2.

#### Texaco/Deutsche Erdöl

240. On November 9, 1966, the High Authority issued a Decision authorizing the acquisition of a majority holding in Deutsche Erdöl, Hamburg, by Deutsche Texaco Ltd., Dover, Delaware, U.S.A., a subsidiary of Texaco Inc. of New York, which has a large number of subsidiaries and branches in the Community countries.

While Texaco had not previously operated in the coal sector, Deutsche Erdöl in addition to its petroleum and chemical works owns a number of mines whose 1965 sales totalled 3,200,000 tons of coal and 1,400,000 tons of coke. The smallest of these collieries, run by the Graf Bismarck company, closed in September 1966. This concentration, the first by which a firm outside the Community

secured sole control of an enterprise coming under Article 80 of the Treaty, was authorized because in the circumstances it could not affect conditions of competition in the coal market.

# Steel|Steel Processing

#### Rheinstahl/Henschel

241. By a Decision of September 29, 1966, the High Authority authorized the take-over of Henschel-Werke, Kassel, by Rheinische Stahlwerke, Essen, a holding company controlling several coal and steel producing and processing enterprises. Henschel is a big manufacturing concern, taking, however, tonnages of coal and steel representing only such a small fraction of Rheinstahl's production that the effect cannot be to place Rheinstahl, for the purposes of Article 66,2, in "an artificially privileged position involving a substantial advantage in access to supplies or markets."

#### Joint venture: Compagnie française d'entreprises métalliques

242. The High Authority gave permission for the joint formation of this company by a Decision of December 14, 1966. The new enterprise, whose main activity will be heavy structural engineering in steel, is controlled by three steel-making and three steel construction firms, Denain Nord-Est, the Union des Consommateurs de produits métallurgiques et industriels,¹) de Wendel, Baudet-Donon-Roussel, the Compagnie française d'entreprises and the Société de participations industrielles pour la métallurgie et le bâtiment, the last-named itself controlled by the Pont-à-Mousson holding company.

Entreprises métalliques' consumption will be principally of heavy sections: it will take 0.9% of the three founder steelmaking firms' production of finished steels, and 7.3% of their production of sections.

#### Other cases

243. The High Authority in addition authorized a number of other concentrations having a negligible impact on competition in the markets concerned, which are therefore merely listed here without further particulars. They were:

<sup>1)</sup> See Twelfth General Report, No. 241.

- Ilseder Hütte, Peine/Eisenhandelsgruppe Nord der Hugo Stinnes oHG, Mülheim (authorized on February 16, 1966);
- (2) DEA-Brennstoffhandel GmbH, Frankfurt-on-Main/Karl Thiel, Offenbach-on-Main, coal wholesalers (authorized on March 2, 1966);
- (3) Klöckner Werke AG., Duisburg/Taben Mandt-Rauch KG., Beverstedt-Taben, concrete manufacturers (authorized on March 2, 1966);
- (4) Klöckner & Co., Duisburg/Gebr. Hoffmann GmbH, Hamburg, machine tools manufacturers (authorized on March 2, 1966);
- (5) Hauts Fourneaux de la Chiers/some divisions of Tréfinétaux and Tréfilerie et Câblerie de Bourg (authorized on May 4, 1966);
- (6) Montecatini, Società Generale per l'Industria Mineraria e Chimica, S.p.A., Milan/Società Edison S.p.A., Milan (authorized on May 4, 1966);
- (7) Neunkirchener Eisenwerk AG. (formerly Gebr. Stumm)/Georg Heckel GmbH, Saarbrücken, wire manufacturers (authorized on May 4, 1966);
- (8) Joint control of the S.A. Papeterie de Belgique, Brussels, papermakers, by Société Générale de Belgique, S.A., Brussels, and Friedrich Flick K.G., Düsseldorf (authorized on June 22, 1966);
- (9) Gebr. Haldy GmbH, Frankfurt, coal wholesalers/ H. Glatthaar & Sohn, Giessen, coal retailers (authorized on July 20, 1966);
- (10) Joint control of Menzinger-Fendel GmbH, Stuttgart, coal dealers by Winschermann GmbH, Karlsruhe, and Wilhelm Worm GmbH, Frankfurt (authorized on July 20, 1966);
- (11) Schrotthandel (formerly Albert Sonnenberg) GmbH, Düsseldorf/Joh. Braun GmbH, Worms, scrap wholesalers (authorized on September 28, 1966);
- (12) Forges et aciéries de la marine de Firminy et de Saint-Etienne, Paris/ Etablissements Tallavignes, Deloche & Cie, Neuilly-sur-Seine (authorized on September 28, 1966);
- (13) Joint formation of Tréfilacier, Paris, wire processers, by an association of steel-producing and steel-processing companies, including Hauts fourneaux et forges de Saulnes et Gorcy, Paris (authorized on September 28, 1966);
- (14) Joint formation of Inesta Spedition GmbH, Duisburg-Ruhrort, shippers, by Ferrostaal AG., Essen, and Franz Haniel & Co. GmbH, Duisburg-Ruhrort (authorized on December 14, 1966);
- (15) Union Sidérurgique Lorraine S.A. ("Sidélor"), Metz/Compagnie industrielle et commerciale de tubes S.A., La Courneuve (authorized on December 14, 1966);

(16) joint formation of Société pour le Treillis Soudé, specializing in welded netting, by Sidélor, its subsidiary Tréfileries de Périgueux, Paris, and Union sidérurgique du Nord et de l'Est de la France S.A., Paris ("Usinor") (authorized on December 14, 1966).

#### CASES TAKEN UP AND CASES DISPOSED OF

244. Tables 50 and 51 give breakdowns of the cases handled by the High Authority under Articles 65 and 66 respectively from the introduction of the Common Market to January 31, 1967.

#### SPOT-CHECKS ON COMMUNITY ENTERPRISES

245. High Authority inspectors carried out 26 spot-checks at collieries and 114 at steel enterprises.

On the steel side, a series of special extra checks for compliance with Article 60 enabled the High Authority to obtain a fuller picture of the producers' behaviour in face of developments in the market. With regard to Article 65, the High Authority was obliged to have checks carried out at 18 enterprises in connection with cartels stated to have been formed. On April 20, 1966, it decided to check up also on some of the employers' federations.¹) In addition, it asked the Council that the member Governments should co-operate in investigating cases relating to bodies or persons not under its jurisdiction, that is, that they should ascertain for it from dealers and from certain consumers the precise origin of ultra-low quotations thought to be illicit, and particulars of other dubious transactions.

On the coal side, Prof. Müller-Armack's inquiry into the activities of the Ruhr coal-selling agencies having been completed, the High Authority on July 1 put officials of its own in charge of further check-ups in this connection, under a special team consisting of the Chairmen of the Working Parties on Competition, the Market and Examination.<sup>2</sup>) The late Mr. Daum until his death continued to act as the High Authority's specially-appointed supervisor of the activities of the French Association Technique de l'Importation Charbonnière in the matter of coal procurements from other Community countries, and of transport.

<sup>1)</sup> See Nos. 221 and 222 above.

<sup>2)</sup> See Fourteenth General Report, No. 2.

TABLE 50

Cases under Article 65

(Position as at January 31, 1967)<sup>1</sup>)

				Disposed of	ed of		
Country	Taken up	Authorized	Prohibited	Article 65 not applicable	Cartels voluntarily dissolved	Otherwise handled*)	Total
		= (1) Ca	(1) Cases examined following application for examination	ollowing applic	ation for exan	nination	
Germany (Fed. Rep.) Belgium France	50 17 50	21 6	-	10 7 22	62	-	36 29 29
Italy Netherlands	12 4	27	-	9	-	11	ထ က
Total	133	36	5	46	9	1	16
		(2) Cases e	(2) Cases examined by the High Authority on its own initiative	e High Autho	rity on its own	initiative	
Germany (Fed. Rep.) Belgium France	63 95	-	e     .	49 15	-   -	∞	4.4.4.6
Italy Luxembourg Netherlands Community	4-11-9	1111	-     -	29   70	-		
Total	125	1	5	75	က	œ	92
Grand total	258	37	7	121	6	6	183

<sup>1</sup>) For explanations concerning arrangement of the tables, see Ninth General Report, No. 288.
<sup>3</sup>) The category "otherwise handled" also covers cases held in abeyance pending receipt of further particulars.

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# TABLE 51

# Cases under Article 66

(Position as at January 31, 1967)

					Disposed of			
Country	Taken up	Authorized	Examined under Article 66	Concentrations effected before signing of Treaty	Exempt under regulations implementing Article 66,3	Article 66 . not applicable	Otherwise handled <sup>1</sup> )	Total
			(1) Cases	(1) Cases examined following application for authorization	lowing applic	ation for aut	horization	
Germany (Fed. Rep.)	104	72	1	en :	1	12	67	. 68
Belgium	23	. 10	1	<sup>81</sup>	- 23 <del>4</del>	14	27	55
France	81	# es	-	. !	<u>'</u> '	23	1	9 1
Lasty	, 70	က		63	l	1		o -
Netherlands	10	10	11	-	-			12
Total	231	133	-	80	7	34	5	188
			(2) Cases ex	amined by th	e High Autho	ority on its o	(2) Cases examined by the High Authority on its own initiative	
		ć	-	6	-	16	60	25
Germany (Fed. Rep.)	30	ا و		۱ ا	-	11	1	12
Belgium	06	67	ł	67	-	11	ı	] <u>6</u>
France	30	· 1	1	1	!	-	i	N -
Netherlands	163	-	1	1		١°		- 63
Community	67		[			1		
Total	72	9		5	3	41		. 58
Grand total	303	139	-	13	10	7.5	<b>∞</b>	246
				1 hdrawn or the D	oject dropped.			
1) The category "otherwise handled" also covers cases in which applications were with the property of the category "otherwise handled" also covers cases in which applications were with the property of the category "otherwise handled" also covers cases in which applications were with the category "otherwise handled" also covers cases in which applications were with the category of	also covers cas	es in wnich appu	ications were wit					

#### Section 4: Transport

246. It is basic to the operation of the Common Market that transport should be a "neutral" element in competition, with no discrimination to anyone's advantage or disadvantage in the rates and conditions of carriage for coal and steel, and that there should be sufficient market transparency in the transport sector to allow checking for compliance both with this rule and with the rules regarding non-discrimination in prices and conditions of sale.

It is therefore a regular part of the High Authority's job to make sure that all transport tariffs, and in particular the various special domestic tariffs, are properly in line with these principles of the Treaty and the Common Market; meantime it is also continuing its efforts to secure arrangements whereby all necessary information will be duly disclosed.

# PUBLICATION OF RATES AND CONDITIONS OF CARRIAGE

247. Particulars are given in earlier General Reports concerning the measures planned by the Governments in this connection.

The disclosure arrangements progressively introduced in 1966 include a number provisionally approved by the High Authority as try-outs, such as, in the case of short-term contracts, the publication of weekly schedules of charges, and for longer-term contracts the obligation to issue details of the routes concerned and to supply information on request to all coal or steel producers, consumers and dealers in the Community.

So far, these systems appear to be functioning smoothly, and enabling those concerned to ascertain the rates and conditions of carriage actually applied. The High Authority is helping to ensure that they work by publishing in the Official Gazette of the Communities the routes by which consignments are carried under the tariffs for long-term contracts, and itself providing all relevant particulars concerning such contracts to any Community producer, consumer or dealer asking for them.

Disclosure, then, is now the established rule—a very real advance in the direction of transport transparency for coal and steel. The rates and conditions for these very substantial traffic flows are no longer kept confidential but treated as information every Common Market operator has a right to have.

Following the measures recorded in earlier High Authority Reports and the further progress in 1966, the position is now as follows.

#### Internal Carriage

#### Rail transport

248. Fixed tariffs are published in all the member countries: in three of them, however, France, Italy and the Netherlands, coal and steel are carried under special agreements at special rates. In the two latter countries it became the law on January 1, 1966, that the routes covered by these agreements must be published and all relevant details must be divulged to any Community coal or steel producer, dealer or consumer requesting them; in France it was made compulsory to publish the special rates if they deviated by more than 5% for coal or 10% for steel from the official tariff.

In Belgium, where the law had been amended not long before to permit the railways to conclude special agreements, it was now provided that if they did so these must be subject to the same arrangement as in Italy and the Netherlands.

Now that these measures are in force, accessibility of necessary information is adequately established for all internal rail carriage within each of the member States.

#### Road haulage

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249. The following disclosure arrangements were introduced in 1966. In the Netherlands, weekly schedules of charges for short-term contracts began in March to appear in the *Nederlandse Staatscourant*, and in June rules similar to those for rail transport were imposed with respect to long-term contracts.

In Belgium a Royal Decree of June 15 instituted a compulsory system of maximum-and-minimum rates, with effect from July 1; in addition, rates actually charged within this range must be published if they go beyond the margin of 5% for coal and 10% for steel which the High Authority is allowing in present circumstances.

In France, where maximum-and-minimum schedules are compulsory for internal long-haul traffic (over 150 km.), increased transparency was achieved by further narrowing of the maxumim/minimum ranges; it is planned to compress these still more.

In Luxembourg much the same system had already been adopted as in the Netherlands.

In Italy a Presidential Decree fixing the details as to the implementation of the Act of November 3, 1964, was printed in the Gazzetta Ufficiale della Repubblica Italiana of December 7, 1966: it requires hauliers in future to publish in advance, subject to a limited margin of uncertainty, the rates and terms they intend to quote for the carriage of coal and steel.

The only matter now outstanding is medium-haul traffic in Germany (50-120 km.) and France (50-150 km.), for which disclosure arrangements are under study.

#### Inland water transport

250. All Dutch inland water-transport rates are now published, in accordance with rules introduced at the beginning of 1966.

The other Community countries possessing inland-waterway networks have compulsory ratemaking systems affording a detailed picture of the charges for internal traffic. The High Authority is making it its concern to ensure proper observance of Article 2 of Recommendation No. 1/16, which requires check-ups to be made on the operation of these and disciplinary action taken in respect of any infringements.

# Cross-Frontier Carriage

#### Rail transport

251. There are still a number of undisclosed special agreements relating to consignments travelling from one member State to another via Swiss or Austrian territory. This matter will need to be gone into with the two Governments concerned; the latter have, however, indicated that in their view there is little object in starting discussions until there are uniform disclosure arrangements for all rail carriage of coal and steel within the Community, and arrangements calculated moreover to have an equal impact on carriage of coal and steel by other modes of transport in competition with the railways on the routes concerned.

#### Road haulage

252. In the Netherlands, similar disclosure arrangements to those for internal traffic were introduced for cross-frontier hauls by Dutch firms.

In Belgium, the same arrangements as for internal traffic were introduced on October 1 with respect to Belgian firms' actual charges for intra-Benelux hauls, (which incidentally have been subject to compulsory maximum-and-minimum tariffs since September 1, 1962); in addition, the compulsory rate-making system and supplementary disclosure arrangements in force for internal traffic now also apply to cross-frontier hauls between Belgium and other member States, whether by Belgian or non-Belgian carriers.

Luxembourg is about to introduce a system similar to Belgium's for intra-Benelux hauls by Luxembourg firms.

The Belgian, French, German and Luxembourg Governments intend to establish international through-rates for road haulage between their respective countries; multilateral negotiations, in which the High Authority is taking part, are in progress.

The Italian portions of hauls to and from Italy are covered by the same disclosure arrangements as carriage within Italy.

#### Inland water transport

253. In an endeavour to settle the problem of ensuring transparency in international waterway rates for coal and steel carried between Community ports, the High Authority opened multilateral negotiations with the member Governments on June 9, 1966.

At the current stage in the talks, what is envisaged is disclosure within days of the conclusion of the contract, by a co-ordinated procedure covering all international waterway transport both on the Rhine and elsewhere; the procedure would be framed without prejudice to the E.E.C. common transport policy, and would be open to review and if necessary amendment as that policy developed, though with due regard to the special practical requirements arising out of the nature of the Common Market for coal and steel.

254. As will be apparent from the above, considerable strides have been made in the achievement of market transparency in the carriage of coal and steel.

In accordance with Article 14 of the Treaty, Recommendation No. 1/61 left the member Governments free to choose their own means for attaining this end. Transparency could of course have been established by other methods having the advantage, *inter alia*, of greater uniformity than those the Governments have now introduced or are preparing to introduce, but it is perfectly right and proper that each should have selected a procedure in line with its own trans-

port policy, and in so doing have moreover been anxious not to anticipate the common transport policy now being evolved by E.E.C., an important plank in which is publication or other disclosure of rates and terms.

The E.C.S.C. Treaty views transport purely from the angle of the operational requirements of the Common Market for coal and steel. It is in no way concerned with the institution of a transport policy, and the High Authority therefore cannot be either: its job, given the limited objectives of the Treaty, is simply to assess the disclosure arrangements the Governments submit to it, and establish that they are in fact such as to ensure that the ncessary particulars of rates and conditions of carriage for coal and steel will be duly supplied both to itself and to E.C.S.C. producers, dealers and consumers.

To this end, then, the High Authority has worked unremittingly, in cooperation with the E.E.C. Commission, for the achievement of an adequate degree of market transparency in the transport of coal and steel.

#### SPECIAL DOMESTIC TARIFF MEASURES

255. Special internal tariffs operating to the advantage of one or more coal- or steel-producing enterprises—whether adopted actually for the benefit of the enterprises in question or (unless in consideration of genuine competition to be withstood) for the benefit of the carrier—require prior High Authority approval.

#### Competitive tariffs

256. If properly made up, special internal rates which deviate from the regular tariff only in so far as they are aligned on those actually charged by a competing mode of transport on the same route result merely in traffic being shared between the two, and do not affect the competitive position of enterprises in the Common Market. There are a great many such arrangements, which are changing all the time. The High Authority has to keep a constant eye on developments, sometimes sending teams to investigate the state of affairs on the spot, in order to be able to check promptly whether the purpose of the special tariff really is to meet existing competition and what the competitors are charging. It has found this type of tariff to be usually quite orthodox, and so non-discriminatory.

Tariffs designed to meet potential competition—in effect, to make it not worth the competing carrier's while to set up at all—have to be approved beforehand by the High Authority. They are considered compatible with the Treaty only if it can be shown that there is a definite likelihood of effective competition

from another mode of transport, which involves bringing evidence that the rival carrier's project is both practicable and remunerative, and that there is in fact the intention to proceed with it unless the existing rates are reduced first; in addition it has to be demonstrated that the parity has been correctly calculated.

These conditions having been fulfilled in the case of a special internal tariff of the Belgian State Railways for the carriage of iron ore from Antwerp to Seraing, the High Authority approved the measure by Decision No. 9/66, of May 4, 1966.1)

#### Other tariffs benefiting carriers

In judgments handed down on May 10 and July 15, 1960,2) the Court of Justice of the Communities ruled that special tariffs warranted by the specific state of the transport market-i.e. introduced "primarily" for the sake of the carrier-were to be presumed compatible with the Treaty and hence entitled to High Authority approval.

The High Authority has since found it something of a problem to decide how far it could go under the Treaty in allowing carriers to engage in ratemaking more with an eye to their own advantage than previously, by instituting non-competitive special tariffs. It has been cautious in the amount of extra latitude given, and has required that such tariffs should not in practice make any difference to the competitive positions of existing enterprises.

Authorization for the first tariffs of this kind was, in accordance with the applications of the Governments concerned, granted and subsequently renewed subject to a time-limit. High Authority Decisions Nos. 15 and 16/66, of July 20, 1966, authorized for an indefinite period a fresh set of special rates, this time on the French State Railways.3)

### Special tariffs benefiting producer enterprises

Article 70,4 of the Treaty empowers the High Authority to waive the ban on discrimination in rates and conditions of carriage contained in Articles 4, b, and 70,1, by authorizing special tariffs benefiting certain individual producers, provided they are compatible with the basic principles of the Treaty, and in particular with those set forth in Articles 2 and 3.

<sup>1)</sup> See Official Gazette No. 84/66.

<sup>2)</sup> See Recueil de la Jurisprudence de la Cour 1960, Vol. VI. 3) See Official Gazette No. 144/66.

Having regard to the present state of the coal and steel market, the High Authority is now taking into account in assessing such tariffs

- (a) the economic factors governing certain producers' competitive position in the Common Market, including official action with respect to the transport infrastructure;
- (b) the competition in the market from products imported from third countries;
- (c) the importance (also in cases where enterprises are scheduled for closure) of preventing disturbance of the member States' economies and maintaining continuity of employment, where appropriate by enabling readaptation and reconversion to be phased over a period.

The High Authority moreover considers that, in suitable cases, tariffs of this kind may be authorized without limit of time; in its Decisions under Article 70,4, however, it reserves the right to amend or withdraw such authorizations should the situation which gave rise to them no longer obtain.

259. On these grounds, the High Authority has in the last few years approved a number of tariffs benefiting individual coal and steel enterprises, which are recorded in previous General Reports. Similarly, by Decision No. 14/66, of July 20, 1966,¹) it authorized the German State Railways' special rates for certain consignments of coal and steel carried to or from the Saar, though requiring some alterations to be made to ensure that they did not, by their limited purview, distort the operation of the Common Market at the expense of Community coal or steel producers, dealers or consumers outside the Saar. The alterations were originally to take effect from October 31, but the date has been twice put back at the German (Fed. Rep.) Government's request; it is now fixed for February 28, 1967.

Appeals against the Decision by the German (Fed. Rep.) and Dutch Governments are now pending before the Court of Justice.

# MINIMUM CHARGES AND MINIMUM CHARGEABLE DISTANCES

260. In some member countries the railways have a system of minimum charges or minimum chargeable distances. In the last year or two these have been substantially increased, to a point where they are now tantamount, in

<sup>1)</sup> See Official Gazette No. 141/66.

cross-frontier carriage, to the old "breaks in rates" which were abolished by the agreement of March 21, 1955, instituting international through-rates.

The High Authority is studying this problem with the Governments.

#### TRENDS IN TRANSPORT OF E.C.S.C. PRODUCTS

261. Following two years of expansion, the total volume of E.C.S.C. Treaty products carried by rail and water (road haulage excluded) in, to and from the Community contracted again in 1965 by 1.6%, to 485m. tons as compared with 493m. in 1964. This overall figure is analysed below by traffic flows, modes of transport and products.<sup>1</sup>)

Intra-Community traffic, which accounted for 362m. tons or close on 75% of the total (as against 378m. or 77% in 1964), showed a decrease of about  $4\cdot3\%$ , owing largely to the continuing shrinkage in the transport of solid fuels. The falling-off was partly offset by a striking all-round expansion in traffic flows with third countries, outgoing shipments jumping over 14% to 26m. tons, while incoming ones by over 5% to 97m.

These changes were reflected in the distribution among the different modes of transport: the share of seaborne shipping was 23% (111,500,000 tons), 7% (7,300,000 tons) up on 1964; the railways' remained substantial, at 60% (292m. tons), though down by 4% (rather over 11m.), while that of inland water transport declined quite markedly, by 5·1% (4,400,000 tons), a point worth noting as it is the smallest of the three, working out in 1965 at 16·8% (just under 82m. tons).

Breakdown by products shows the biggest decrease in 1965 to have been for solid fuels (-19,200,000 tons), and the biggest increases for iron ore and rolled steels (+7,200,000 and +4,300,000 tons respectively). Of the solid fuels, hard coal carried within the Community was the most affected (-7,600,000 tons by rail and -4,400,000 by inland waterway), but there was also quite a marked diminution in intra-Community transport of brown coal and coke, especially by rail (-2,500,000 and -1,800,000 tons). The increases in the traffic with third countries were mainly in incoming seaborne shipments of iron ore (+7m. tons) and outgoing ones of rolled steels (+2,300,000 tons); the same two products were the only ones of which slightly larger tonnages were carried by water between Community ports (+800,000 tons by inland waterway and +600,000 by sea).

<sup>1)</sup> See also Statistical Annex, Tables 37-39.

The full figures, broken down by the nine Treaty products, are given in a separate publication of area transport statistics for 1965. This also includes some figures for road haulage<sup>1</sup>): on the basis of the Nomenclature of Transport Statistics, the volume of Treaty products hauled by road between Community countries in 1965 may be put at 3,500,000 tons, while a random-sample survey suggests that internal traffic within the member countries totalled something like 180m. tons.

<sup>1)</sup> See Eleventh General Report, No. 375 ff.

#### CHAPTER FOUR

# LONG-TERM DEVELOPMENT OF THE COMMUNITY INDUSTRIES

#### Section 1: Investment

#### GENERAL REMARKS

262. Article 54 of the Treaty lays down that, "in order to encourage the co-ordinated development of investment, the High Authority may, in accordance with the provisions of Article 47, require enterprises to submit individual projects in advance, [and] ... within the framework of the General Objectives referred to in Article 46, ... may issue reasoned opinions on such projects."

In implementation of Articles 47 and 54, the High Authority accordingly on July 20, 1955, promulgated Decision No. 27/55 requiring all coal and steel enterprises to declare to it investment projects involving expenditure above a given figure (as a rule 500,000 dollar units of account for some categories, and 1m. for others). In order to gain a clearer picture of the foreseeable development of capacity in the different E.C.S.C. sectors and sub-sectors, and equip itself to formulate more fully reasoned opinions concerning the projects' desirability point of view of the General Objectives, the High Authority has now found it necessary to require enterprises, as from January 1, 1967, to supply more detailed particulars than hitherto. To this end, it adopted a fresh Decision on November

(a) With regard to the declaration of new investment projects, the provisions of Decision No. 27/55 (as amended by Decision No. 26/56, of July 11, 1956) remain in force.

19, 1966,1) the gist of which is as follows.

<sup>1)</sup> Decision No. 22/66, Official Gazette Nos. 219 and 227/66.

- (b) Since with the sweeping changes in production techniques and in the state of the market it is now often necessary to take plant in both industries out of operation before it has been fully amortized, advance declaration of disinvestment as well as of investment schemes is in future to be the rule.
- (c) In view of the adjustments enterprises frequently have to make while their investment and disinvestment projects are actually in hand, they are from now on also to forward detailed *progress reports* on these.
- Even the prior declarations and progress reports together cannot, however, afford a truly comprehensive picture of how capacity may be expected to develop, inasmuch as, firstly, some items are too small in themselves to warrant individual declaration, yet taken together amount to quite a substantial portion of the whole, and secondly, co-ordinated investment requires that account be taken not only of capacity in service and building, but also of capacity merely contemplated. In future, therefore, enterprises will be required for the purposes of the High Authority's annual investment survey to describe projects of the latter type also. The descriptions will be only for discussion: the enterprises will still have to declare the projects concerned in the normal way if it is decided to proceed with them.

The new Decision, which was taken, in accordance with the Treaty, on the High Authority's own responsibility, forms part of the Community's overall drive to place the coal and steel sectors on a sound economic footing. The High Authority feels certain the enterprises will appreciate that the additional particulars they have now to furnish will make for better reasoned opinions and hence better co-ordinated investment planning.

263. By means of its annual investment survey and the opinions it issues on the compatibility of the larger schemes with the General Objectives, the High Authority is able to bring a persuasive influence to bear which often has the effect of inducing enterprises to make changes, major or minor, in their initial plans.

The Treaty further empowers the High Authority to assist with the financing of such projects as are considered to be especially valuable to the Community: it can lend the enterprises money direct, guarantee loans raised by them from third parties, and arrange for banks to grant them medium-term loans against the Community funds deposited there. These facilities are particularly useful in the case of industries such as coal and steel, in which annual capital expenditure represents quite a substantial proportion of the turnover.

#### THE ANNUAL INVESTMENT SURVEY

264. It has been the High Authority's annual practice since 1956 to issue half-way through the year a report on the survey carried out at the preceding January 1 of investment activity in the Community coalmining and iron and steel industries. The report is sent to the E.C.S.C. enterprises, the Members of the European Parliament, the appropriate Government departments, the employers' and workers' associations, and others immediately concerned, and is obtainable on request from the Publications Department of the European Communities.

To keep the statistical tables to manageable proportions, the figures for some earlier years have been omitted from recent reports. As this meant referring to an increasing series of back numbers to obtain a full picture of developments over the years, a short recapitulation<sup>1</sup>) was compiled in 1966 in conjunction with the evaluation of the latest survey.

265. The results of the 1966 survey<sup>2</sup>) as regards capital expenditure are summarized in *Table 52*.

The enterprises' estimates indicate that the coal industry's production potential<sup>3</sup>) will continue to decline gradually and the iron-ore mines' remain about where it is now; the steel industry's, on the other hand, may be expected to increase fairly rapidly, though not quite at such a pace as between 1952 and 1965.

# Coalmining Industry

266. With competition in the energy market keener than ever, the Community coalmining industry was obliged to retrench further in 1965. It is doubtful whether the slight upturn forecast for 1966 will in fact materialize in most sectors.

The breakdown by sectors is shown in Table 53.

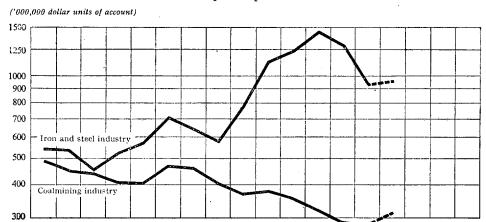
267. Expenditure on the pits decreased, though rather less markedly than that on the valorization side. It accounted for 69% of the industry's total capital spending in 1965, as compared with an average 58% from 1954 to 1959, but was nevertheless down both absolutely and per ton of coal produced.

<sup>1)</sup> Investment in the Community Coalmining and Iron and Steel Industries: A Recapitulation of the Surveys from 1956 to 1966, August 1966.

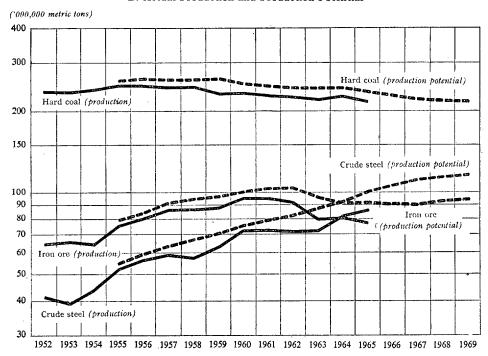
 <sup>2)</sup> Investment in the Community Coalmining and Iron and Steel Industries: Report on the 1966 Survey, July 1966.
 3) For a definition of the term "production potential," see Tenth General Report, No. 445.

GRAPH No. 7
Investment in the Coalmining, Iron and Steel and Iron-Ore Industries

#### A. Capital Expenditure



B. Actual Production and Production Potential



 $TABLE \ \ 52$  Capital expenditure in the E.C.S.C. industries

('000,000 dollar units of account)

Industry	Actual expenditur at Januar	Estimated 1966 expenditure as at	
	19641)	1965	January 1, 1966
Coalmining industry Iron-ore mines Iron and steel industry	299 24 1,315	286 26 935	316 24 974
Total	1,638	1,247	1,314

<sup>1)</sup> Corrections made to figures in Fourteenth General Report.

The collieries' declarations suggest a contraction of rather over 20m. tons in potential between 1965 and 1969, but the resulting 1969 figure of 217m. is still quite unduly high, considering that this same amount was produced in 1965 and could not all be sold.

 $TABLE\ 53$  Capital expenditure in the coalmining industry

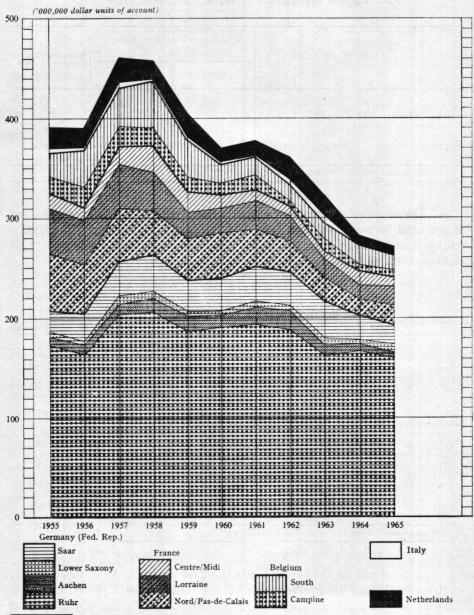
('000,000 dollar units of account)

Sector	Actual expenditur at Januar	Estimated 1966 expenditure as at		
	19641)	1965	January 1, 1966	
Pits Coking-plants,	203	192	197	
mine-owned and independent Hard-coal briquetting-plants	23 9	21 7	26 9	
Pithead power-stations and other power- generating plant Plants producing B.K.B. and low-	56	59	78	
temperature brown-coal coke	8	7	6	
Total	299	286	316	

<sup>1)</sup> Corrections made to figures in Fourteenth General Report.

Expenditure on the coking-plants slumped further in 1965, to below any level recorded since 1952; investment by the Italian coastal plants, mostly in capacity intended to take American fines, accounted for one-third of what spending there was.

 $GRAPH\ No.\ 8$  Capital Expenditure in the Coalmining Industry<sup>1</sup>)



<sup>1)</sup> Exclusive of independent coking-plants.

The mine-owned plants' estimated 1969 potential works out at 3,400,000 tons less than their potential in 1965; the independent plants' potential on the other hand is due to rise by 400,000 tons and the steelworks-owned plants' by 1,300,000, which makes the net reduction only 1,700,000 tons, or 2%.

 $TABLE\ 54$  Capital expenditure on the coking-plants

('000,000 dollar units of account)

Category	Actual expenditure at Januar	Actual expenditure as per accounts at January 1, 1966		
	19641)	1965	January 1, 1966	
Mine-owned and independent Steelworks-owned	23 30	21 18	26 15	
All plant	s 53	. 39	41	

<sup>1)</sup> Corrections made to figures in Fourteenth General Report.

Expenditure on the *briquetting-plants*, though as always much lower than in the other sectors, was in 1963 and 1964 rather higher than usual as some enterprises were building plants for the production of smokeless ovoids, to help make good the shortage of sized anthracite and low-volatile coal.

The fall which began in 1962 in expenditure on the pithead power-stations is reflected in a slower rate of growth in their maximum electric capacity, which is expected to increase by only about 13% between now and 1969. Many collieries are trying to turn more of their low-grade production into piped heating for residential and industrial centres.

## Iron-Ore Mines

268. Capital expenditure remains very low, as it has been since 1963. In most orefields it is accepted that production will decline further in consequence of the competition from overseas ores. The Lorraine producers, however, are still planning to expand; according to their estimates, the total potential, which has shrunk since 1962 from 105m. to 92m. tons, should be up again by 1969 to 95m.

# Iron and Steel Industry

269. As a series of major projects were successively completed, capital spending in the iron and steel industry, which had been climbing steeply up to 1964, started thereafter to flag somewhat. The 1965 figure is, however, still well above the average for the preceding eleven years. A big drive is in progress in Belgium, and the Dutch steelmakers are also planning to step up their investment in the years ahead.

The proportion of total expenditure devoted to pig-iron production plant (steelworks-owned coking-plants, burden-preparation installations and blast-furnaces), which in 1958-59 stood at 32%, thereafter declined; for three years it was down around 17%, and in 1966 it will probably be found to have been lower still. The reason is mainly reduced spending on coking and sintering capacity.

Sinter potential may be expected to increase between 1965 and 1969 by 18%, to 94m. tons, and pig-iron potential by 13%, to 85m.

 $TABLE\ 55$  Capital expenditure in the iron and steel industry

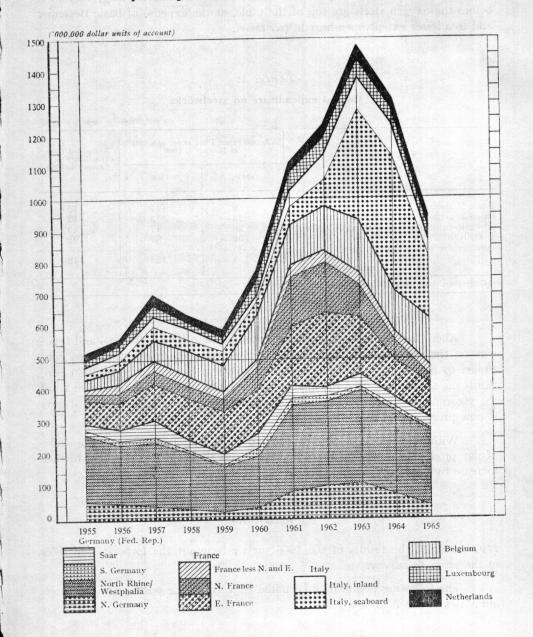
Sector		Actua	l expenditu at Janua	Estimated 1966 expenditure as at January 1, 1966			
		19841)				1965	
		\$'000,000	%	\$'000,000	%	\$'000,000	%
Plant for production of: pig-iron <sup>2</sup> ) crude steel rolled products General services	Total	223 158 634 300	17·0 12·0 48·2 22·8 100·0	162 128 425 220	17·3 13·7 45·5 23·5	157 142 474 201	16·1 14·6 48·7 20·6

Corrections made to figures in Fourteenth General Report.
 Inclusive of steelworks-owned coking-plants and burden-preparation installations (crushing, screening, sintering)

70% of expenditure on the *steelworks* proper went in 1965, as in the two previous years, on oxygen-blown plant, mainly in Italy, Belgium and the Ruhr.

# GRAPH No. 9

# Capital Expenditure in the Iron and Steel Industry



Steelmaking potential, already over 100m. tons in 1965, is expected by 1969 to total 118m., with the breakdown 31% oxygen-blown, 30% basic Bessemer, 27% open-hearth and 12% electric-furnace. It will not be long, therefore, before the oxygen steels are top of the table, at the expense of basic Bessemer and to a lesser extent open-hearth, (see table).

 $TABLE\ 56$  Capital expenditure on steelworks

('000,000 dollar units of account)

Type of plant	Type of plant		Actual expenditure as per accounts at January 1, 1966				
			1965 .	January 1, 1966			
Basic Bessemer Open-hearth Electric-furnace		9 23 20	11 13 17	15 12 13			
L/D, Kaldo, etc.		106	87	102			
•	Total	158	128	142			

About half the industry's capital expenditure in 1965, as in 1964 and 1963-was on the *rolling-mills*. Investment in continuous-casting installations continued to rise steadily, and will probably prove to have reached in 1966 two, thirds the amount spent on the blooming and slabbing mills. On the other hand the vigorous investment activity undertaken to increase the production of flats is now progressively diminishing.

With sections capacity now starting to expand rather faster, the share of flat products in total rolling potential is not expected to show any further increase by 1969 on the 1965 figure of 49% (compared with 37% in 1952).

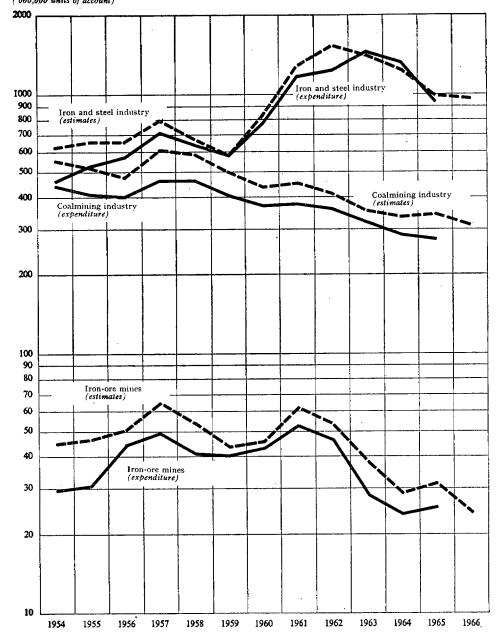
## Conclusions

270. Overall, the results of the 1966 survey bear out the forecasts for 1965 in the previous survey.

The following points may be noted concerning the position in the three industries in the next few years.

GRAPH No. 10

Comparison of Actual and Estimated Expenditure to Forward Estimates ('000,000 units of account)



 $TABLE\ 57$  Capital expenditure on rolling-mills

('000,000 dollar units of account)

Industry	Actual expenditur at Januar	Actual expenditure as per accounts at January 1, 1966			
	1.9641)	1965	January 1, 1966		
Section mills	146	108	135		
Flat-product mills Blooming and slabbing mills	345 79	219 45	205 51		
Continuous-casting installations	5	10	35		
Other plant	59	43	48		
To	tal 634	425	474		

<sup>1)</sup> Corrections made to figures in Fourteenth General Report.

The Community collieries' potential, according to their declarations, should diminish from 238m. tons in 1965 to 217m. in 1969. The latter figure is still distinctly on the high side as compared with the 190m. tons indicated by the High Authority as the target for 1970,¹) though it is true contraction tends in practice to proceed each year rather faster than the estimates a few months earlier had indicated.

The Lorraine iron-ore producers are reckoning on an expansion outweighing the contraction forecast elsewhere. This does not tally with the estimates in the High Authority's General Objectives for steel, in which the view is taken that Community ores will be used less and less in the years ahead.<sup>2</sup>)

The iron and steel enterprises for their part will be concentrating mainly on productivity improvements, but will not be able to avoid some increases in capacity. The survey suggests that by 1969, notwithstanding the recent sag in investment, the industry will have plant to produce something like 82m. tons of pig-iron and 113m. tons of crude steel (calculated assuming 96% utilization of the aggregate potentials declared by the works individually); the General Objectives for 1970, on the other hand, put the respective demand figures at no more than 76m. and 95m., and there is a similar disparity with regard to rolled products between the estimated potential in 1969 and the estimated upper limit of demand in 1970.

<sup>1)</sup> See Nos. 89 ff. above.

<sup>2)</sup> See Nos. 322 ff. below.

#### SPECIFIC CAPITAL EXPENDITURE

271. Table 58 shows for each member country the level of capital expenditure per unit (ton, thousand kilowatt-hours) produced in the principal producer sectors.

TABLE 58

Specific capital expenditure

(dollar units of account per ton or per '000 kWh produced)

Sector	Germany (Fed. Rep.)	Belgium	France	Italy	Luxem- bourg	Nether- lands	Com- munity
Coal	1						
average 1954-57	0.9	1.4	1.3	1.3		1.1	1.0
average 1958-61	1.0	1.0	1.0	0.2		1.1	1.0
average 1962-65	1.0	0.8	0.7	1.3	<del>-</del>	1.0	0.9
Coke					1		
(all types of plant)					l		
average 1954-57	0.9	1.1 <sup>1</sup> )	3.0	1.3	l —	1)	1.3
average 1958-61	0.9	$0.7^{1}$ )	1.6	1.2	<u> </u>	1) 1)	1.0
average 1962-65	0.4	$0.5^{1}$	0.6	4.5	1 —	1)	0.8
Electricity							
(generated at mines)	[				l		
average 1954-57	4.9	3.8	2.8	13.6	i	2.8	3.9
average 1958-61	3.9	5.8	$\begin{bmatrix} 2.0 \\ 2.1 \end{bmatrix}$	1.4	_	0.7	3.5
average 1962-65	2.4	0.9	0.7		l	2.7	1.7
average 1302-00	J 2. T	0.0	"			: - ' '	
Iron ore			1	1			
average 1954-57	0.5	0.1	0.5	1.5	0.2	· —	0.5
average 1958-61	0.6	0.5	0.5	0.7	0.2		0.5
average 1962-65	0.4	0.0	0.4	0.9	0.2	_	0.4
Pig-iron²)		Ì					
average 1954-57	2.0	2.1	2.8	1.8	2.6	5.7	2.3
average 1958-61	2.9	4.1	4.8	3.1.	2.3	4.6	3.5
average 1962-65	1.9	2.7	4.1	11.2	3.0	2.3	3.3
0 - 1/1							
Crude steel	1.9	1.0	1.2	1.2	1.5	4.2	1.6
average 1954-57	1.7	1.8	1.5	1.1	1.0	3.2	1.6
average 1958-61	1.5	3.1	1.3	4.0	1.6	1.4	1.9
average 1962-65	1.5	3.1	1.2	4.0	1.0	1.4	1
Rolled products		1					!
average 1954-57	9.2	3.6	6.8	8.7	3.3	7.8	7.5
average 1958-61	5.6	11.3	7.8	6.9	4.0	13.4	7.0
average 1962-65	9.4	12.6	10.0	17.3	4.8	16.1	11.0
~		I	1.	1	İ		

Coke figures for Belgium and the Netherlands have been consolidated,
 Expenditure on burden-preparation installations and blast-furnaces only.

Since, as noted in previous Reports,<sup>1</sup>) the figures need to be treated with some reserve, it has been felt best to indicate as the reference basis averages relating to periods for several years. The averages shown in the table are each for a period of four years, which is long enough to ensure that practically no trace remains of any sudden aberrations such as are liable to crop up for individual years. It still needs to be borne in mind that the sectors concerned vary in structure and operating conditions from one country to another; nevertheless, the table gives a fair idea of the general trends.

#### DECLARATIONS OF INVESTMENT PROJECTS2)

## Declarations Received

272. The estimated aggregate value of projects declared to the High Authority in 1966 (with changes notified subsequently) is 450m. dollar units of account. This is some way below the figures for 1964 and 1965, which were themselves below the average for the preceding years.

TABLE 59 Aggregate value of projects declared

('000,000 dollar units of account)

Year	Coalmining industry¹)	Iron-ore mines	Iron and steel industry	$\begin{array}{c} \text{Total} \\ (1+2+3) \end{array}$
	1	. 2	3	4
1956	205	9	638	852
1957	177	25	252	454
1958	251	16	410	677
1959	167	8	495	670
1960	146	6	1,802	1,954
1961	173	10	1,361	1,544
1962	87	_	553	640
1963	1. 72		131	203
1964	43		501	544
1965	121		589	710
1966	112	1	337	450

<sup>1)</sup> Including plants producing brown-coal briquettes (B.K.B.) and low-temperature brown-coal coke, and independent coking-plants.

<sup>1)</sup> See Eleventh General Report, No. 93.

<sup>2)</sup> For an explanation of the requirements regarding project declarations and the difference between them and declarations for the annual survey, see Fourteenth General Report, No. 252.

Investment planning in 1966 was notably influenced by three main factors—the very poor earnings of steel plants, the high interest rates ruling in the capital markets, and the disposition, especially in the steel industry, to set up big production combines. As regards the third point, the enterprises in process of regrouping are inclined to postpone further capital expenditure until their new legal set-up (merger, co-operation or joint-selling agency) has been finalized and received High Authority sanction.

273. The intended capital outlay on projects declared in the coalmining industry in 1966 totalled approximately 112m. units of account (about 8% less than in 1965), practically all of it in the Ruhr. Of this, only 17m. was to go on the pits themselves, and 94m.—84%—on pithead power-stations. With regard to the pits the enterprises are continuing to concentrate on improvements to their haulage and winding and their coal-preparation installations. On the generating side, investment activity is largely concerned with the extension of existing power-stations, one project being to equip a station with two new units of 345 MW each and another to install one of 110 MW; in addition, one colliery is building a piped-heating plant. The carbonization and briquetting sectors came up with

 $TABLE \ \ \, 60$  Aggregate value of projects declared in the iron and steel industry

('000,000 dollar units of account)

Steelworks Rolling-mills Gener-

	Grand I			Stee	elworks	Rolli	ng-mills	Gener-	
Year	Steelworks- owned coking- plants	Burden preparation	Blast- furnaces	Total	(of which: L/D, etc.)	Total	(of which: flat- products mills)	ating plant and miscella- neous	Total (1+2+3 +4+5 +6)
	1	2	3	4	41	5	51	6	7
1956 1957 1958 1959 1960 1961 1962 1963 1964	$\begin{bmatrix} 42\\20\\8\\12\\41\\-1^{1})\\12\\-2^{1})\\21\\21\\21\\21$	58 37 88 60 132 98 68 — 36 55	140 53 77 43 149 117 60 24 9	135 26 48 17 357 166 58 26 120 86	(2) (22) (18) (6) (287) (124) (43) (15) (102) (77)	189 85 125 302 930 799 268 87 256 293	(77) (46) (66) (204) (520) (559) (149) (149) (48) (189)	74 31 64 61 193 182 61 82 94	538 252 410 495 1,802 1,361 553 131 501 589
1966	26	1	29	18	(18)	261	(116)	2	337

<sup>1)</sup> Cancellations outweigh new projects declared.

only one project each, respectively for the complete reconstruction of a coke-oven battery and the installation of a smokeless-briquette plant with an annual capacity of 100,000 tons.

One project was declared by an *iron-ore* mine, for improvements to surface and underground equipment.

The total declared for the *iron and steel* industry was no more than 337m. units of account—a poorer showing than in any year except 1957 and 1963. For the coking-plants and blast-furnaces there were only a handful of projects, though two of them were to cost quite large sums, one for a coking-plant at the coast and the other for a large-hearth blast-furnace in the Ruhr. 77% of the industry's planned investment for 1966—264m. units of account—was concentrated in the rolling-mill sector, where the enterprises are for the most part seeking, so far as their present straitened means permit, to streamline and rationalize existing mills; there was only one project of any size for a new installation, namely a large-capacity medium-bar mill to be operated jointly on behalf of three steel plants. In view of the particular importance of the continuous-casting side, it may be noted for the record that expenditure on this was to amount to about 10m. units of account.

The impact of the projects declared in 1966 on future production potential varies widely from sector to sector. For coke they should increase potential by 800,000 tons and for pig-iron by 900,000, but for crude steel by only 400,000; as regards the different qualities of steel, L/D potential will be up 1,700,000 tons and electric-furnace 100,000, and basic Bessemer down 1m. and open-hearth 400,000 (see table).

#### ....TABLE 61

# Net increases in crude-steel production potential as indicated by investment projects declared

('000,000 tons annual potential) 1964 1965 1966 1962 1963 1960 1961 Country 0.21.6 0.4 4.6  $2 \cdot 1$ 0.31.7Germany (Fed. Rep.) 2.6 0.0 $2 \cdot 6$ 0.40.6Belgium/Luxembourg/Netherlands  $2 \cdot 7$ 0.8 0.1  $2 \cdot 2$ 0.00.02.0 France 0.90.30.31.0 0.23.9 1.0 Italy · 6.5 5.20.41.6 13.2 Community

## High Authority Opinions

274. Under Article 54,4 of the Treaty, the High Authority may issue "reasoned opinions" on investment projects of particular importance for the purposes of the General Objectives. These show the enterprises exactly how the merits of their individual projects must be appraised in the light of developments in the Common Market. They are purely advisory in character, 1) and in no way binding on the enterprises to which they are addressed. Copies are, however, forwarded to the Governments concerned, and lists of opinions issued are published regularly in the Official Gazette of the Communities. 2)

The Governments can thus draw whatever conclusions are relevant to their particular interest in the project in question; so also can any other parties immediately concerned, more especially banks and credit institutions shown the opinions by the enterprises.

275. The High Authority in 1966 issued 11 opinions, three of which related to projects declared before the end of 1965.

Three opinions were addressed to collieries. Two were in connection with the extension of a pithead power-station by installing two new 345 MW generator units, a project jointly declared by two collieries one of which was at the same time planning to enlarge a piped-heating plant. The third opinion concerned the construction at another station of a 110 MW unit to supply current to the German State Railways. The High Authority welcomed all three schemes, emphasizing that it was fully in favour of arrangements enabling larger amounts of pretty well unsaleable low-grade coal to be converted into electricity, and considered the piped-heating project a useful additional outlet for certain grades.

The other eight opinions all dealt with projects in the *iron and steel industry*. Concerning the first of these, a big expansion programme, the High Authority had serious doubts, which were only resolved when the enterprise in question reported that it had concluded a broad agreement to co-ordinate its investment with two other firms, taking into account all the technical and business circumstances obtaining with respect to all three, in order to avoid any miscalculations or duplications in capital spending. In its second opinion, on the replacement of a basic Bessemer by an oxygen steelworks, which would result in a substantial addition to production potential, the High Authority acknowledged that the operation would make the steel plant in question more competitive, but was

See the judgment delivered by the Court of Justice on December 10, 1957, in consolidated Cases Nos. 1 and 14/57 (Recueil de la Jurisprudence de la Cour, Vol. III, 1957).
 See Official Gazette Nos. 27, 103, 136, 183 and 238/66.

obliged to point out that with the demand for steel at present growing so slowly the new installation could not be fully utilized for years: it therefore suggested the enterprise see whether it could not enter into medium and long-term agreements with neighbouring firms to enable the L/D steelworks to be run nearer capacity.

In an opinion on the proposed installation of a new medium-sized merchant-bar mill to be operated jointly by three companies, the High Authority also warmly approved this co-operation, as calculated to improve their productivity and allow them to extend their production schedules without inflating capacity by constructing several similar mills working in parallel. Generally speaking the High Authority favours such co-operative projects where, as required by Articles 65 and 66 of the Treaty, they "contribute to a substantial improvement" in the production of neighbouring plants in the same line of country.

Two opinions were issued endorsing a two-stage project mainly designed to enable ingots and hot-rolled wide strip to be produced at the same plant, instead of at different ones as heretofore.

The remaining three opinions concerned the installation of electric-arc furnaces, coupled in one instance with that of a continuous-casting line. Regarding the first two projects, which were for small furnaces producing ordinary steel, the High Authority recalled the caution it had urged in its General Opinion of August 8, 1962, on the orientation of investment programmes in the iron and steel industry. In the third case, where a small electric furnace was to be replaced by a larger one and continuous-casting apparatus installed, it decided not to object, since the furnace would be mainly producing special and high-grade steels, and moreover the continuous-casting line really was a welcome move.

#### FINANCING OF INVESTMENT

## General Remarks

276. By the terms of Article 54,1 of the Treaty, the High Authority "may facilitate the carrying-out of investment projects by granting loans to enterprises or guaranteeing loans otherwise raised by them." Over and above this very important activity, it is empowered by paragraph 2 of the Article to assist by the same means with the financing of "operations and installations" not directly involved in coal and steel production within the meaning of the Treaty; aid of this kind (for which it has first to obtain the unanimous consent of the Council of Ministers) has been given in large measure to the building of workers' houses.

Lending under Article 54 continued substantial in 1966. In addition there was a marked increase in lending of another kind, under Article 56,2: here the loans are to part-finance the establishment of "new and economically sound activities or industrial reconversions calculated to afford productive re-employment to workers rendered redundant." Particulars of the High Authority's redevelopment operations in 1966 will be found on a later page.<sup>1</sup>)

The High Authority was not called upon to stand guaranter under either of the Articles during 1966. At the end of the year its guarantee commitments stood at 43,020,000 units of account, compared with an initial total of 47m.

#### Borrowing operations

277. During 1966 the High Authority contracted five loans to a total value of 103m. units of account—four bond issues floated on the Italian and international money markets and one private loan from an Italian bank.

The sums involved were as follows:

Lire	15,000,000,000	(public loan)	===	24m. units of account
units of				
account	20,000,000	(public loan)	==	20m. units of account
Lire	15,000,000,000	(private loan)	===	24m. units of account
US\$	15,000,000	(public loan)		15m. units of account
US\$	20,000,000	(public loan)	==	20m. units of account
•				
				103m. units of account

These brought the High Authority's total borrowings at December 31, 1966, to the equivalent of 662,600,000 units of account.

## Lending operations

278. Funds available for lending to enterprises in 1966, from the year's borrowings and sundry other sources, totalled 119,910,000 units of account.

Most of the moneys were re-lent as raised, at between 6% and 7%. As a special measure, however, redevelopment loans were usually granted at reduced interest, the High Authority having informed the Governments on September 29,

<sup>1)</sup> See Nos. 408 ff. below.

		('0	00,000 dollar us	nits of account)
1.	Borrowings Availabilities at January I Proceeds of loans contracted in 1966	!	0.03 103.00	103.03
2.	High Authority's own resources  (a) Special Reserve     Undisbursed balance from previous years     Allocated to Reserve in 1966     Redemption payments on earlier loans (b) Readaptation Reserve     Allocation		7.40 8.22 1.06 0.20	16.88
		Total		119.91

1965, that it had decided in future to adopt the practice of combining funds of its own with its various borrowings so as to make these loans repayable at only 4.5% for the first five years, and 6.5% thereafter. The redevelopment schemes so aided are described in Chapter Five, Section 4; the assistance given amounted to 10,810,000 from borrowings and 6,180,000 from the High Authority's own resources.

Favourable terms were also granted in the financing of residential building for miners and steelworkers during 1966, under the special leg of Scheme V and a new Scheme VI scheduled to run from January 1, 1966, to December 31, 1968. 20m. units of account was earmarked from the Special Reserve for the latter. The High Authority disbursed 4,770,000 units of account from its own funds for the two schemes during 1966. It also lent 200,000 units of account for readaption.

The great bulk of the High Authority's loans were, as before, to industry, for which it set aside a total of 68,100,000 units of account, drawn entirely from borrowings. The projects aided may be broken down into the various categories rating priority under the General Objectives, as indicated in the directives published in the Official Gazette of the Communities of May 20, 1961, as follows.

### Coalmining industry

Installations principally intended to increase productivity and lower production costs, and installations for coal valorization:

Société Alsacienne de Houilles et Agglomérés, Strasbourg-Rheinhafen; Gewerkschaft Augusta Victoria, Marl, near Recklinghausen; Concordia Bergbau-Aktiengesellschaft, Oberhausen; Klöckner-Werke AG, Duisburg;

Friedrich Krupp Hüttenwerke Aktiengesellschaft, Bochum;

Hüttenwerk Oberhausen Aktiengesellschaft, Oberhausen;

Gebrüder Stumm GmbH, Brambauer, Westphalia;

Essener Steinkohlenbergwerke AG, Essen;

Hibernia Aktiengesellschaft, Herne;

Hamborner Bergbau Aktiengesellschaft, Duisburg-Hamborn.

#### Iron and steel industry

Installations for blast-furnace burden preparation and pig-iron production:

Italsider S.p.A. (Trieste plant), Genoa.

Oxygen steelmaking installations (in some cases for joint use by neighbouring plants):

Aktiengesellschaft der Dillinger Hüttenwerke, Dillingen, Saar;

Dortmund-Hörder Hüttenunion Aktiengesellschaft, Dortmund;

Société Métallurgique de Normandie, Mondeville;

Klöckner-Werke AG, Duisburg.

## Continuous-casting installations:

Terni, Società per l'Industria e l'Elettricità S.p.A., Rome.

Rationalization and specialization of production:

Gebrüder Böhler & Co. Aktiengesellschaft, Düsseldorf-Oberkassel;

Stahlwerke Bochum Aktiengesellschaft, Bochum;

Acciaierie e Ferriere Lombarde Falck S.p.A., Milan;

Giuseppe e Fratello Redaelli S.p.A., Milan;

Theodor Wuppermann GmbH, Leverkusen;

Röchlingsche Eisen- und Stahlwerke GmbH, Völklingen, Saar;

Rasselstein Aktiengesellschaft, Neuwied;

Erkenzweig & Schwemann Edelstahlwerke und J.C. Söding & Halbach, Hagen.

The High Authority's loans (initial amounts, plus 17,640,000 units of account in prepayments and accelerated redemptions, subsequently re-lent) from its inception to December 31, 1965, are shown, broken down by sectors and countries, in the following table.

 $TABLE\ 62$  High Authority loans to end 1966, by sectors and countries

('000,000 dollar units of account and %)

	Germany			Belgium Luxem-	Community		
Sector	(Fed. Rep.)	France	Italy	bourg Netherlands	\$'000,000	%	
Coalmining industry	170.36	31.92	4.77	14.00	221.05	29.7	
Iron-ore mines	10.55	13.00	5.70	1.00	30.25	4.1	
Iron and steel industry	130.18	59.77	117.12	12.57	319.64	43.0	
Sub-total	311.09	104.69	127.59	27.57	570.94	76.8	
Workers' housing Redevelopment and	51.78	18.65	14.22	31.74	116.39	15.6	
reconversion	3.80	4.89	17.83	20.26	46.78	6.3	
Readaptation	5.33	0.51			5.84	0.8	
Research	1.29	0.67	0.23	0.77	2.96	0.4	
Miscellaneous				0.72	0.72	0.1	
Total	373.29	129.41	159.87	81.06	743.63	100.0	

## Section 2: Technical Research

#### RESEARCH POLICY IN 1966

- 279. A great deal of attention was given to the subject of research in 1966, at the conference of the Science Ministers of the O.E.C.D. countries (January 12-13, 1966), at the sessions in the Consultative Assembly of the Council of Europe (May 2-6, 1966) and of the North Atlantic Council, in the reports of the Working Party in Scientific and Technical Research set up by the Medium-Term Economic Policy Committee of E.E.C., and particularly in numerous reports of the European Parliament.<sup>1</sup>)
- 280. In all these it was underlined what a tremendously important factor research is in competition and in control of market dominance. Disquiet was expressed at the increasing lag in research effort between the United States and the industrialized countries of Europe, and the even greater one between the industrialized and the developing countries, and it was also stressed that co-operation between the countries of Europe, although so vital, was often less close, and contacts less frequent and intensive, than between these same countries and the United States.
- 281. Numerous proposals were put forward in this connection in the European Parliament concerning the organization of Community research, notably with regard to
- (a) the setting-up of a European Research Office, to be responsible for the planning of research and dissemination of results;
- (b) the choice of possible subjects for future Community research, and the principles on which such research should be planned;
- (c) the holding of a European symposium to expedite the framing of a European science policy;
- (d) the need to limit the exercise of patent rights in order to prevent inventions being "hoarded" and to improve and speed up the dissemination of research findings.

<sup>1)</sup> See in particular Nos. 87, 97, 107 and 63-94, and collection of European Parliament papers issued under No. 17034.

- 282. It is therefore relevant, and indeed necessary, to take stock of E.C.S.C.'s research position in the following major respects:
- (a) The Community countries' relative backwardness, technologically and scientifically, as compared with the other main industrialized areas of the world;
- (b) fostering of Community-level co-operation on scientific research and development;
- (c) dissemination of research results;
- (d) promotion and establishment of a science and research policy at European level.
- These matters all concern E.C.S.C., but not all to the same extent, because of the special character of E.C.S.C. research. This is primarily "sector" research. not covering the whole economy but confined to three specific industries, coal and iron-ore mining and iron and steel-all basic heavy industries, which have a fairly low rate of return as compared with others, and industries, moreover. which are not only organized on traditional lines but engaged in bulk production. The word "research" usually brings to mind the advanced and the so-called "invention" sectors such as the nuclear, aircraft and chemical industries, in which inventions and innovations are not merely the most important factors of production but also represent the most reliable guarantee that investments will yield a return. In a bulk-production enterprise it is doubtful whether a new departure will pay its way indefinitely. Moreover, in bulk-production industries of this type, it is impossible to proceed by pure logic, arguing that because A is so B must equally be so: an empirical approach is unavoidable and even enterprise size is in itself a subject for research. The high cost of the plant and the constant preoccupation with safety, particularly in coalmining, render it still more risky to make any substantial change in a production process; they necessitate a much more cautious approach and lengthier research before any new device or method can become operational.

## Levels of technological development

284. Although the E.C.S.C. industries are faced with all these difficulties, they do not appear to be as far behind technologically as many other traditional industries. In fact, although capital expenditure on research is lower than in the United States, it would appear—particularly in the case of steel—that the technological gap has in the last few years been narrowing. Thus, whereas in 1955 research expenditure per ton of steel in E.C.S.C. was half that in the United States, it is now two-thirds. Then again, a good number of the most important

new developments in the steel industry originated in Europe. And finally, there would even appear to be one sphere in which the E.C.S.C. industries are well in the lead, namely social and medical research.

285. This matter of the technological gap between the European basic industries and those of the other large industrialized areas, particularly the United States, has admittedly not been fully gone into. For this reason the High Authority intends to continue the studies recommended by the European Parliament and the Consultative Committee, comparing the degree of technological development in the Community industries with that in the same industries elsewhere.

In any event, it would be dangerous to let up on the research and development drive in the Community simply because in some fields the lag is not so very great. The upshot of these various considerations is that for research purposes the E.C.S.C. industries constitute an outstanding field for experiment and observation.

#### CO-OPERATION IN RESEARCH AND DEVELOPMENT

286. The fact that the E.C.S.C. industries are not so very far behind those of other countries in the sphere of research is probably due in part to the tradition of co-operation between the enterprises and the research centres in these sectors, where research for the benefit of the industry as a whole is of very long standing. Moreover, although only recent, Community research promoted by the High Authority has had the result that, among traditional industries, the E.C.S.C. industries are probably those in which international co-operation has been carried furthest.

In this connection it should be mentioned that the co-operation among consumers, workers and producers through the various committees set up earlier is progressing well.<sup>1</sup>)

Similar co-operation has developed with countries outside the Community, particularly Great Britain, Sweden and the United States, both through existing bodies (the Council of Association, the Research Committee) and at actual research level (basic research on flames, fire resistance of steel-framed buildings, work at the experimental blast-furnace, analysis of gases in steels, colliery automation, coal valorization). Particular mention should be made of the offer of collaboration and exchange of findings on coal valorization received by the High Authority in April 1966 from the United States Government. Committees have been set up on both sides to study how this can best be arranged.

<sup>1)</sup> See Fourteenth General Report, No. 263.

Though confined to two sectors of production, High Authority-aided research has taken a wide variety of forms, ranging from economic studies on the research programmes themselves and profitability studies on different production techniques to the industrial-scale testing of processes developed at pilot level. (In this latter field, development, now seen in Europe to be a key link in the research chain, the High Authority has been active for some years and has been able to experiment with various promotion methods.) The Community is also promoting pure and applied research in a number of technical contexts, research on industrial medicine, health, safety and ergonomics (industrial physiology and pathology) to secure improvements in the treatment and prevention of occupational diseases and accidents and in working conditions, and fundamental research on coal and coke chemistry and physics, metal physics, combustion mechanisms and so on. It is aiding development of new improvement of existing processes, to enable the industries to achieve more profitability, more standardization and more uniform, and better, product quality. encouraging joint research by producers and consumers aimed at expanding the industries'markets, including studies on steel utilization, undertaken as a follow-up to the recent Steel Congresses, and on coal valorization.

The following table gives an idea of the diversity of the research thus assisted.1)

	Iron and steel, iron ore			Coal			Social			Total	
	55-56	55-56 to 65-66	65-66	58-59	58-59 to 65-66	65-66	55-56	55-56 to 65-66	65-66	55-56 to 58-59	65-66
Pure research Applied research Development	93	25·4 58·6 16	36·3 36·6 27·1			77 6·5 16·5		54·8 35 10·2	89·2 10·8		67 18 15
	100	100	100	100	100	100	100	100	100	100	100
Research in connection with consumption Research in connection with	_	4·4	10.9	27	36.6	74-8	_		· —	13.5	43
production	100	95.6	89-1	73	63-4	25.2	_	_		86.5	57
	100	100	100	100	100	100				100	100

<sup>1)</sup> See also Nos. 279 ff. above.

In the course of these varied activities the Community has come up against most of the problems and difficulties involved in promoting and financing research, particularly joint research, which are at present the concern not only of a good many Governments but also of a number of international bodies.

287. The first problem concerns the type of help needed to stimulate research. There are two main types of assistance. One is a straight grant to a research centre or individual researcher, made on condition the money is spent on work in a given field; the other is direct participation in the real cost of a particular research project. Between these two extremes there is a whole range of intermediate methods, depending on how specific the research project is and on the nature of the costs to be borne.

Since Community research primarily concerns particular sectors of industry, the second type of assistance, participation in the actual cost of selected projects, has been preferred. However, this type of co-operation raises the problem of the research contract, which must specify the mode of financing and control; that is to say, each contract must define the object of the research and the degree of participation in the costs, as well as the type of costs to be borne.

288. Once a decision had been taken in favour of project financing, the second problem was that of selection. Inasmuch as the main research objectives are straight forward enough, with no clear priority, and the amounts available relatively indeterminate, the choice of projects has presented real difficulties. To overcome them, the High Authority has established certain criteria and obtained the advice of experts as to how they are to be applied.

The criteria have been defined in various documents,1) and may be summarized as follows.

- (a) The object of the research envisaged must be in accordance with the General Objectives referred to in Article 46 of the Treaty, and with the High Authority's research policy (but, as we have seen, it has proved extremely difficult to fix such objectives, and in the end they had to be left rather indefinite).
- (b) The project must be of general interest, if not to all at least to many of the Community enterprises in the sector concerned.
- (c) Projects to be co-executed and co-financed by a number of enterprises, research centres and/or technical and scientific associations in different Community countries receive special consideration.

<sup>1)</sup> See in particular The Research Policy of the High Authority, E.C.S.C. Bulletin No. 41, and notice in Official Gazette No. 70/63.

- (d) The financial assistance granted by the High Authority must be put to optimum use, *i.e.* there must be a good chance of success, even through the benefits of the research may in certain cases take some time to materialize (notably in the case of pure research).
- (e) In the case of applied research and development, the work must be calculated to aid profitability.

It will be seen that, like the objectives and for the same reason, these criteria leave a fair amount of latitude, and so, if duplication of work is to be avoided and proper co-ordination ensured, it is all the more necessary, in interpreting them, to have the assistance of experts well acquainted with current work within the Community and qualified to judge the potential value of the projects for the Community industries. The heads and senior staff of the major research establishments in the Community are the ideal people for this purpose. At the same time it has been pointed out that they are liable sometimes to find themselves in the unpleasant position of being both judge and counsel, since now and them the application being scrutinized has emanated from them. The High Authority has therefore, in response to urgings by the Parliament and by some members of the Consultative Committee, been considering ways and means of improving the procedure for obtaining expert opinions, and has already appointed extra members to some of the committees.

289. The High Authority considers that in the first stage of the stepping-up of joint research the great thing has been to get a number of projects under way. In this respect it is clear that the Community has done much useful work in sponsoring and organizing projects in a great many fields—ergonomics; industrial health and medicine, including in particular silicosis; fundamental research on blast-furnace operation and on methane detection and methane drainage; coal valorization; iron-ore beneficiation; automation; co-operative producer/consumer studies with regard to coal and steel utilization and to means of channelling scientific information and research results—and in fostering co-operation among Community researchers and research centres generally. The High Authority is nonetheless aware that there is still scope for improvement. Over the next few years the Community's role in the field of research will probably change to some extent: now that the first impetus has been given, it will be more a matter of seeing that research is carefully planned, and, above all, really efficiently organized.

Concentration on efficiency will be the more necessary since the steppingup of research in the Community on the one hand and the rising demands of readaptation and redevelopment on the other are bound to place a greater strain than hitherto on the funds available for the High Authority's work. It is therefore possible that the High Authority may have to do some pruning of its research appropriations, by

- (a) fixing a ceiling or "envelope" for each sector of research;
- (b) establishing within this, in line with the General Objectives, research targets and programmes which will serve to pinpoint more clearly the priorities involved and so the choices that will need to be made;
- (c) reorganizing its project selection procedure so as to classify the different projects proposed in accordance with the scale of priorities and financial ceiling adopted.

## PUBLICIZATION OF RESULTS

290. The end value to society of research investment depends, however, to a very great extent on the success with which the findings are publicized. The completion of a research project is by no means the last of the matter; the results have then to be applied.

To improve the dissemination and utilization of research results, the High Authority has had to overcome a number of obstacles. The point was to ensure at the same time fair remuneration for Community researchers and access without discrimination for all interested parties within the Community to all findings, without thereby infringing commercial practice or depriving researchers of all financial interest in the exploitation of their findings. To ensure proper dissemination, the High Authority first stipulated that all recipients of research assistance must either publish or patent their results, under Community supervision, and in the latter case must grant licences to all interested applicants within the Community on fair, non-discriminatory terms, though not necessarily free of charge. This is the most striking and best-known aspect of the work of the High Authority in this sphere.

291. However, for some years past, the High Authority has been introducing new arrangements mainly designed to enable it to play a greater part itself in the work of dissemination. It now itself forwards research reports to those concerned, publishes them in specialist periodicals, convenes committees of experts and representatives of the industries, organizes study sessions, and so on.<sup>2</sup>) The difficulty is to decide to whom the information should be sent and how, *i.e.* 

<sup>1)</sup> See Official Gazette No. 70/63.
2) See Bibliography, pp. 228-229.

by what means and through whom it should be distributed. Moreover, it is always difficult to decide exactly when more is being spent on dissemination than the effects really warrant. In this connection the High Authority has been conducting a number of studies with the object of more efficiently locating potential and surveying existing recipients, improving the classification of all findings, and, in particular, grouping the different types of material to be issued according to the different researchers' and research centres' particular line of country. The biggest but also most promising job being done here is the setting-up of clearing-houses, in the form of documentation pools, purveying specialist literature on medicine, ergonomics and industrial medicine, an association for the diffusion within the Community of techniques developed in non-member countries, and symposia on three of the major research areas, automation, firedamp, and utilization of pre-reduced ore.

In order to achieve a fair distribution between the expenditure on the actual research and that on the dissemination of findings, the High Authority has for some years been making for each research programme or group of projects a separate appropriation to cover the cost of the latter, *i.e.* expenses in connection with patenting, publication or the organization of study meetings.

For some time also, the High Authority has concerned itself with a further aspect which is related both to research and to dissemination, namely the preparation stage. First of all it is of course necessary to avoid pointless duplications. The co-ordination of studies at Community level and the wide-ranging task of cataloguing existing work and studies in certain sectors are aimed at obviating this possibility. Again, it important to define the areas where applied research and development are likely to be most fruitful. The Steel Congresses, which have led to much more extensive contact among research workers, producers and users are good example of this work, another being the consulting of experts in order to appraise the problems and prospects of a particular project contemplated.

Lastly, the High Authority has to concern itself with problems of a more general nature connected with the strategy and tactics of industrial research. But this brings us back to the last point referred to above, the question of a European science and research policy.

## E.C.S.C. AID ON OVERALL SCIENCE AND RESEARCH POLICY

292. Although the High Authority's activities extend from pure research to development work in an extremely wide variety of fields, they are nevertheless geared to the needs and problems of a limited number of industrial sectors. There is thus a certain risk of isolation and it is necessary for the High Authority to

dovetail its research policy into a larger whole. This is particularly important inasmuch as the Community's sphere of activity provides a very valuable field for experiment and the results obtained by co-operation at European level in these sectors constitute a fund of knowledge which no general research policy can afford to neglect.

It was for this purpose that the Interexecutive Working Party on Research and its ad hoc Committee were set up, their object being

- (a) to study the experience of the three Communities in the matter of scientific and technical research,
- (b) to lay down principles and guidelines for a common or co-ordinated research policy;
- (c) to co-ordinate the standpoints of the three Executives with respect to the work of the Working Party on Science Policy (the "Maréchal group) of the Medium-Term Economic Policy Committee.

A comparison of the experiences of the three Communities is already under way. The High Authority has submitted a memorandum entitled *Ten Years of Technical Coal and Steel research*, and Euratom has prepared a similar report. Through co-ordination in the Inter-Executive Working Party on Research it has been possible to work out and submit agreed views for the three Executives to the Medium-Term Economic Policy Committee and to other bodies concerned with research, particularly O.E.C.D. What is more, the Working Party has made it possible to plan and carry ont common research projects, as advocated by the European Parliament. Thus, in co-operation with Euratom,

- (a) the possibility of using a neutron probe to measure the moisture content of sinter mixes has been investigated: the only obstacle to use on an industrial scale, has been the over-large particle size of the mixes;
- (b) E.C.S.C. is at present part-financing industrial-scale tests of laboratory work by Euratom on the use of neutron activation for measuring the oxygen content of steels;
- (c) E.C.S.C. is studying the possibility of collaborating with Euratom in the development of gammagraphic exploration apparatus for testing semi-finished high-grade steels.

Finally, as a foundation for an overall European-level research policy, the Working Party has commissioned a number of investigations of its own, notably into the relationship between research and economic growth. Two sets of studies have been started at the instigation of the High Authority, the

<sup>1)</sup> See E.C.S.C. Bulletin No. 62.

 ${\it GRAPH~No.~II}$  Annual High Authority Commitments for Technical Research

1965 4,971,000 1964 610,000 4,702,000 1963 2,420,000 1,062,000 2,548,000 3.024.000 558,000 1960 424,000 1959 1.472,000 3,065,000 5,000,000 1958 Iron ore Coal 200,000 Steel ('000,000 dollar units of account) 1957 .500,000 1955

first on certain factors operating for or against the industrial application of laboratory discoveries (the "novelty barrier"), and the second and more ambitious on methods of assessing the remunerativeness of research for the economy as a whole.

293. These projects are good examples of the High Authority's approach to the development of its research policy, which is seen not as a series of isolated endeavours by particular sectors or industries but as the basis of a wider strategy serving the purposes of a European-scale industrial policy. Until the Executives are merged, the Working Party will remain the essential co-ordinating agency for the successful fulfilment of this task.

### FINANCIAL ASSISTANCE IN 1966

294. The High Authority again stepped up its activities in this direction, as it had already done the year before; on the coal side the figures as such appear to indicate a decrease, but this is in fact misleading.

Research appropriations in 1966 totalled 8,700,000 units of account, of which 6,600,000 was allocated to steel, 400,000 to coal and 1,700,000 to "social" research. The aggregate sums earmarked since 1952 (minus some 600,000 units of account earlier allocated but not disbursed, and now withdrawn) now stand at 24,800,000 units for steel, 7,200,000 for iron ore, 23,300,000 for coal, 27,600,000 for social research and 200,000 for dissemination of results, i.e. 83,100,000 in all.

As noted, the apparent drop from 1965 to 1966, a paper one only, since a number of decisions taken during 1965 not implemented until 1966: the value of the contracts signed in 1966 in fact exceeded the appropriations decided on by the High Authority in this year.

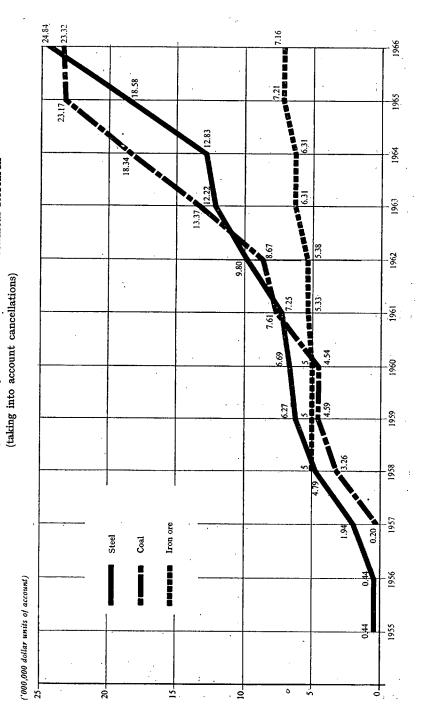
## Research contracts signed by the High Authority in 1966

Steel	8,200,000 units of account
Ore	900,000 units of account
Coal	3,100,000 units of account
Social ;	2,500,000 units of account
Total	14,700,000 units of account

295. At the same time there was an increase in disbursements, viz. 6,500,000 units of account for technical research as against 5,800,000 in the previous year, which brought the proportion of disbursements to amounts earmarked up from

GRAPH No. 12

Cumulated Total High Authority Commitments for Technical Research



51% to 57%. Moreover, if we include social research, total disbursements amount to 9,300,000 units of account; the proportion to total assistance is then 54%, owing to the period over which the budgeted credit extends, but even so this is higher than in the previous year (47%).

#### TECHNICAL RESEARCH: COAL

- 296. The financial situation of the Community coalmining industry did not improve in the year under review. The industry's endeavours to increase its technical and economic efficiency had to be further intensified; here technical research has a most important contribution to make, though in fact it is directed not only to raising productivity but also to improving safety standards and working conditions.
- 297. In 1966 six major High Authority-aided programmes and 32 individual projects of some size were in hand in the coalmining industry. Several were completed during the year. The High Authority granted fresh financial assistance totalling 434,000 units of account for four projects, three of which are continuations of work already in progress and the fourth new.

Individual projects are normally handled by a single centre, and programmes by several—in one case as many as twenty. The latter are co-operative schemes in which the centres work parallel on a basis of division of labour. This inter-regional and cross-frontier collaboration has worked excellently, particularly in the sphere of pure research.

In 1966 as previous years, research promoted in the coalmining industry falls under three main heads—mining techniques, coal valorization and coal utilization.

# Mining Techniques

298. Fundamental research in this field is at present mainly focused on underground rationalization and productivity improvement by attention to operating techniques and organization. The rationalization drive is aimed at concentration of pits and workings and full mechanization of winnings, with the ultimate objective of outright automation. To attain this end, or rather series of ends, a great many conditions have to be fulfilled.

The High Authority is aiding these efforts by part-financing about a dozen individual projects and several programmes, and by commissioning expert technical and economic reports.

10,647 1965 1961 24 1963 2,115 Actual Disbursements for Technical Research 1962 1961 5,099 3,810 1959 408 1958 1957 829 Iron ore Steel Coal ('000,000 dollar units of account) 1956 396 1955 ä

01

1966

GRAPH No. 13

15.

299. The push to achieve concentration of workings in space and in time, higher output per face, faster daily rates of advance and full mechanization and electrification of large pits—all major factors in reducing costs—is handicapped both technically and safety-wise by strata pressure and the presence of firedamp. The exploration and control of these two phenomena remain vital tasks of mining research.

Aided by the High Authority, the Community collieries have been investigating firedamp problems in two Community-level research projects, on presence and emission of methane and on sudden outbursts of firedamp, as well as in two individual projects, on the origin of methane and its migration within the deposit and on improvement of ventilation by properly-calculated regulation of fans, 1) and have obtained a number of further findings.

The origin of firedamp has been determined, and its distribution within the deposit, its association with coal and the adjacent strata and the conditions and laws governing its emission and irruption in underground workings established. Ways and means of eliminating firedamp rapidly from a deposit and preventing uncontrolled outbursts have been studied and, when planning new workings or extraction at different levels and deciding which methods and equipment are to be used, mining engineers can now include the gas content of the deposit and the accurately defined conditions of emission in their calculations. The quantification of the processes governing the presence and emission of firedamp in coal deposits will also make possible improvements in ventilation and safety underground.

One very important problem is the remote monitoring of the main ventilation data at key points in the pit, as a step towards maximum efficiency and automatic regulation of fans.

300. Strata pressures liberated during coal-winning and roadway drivage is the big factor tending to slow down the process of rationalization. The problem of strata pressures in gate roads has been studied as part of an important research programme carried out jointly in all the coal-producing countries of the Community.<sup>2</sup>) The laws governing the effects of strata pressure have been formulated and the information thus gained has enabled improvements to be made in tunnelling techniques and types of support, thus extending the life of the roadways. One project, on pressures at the face, is concerned with roof control and the influence of supports of different strengths and designs on the state of the roof. Alongside this pure research, applied research is in progress in which laboratory findings

2) Ibid.

<sup>1)</sup> See Fourteenth Annual Report, No. 265.

and the results of tests with reduced-scale and full-scale models are being turned to account in designing new types of support or modifying and improving existing types at mechanized faces.

301. For some years the High Authority has also been promoting research on the mechanization of roadway drivage. Pure research<sup>1</sup>) on "cut-through drilling" is being conducted to discover the best method of tunnelling through hard rock, with the object of later applying the findings in the designing of appropriate cutting machinery.

In addition, experts are to survey the present state of technology in this connection, and their conclusions may also prove relevant in the devising of roadway drivage techniques.

302. The mechanization of the actual winning operations is yet another aspect which is receiving the attention of managements and researchers. It is the subject of a number of projects concerned with the development and practical testing of coal-winning techniques, and of a big Community programme on the telemonitoring and remote control of all or part of equipment at the face.

Research on the development of a coal-getting machine for use in faulty seams<sup>2</sup>) was completed last year without fully solving the problem of mechanical passage through faults. The activated coal plough is being used as the basis for a promising new machine for mining the harder kinds of coals, which has still to be tested.

Preliminary work continued on the construction of an entirely new remote-controlled<sup>2</sup>) power cutter operating without supports. Particular difficulties were encountered in designing a curved face conveyor and in determining on what basis it was to be remote-controlled.

The development of efficient drive units for coal ploughs and armoured conveyors has now reached the stage of underground tests with hydrostatic drive units.<sup>2</sup>)

303. Work at present under way on the subject of hydromechanical winning and transport<sup>2</sup>) is of particular importance in view of the type and tectonics of some Community deposits. The development and small-scale testing of water lances

See Fourteenth General Report No. 265.
 See Fourteenth General Report, No. 266.

and force pumps were followed during the year by working and performance tests on a larger scale which yielded results of exceptional interest for the winning and vertical raising of coal up to heights of 750 metres.

Development work and experiments continued on cold shotfiring!) for use in the working of residual pillars and pockets where it is difficult to use mechanical methods of coal-getting. This method may soon be suitable for general use.

304. Telemonitoring and remote control at the face, i.e. of the cutting and loading of the coal and the advance of the supports, is the subject of a Community programme<sup>1</sup>) being carried out jointly by two German, two French and one Belgian mining company in co-operation with the mining research institutes of these countries. The aim is to develop and test coal-getting machines (ploughs and cutters) and conveyors, to study drives and remote control of the motors, and to examine the processes involved in the remote control of the movement of mechanized supports. The results so far obtained indicate that in view of the very complicated mechanisms and immense cost it would be best to abandon the idea of fully automating the intricate face machinery; the most economical answer at present would be to aim simply at unit and series control of face supports. Work is proceeding with this in view.

#### Coal Valorization

- 305. The High Authority is currently aiding only one project concerned with the mechanical valorization of coal, i.e. coal preparation proper. The aim is to eliminate or reduce the amount of incidental degradation during transport between the pit and the consumer, particularly in the filling and discharge of bunkers.<sup>2</sup>) This degradation results in a considerable increase in the proportion of smalls, which fetch a lower price, so that the matter is of some importance from the business point of view. The project has yielded results which will be of value with regard to the rational design and use of bunkers.
- 306. The most important side of thermal valorization of coal is coking. The main problems of design and technology here are the technical and economic improvement of coke oven efficiency, and the use of coal not of the best coking grades to produce metallurgical coke. The first problem is of special importance for the coalfields which produce most of the coking coal for the Community steel

2) Ibid., No. 269.

<sup>1)</sup> See Fourteenth General Report, No. 266.

industry, while the second particularly concerns the Community fields which produce lower-grade coking. Both are being studied by High Authority-aided research.

The parameters of the main factors in coking have been studied, as part of a Community-level project, in an industrial-scale experimental coking-plant with a view to improving the properties of the coke and the remunerativeness of traditional coke-ovens, and their influence on the economic and qualitative yields of the plants has been precisely determined.¹) The characteristic values and conditioning factors established will from now on enable coking-plants to be operated under optimum conditions which can be calculated in advance, and production accurately planned in accordance with the technical conditions obtaining and the raw materials available.

The production of top-grade blast-furnace coke from poorly-coking coal raises technical difficulties which are liable to have serious financial implications, particularly if it becomes necessary to stop making up the blend with coking coal imported from third countries. The pounding method has been in use for many years. A French and a German research centre, with financial assistance from the High Authority, have been working on the development of a new process whereby the coking coal is subjected to heat treatment before being fed into the ovens.<sup>2</sup>) The French project has been completed and that in Germany (Fed. Rep.) should be finished by the end of this year. The results should make it possible to obtain satisfactory grades of coke and to increase the production capacity of the coke-ovens at lower cost.

307. The aim of the chemical valorization of coal is to convert and utilize the by-products of carbonization, i.e. the hydrocarbons released from the coal during coking. The formerly flourishing coal-chemical industry, producing fertilizers, drugs, dyes and plastics, has in the last few decades been meeting with keen competition from the petrochemical industry, which turns to account the by-products of petroleum refining.

Three years ago the Community collieries decided to undertake a major programme of fundamental research on coal chemistry and physics with a view to opening up new fields for coal valorization.) Using all the latest methods of physical and chemical investigation and working directly from coal, they have been exploring the possibility of developing new products and compounds which might at a later stage serve as a starting-point for the development of new utilization techniques and industrial applications. The lengthy and wide-

<sup>2</sup>) *Ibid.*, No. 269.

<sup>1)</sup> See Fourteenth General Report, No. 268.

ranging research, by the four central coal research establishments and all the Community university research centres specializing in this field, has been proceeding according to plan; a number of promising interim results have been obtained, and a progress report is in preparation.

### Coal Utilization

- 308. In this field the High Authority has made grants towards a number of projects ranging from basic research on the combustion mechanism of solid fuels to the development of complete heating plants and modern boilers in various sizes and for various uses. It has also given attention to the problem of air pollution, and has sponsored research on efficient utilization of ash and clinker.
- 309. Pure research carried out in France and the Netherlands on the combustion mechanism of solid fuels¹) has led to a number of improvements and proposals in connection with plant design and technology. Work commenced at the beginning of the year on a comprehensive programme of research on p.f. firing of watertube boilers, the results of which are not expected for some time.

The research in Belgium on automatic stoking and ash removal devices for various types of fireboxes and grates is still in progress. The work at the same centre on air pollution resulting from the combustion of coal with a high volatile-matter content has been completed, and has yielded good results.

The project in the Netherlands on the special problem of chimney draught conditions in residential blocks has produced some valuable information of much relevance for the design of heating plant and chimneys in such blocks.

310. The French and German research on utilization of boiler ash and clinker, which are recovered in substantial quantities by large industrial users and have to be stored at additional cost, is aimed at developing high-quality roadmaking material, raw materials for the manufacture of refractory bricks, and various light aggregates and cements. Good progress has been made with both ash and clinker.

The problem of air pollution is one of particular urgency in highly industrialized areas. In addition to the unpleasant but harmless emissions of soot and dust, the air is also being fouled by such exceedingly noxious gases as sulphur

<sup>1)</sup> See Fourteenth General Report, No. 270.

dioxide and trioxide, which are contained in combustion fumes and exhausts. legislation in force has therefore fixed the permissible sulphur concentration in the fumes (which must be observed by the large industrial coal consumers if plant is to be approved) at a pretty low level. Since in the industrialized regions the atmosphere is already polluted by existing plant, it is particularly difficult to ensure that emanations do not exceed the specified limits. The only way in which the sulphur-bearing constituents of coal can be eliminated economically is in gaseous form at the moment of combustion. The first results of the German experiments with adsorbing agents, such as peat coke, coke made from preoxidized coal, and alkaline-earth compounds, can be described satisfactory.

Industrial-scale tests are being carried out at a desulphurizing plant operating under normal conditions at a thermal power-station in Germany (Fed. Rep.).

Tests carried out in France and in Belgium on the catalytic combustion of tar funes from smokeless-briquette plants1) have also yielded satisfactory results, demonstrating the limits and potentialities of various processes and catalysts under different working conditions.

### TECHNICAL RESEARCH: IRON ORE AND STEEL

In view of the further worsening in the state of the steel market during 1966, the High Authority has been making considerable use of its powers under Article 55 of the Treaty in the matter of technical and economic research, promoting work likely to produce short and medium-term improvements in the position of the Community steel industry in the face of the ever-stiffening international competition.

In implementation of the principles set forth in its publication Technical Research Policy,2) the High Authority undertook a variety of activities, all with clearly-defined aims-more efficient preparation of raw materials, lower steel production costs, better-quality products at competitive prices, increased utilization of steel in the different consumer sectors, and the opening-up of new sales outlets.

The intensified Community research activity during late 1964 and 19653) was maintained in 1966.

See Fourteenth General Report, No. 270.
 See E.C.S.C. Bulletin No. 41.
 See Fourteenth General Report, No. 272.

By and large, research in 1966 was a continuation of work under the twoand three-year programmes commenced in the two previous years.

Of the new projects, special mention should be made of that on the direct reduction of iron ore, a subject which had been abandoned in 1957 upon the turnround in scrap and coke supplies.

Fresh efforts are now being made all over the world to obtain either total or partial reduction at competitive cost. The High Authority has agreed to subsidize a project offering substantial improvements over earlier counterparts.

High Authority-aided research projects fall into four main categories.

## Extraction and Beneficiation of Community Ores

312. 1966 saw the continuance and intensification of the High Authority's efforts to enable the Community mines to carry out an orderly and measured retreat before the advance of high-grade imported ores.

Firstly, assistance was granted for a new push to mechanize production, which involved the testing of even more powerful mining machinery, new hydraulic or mechanical ore conveyors, and new methods of drilling and blasting-all designed to reduce production costs.

Secondly, intensive research continued on ore preparation: the best method here appears to be to effect an initial size grading followed by specific treatment of each size separately.

Results obtained in the pilot plant<sup>1</sup>) up to the end of the year fully came up to expectations. There is, however, still the problem of applying them in regular production, with all the risks this is always bound to involve even after extensive pilot-scale trials.

313. In this connection the High Authority has laid before the Council of Ministers requests for assistance for various research projects relating to iron ore mining, submitted by the Chambre Syndicale des Mines de Fer de France and by French and German mining companies.

Grants totalling more than 1,100,000 dollar units of account have been approved for research on

(a) continuous mining techniques, using more powerful machines such as are already in use in the coalmining industry but require adaptation to the harder and more variable characteristics of the Community ore deposits;

<sup>1)</sup> See Fourteenth General Report, No. 275.

- (b) hydraulic¹) and mechanical systems for transporting the ore extracted, in the latter case by a new conveyor technique designed for undulating and curving routes;
- (c) methods of blasting for bringing down very large amounts.
- 314. Other projects concerning ore beneficiation are under consideration. Concentrates are generally too fine to be sintered by heat treatment on traditional strands and have to be made into pellets and roasted to give them the resistance required of good-quality blast-furnace feed. The High Authority is at present examining projects for industrial-scale research on the pelletization of Community ore concentrates, either alone or blended with imported ores.

## Iron and Steel Making

315. Throughout the world, the steel industry is making ever-increasing use of rich ores or concentrated low-grade ores.

The process of direct reduction, much more than the blast furnace, requires ores which do not contain an excessive amount of gangue, since this generally passes in its entirety into the solid sponge iron. Not surprisingly, with the recent progress in beneficiation techniques, it has become a much more promising proposition than formerly.

The trend in the the Community's primary-energy supply position will bring increased commercial availabilities of coke-oven gas in the short term and of natural gas in the medium term. It is more economic to utilize the reducing capacity of these gases after cracking than their calorific value only.

The proposed direct-reduction techniques have been improved in a number of respects and are now thought to have good prospects of industrial success.

Outside the Community, in certain developing countries with considerable reserves of natural gas not easily exported, direct reduction may well form the basis for a medium-sized steel industry which with be able to do without the large, costly complexes found in the industrialized countries.

For these various reasons, the High Authority has been taking a fresh interest in direct reduction and has granted substantial financial assistance for work on process for producing solid sponge iron, which has now sufficiently advanced in the pilot stage to merit the building of a first prototype plant.

<sup>1)</sup> See Fourteenth General Report, No. 274.

The process is in fact based on earlier methods, but has been improved so far as to be now potentially a paying proposition given certain conditions as to supply. It might be used to yield either a pre-reduced product as charge for blast-furnaces whose output is to be increased, or more highly reduced products to be used as cooling additives in oxygen steelmaking furnaces.

Another process now under consideration produces molten steel from iron ore in a single operation using natural gas as the fuel and solid carbon as the reducing agent.

In the field of pig-iron production, High Authority assistance for research at the Liège experimental blast furnace was renewed in 1966, for a further three years up to the end of 1969.1) The work at this pilot plant, in which the Swedish steel industry is to collaborate with the six Community countries, is primarily concerned to add more and more to knowledge of the phenomena occurring within the blast-furnace, particularly in the high-temperature zones of the boshes and hearth. In addition to this pure research, other current projects are concentrated on the never-ending problem of how to produce really competitive pig-iron: particular mention should be made of continuous tapping-rendered necessary by the steadily increasing output of modern blast-furnaces charged with highgrade ores-and of operation with better and better quality burdens (pellets of high-grade ores or ore blends, specially basic sinters serving as fluxes for exceptionally acid pellets, etc.).

Continuous production, just referred to in connection with blast-furnace tapping, is one of the objectives which the High Authority agreed to assist in 1965.2)

These grants went to research on the oxygen and electric steelmaking processes, which are highly discontinuous, coming as they do between the continuous tapping of molten iron from the blast-furnace—which should soon be possible-and the continuous casting of steel into slabs and billets, a practice which is becoming steadily more widespread.

In 1966, work on one of the High Authority-aided projects developed a technique of continuously refining molten pig-iron to produce the desired quality. Other technological problems, such as the behaviour of refractories, remain to be solved.

<sup>1)</sup> See Fourteenth General Report, No. 280. 2) Ibid., No. 282.

In the field of steelmaking, a fresh effort—possibly the last— is being made to discover an economic method of eliminating the brown smoke from Bessemer converters bottom-blown with an oxygen-enriched blast.

A first attempt1) to trap the fumes while utilizing the heat of the converter flame was not unsuccessful from a technical point of view, but proved impracticable owing to the costs involved in constructing the large additional plant required.

This setback was one of the reasons why, in the Ruhr, Bessemer converters are now being largely superseded by L/D furnaces, in which the problems of dust extraction are much more easily solved.

Current work in this field is aimed at substantially restricting, if not entirely preventing, vaporization of the iron when the jet of oxygen-enriched air strikes the liquid metal. It is the High Authority's intention to assist this project in order to ensure that the work already done may be pursued to its conclusion.

# Automation in the Iron and Steel Industry

319. The main aim of the steady move towards automation in the iron and steel industry is to turn out products with increasingly regular properties and qualities. Automation goes hand in hand with continuous processes, for which it is particularly suitable: continuity and automation have the same objective and can be combined with advantage.

Of the research assisted by the High Authority, that on the automated sinter strand2) has been completed, resulting in uniform, optimum operation to produce a predetermined quality of sinter. Moreover, the correlations established between various factors made it possible to cut down the number of variables involved in operation, thus substantially reducing the investment required for fairly extensive automation.

The pure research on the automation of reversing mills has now advanced sufficiently for work to begin on the automatic computerized control of a universal slabbing mill with a view to ensuring uniformly optimum rolling passes and sequences to yield the desired end product.

In the four-high plate mill, rolling is controlled automatically on the basis of displayed instructions which in a later stage are determined in advance by a computer.

<sup>1)</sup> See Tenth General Report, No. 360.
2) See Fourteenth General Report, No. 277.

Work has commenced on another research project aimed at optimum operation of a plate mill comprising two computer-controlled four-high reducing and finishing stands.

In addition to the sinter strand and reversing mill projects, the High Authority in 1966 turned its attention to blast-furnace operation. A wideranging programme of joint research on blast-furnace automation has now been drawn up and will follow up the work carried out as individual projects in the various countries of the Community, which has hitherto produced nothing more than static mathematical models of blast-furnace operation. It is now hoped to achieve dynamic models by studying the effect of various deliberate modifications in the burden, hot blast and other factors, which should lead to accurate definition of the quantitative influence of a number of parameters, at present too little understood. This programme will be carried out at a number of blast-furnaces charged with different burdens and operated with different parameters, in order to work ont general laws applying to the greatest possible number of blast-furnaces.

The joint research programme on iron and steel measurements<sup>1</sup>) undertaken to prepare for the future development of automation, has already reached the stage of work on an industrial scale, and projects relating to these full-scale extrapolations have been submitted. These concern, *inter alia*, the detection of defects in semi-finished products by means of gamma rays,<sup>2</sup>) in order to be able to apply to high-grade steels the excellent results obtained for the ordinary bulk steels with automatic and accurate cropping of the waste end of blooms. The results will be published in due course.

## Research on Steel Utilization<sup>3</sup>)

320. Each of the yearly Steel Utilization Congresses has laid more stress than the last on the need to intensify the Community research begun in 19644) on ways and means of extending the use of steel. The High Authority duly continued and amplified its activities in this field during the year under review.

The joint research programme on the utilization properties of steel launched with a High Authority grant in 1965 is being pursued as part of a

<sup>1)</sup> See Fourteenth General Report, No. 279.

Joint Euratom/E.C.S.C. project.
 See Fourteenth General Report, No. 284.
 See Thirteenth General Report, No. 331, Iast paragraph...

series planned in detail in consultation with the expert representatives of the producers and consumers. This co-operation will enable the scope of the work to be widened.

This programme has already stimulated complementary research projects, concerned with such matters as corrosion, the deep-drawing properties of sheet, the design of welded structures and the utilization of high-yield-strength steels.

The High Authority has submitted to the Council of Ministers a request for a second grant towards a joint research programme on metal physics. This too is fundamental research, the results of which will be applied in producing steels with good mechanical properties at relatively low cost, but in this case the projected research is a study of the influence of combined deformation and heat treatment on these characteristics. While the field to be explored is vast, the joint efforts of specialized researchers in the six countries should help the Community to reach a level not too far below that of other countries. If third countries with something to contribute were to join their endeavours to those of the Community—which now seems to be quite a possibility—it would do much to lend strength to this effort in the general interest.

The High Authority is currently considering whether, now that the preliminary programme on the subject has been completed, it should agree to assist more comprehensive research on the machinability of engineering steels.

Also under consideration is a joint research programme on cold section rolling with a view to the accurate determination of rules for calculating and utilizing such sections in steel structures, thus increasing sales outlets, after cold forming, for the steel sheet which the Community industry produces in such large quantities. The utilization of these sections will result in light steel structures, the great advantage of which is the combination of low weight and strength.

Finally, the High Authority provided a grant for research on the fire-resistance of steel-framed buildings, in which full-size structural elements or assemblies are exposed to fires of varying intensities and their behaviour closely observed. It is coming to be recognized that the existing fire safety legislation in the Community countries is too hard on steel, insisting on such stringent precautions as to constitute a serious handicap to the development of steel construction.

The Community programme follows on and complements earlier British research in this field. It will be carried out in co-ordination with British research, and the High Authority hopes that other countries will also join in.

#### Euronorms

321. The Co-ordinating Committee on the Nomenclature of Iron and Steel Products continued busily with the establishment of Euronorms during 1966. Forty-seven days were taken up with meetings of the Committee, the working parties and the special sub-committees.

Work on the chemical composition of iron and steel products progressed satisfactorily in 1966, and one Euronorm has already been published.

The revision of Euronorm 14 on the modified Erichsen cupping test has now been completed. The working party concerned with mechanical testing is awaiting the results of work carried out by the International Standards Organization before starting on the revision of certain standards, including in particular those dealing with tensile tests at ambient temperature.

Work on the standardization of rolled products showed that Euronorm 27, which concerns the abbreviated nomenclature of steels, required certain additions: these were made in 1966. With a view to the effective rationalization of widely-used merchant bars, which would benefit consumers and producers alike, the High Authority issued in 20,000 copies a brochure containing the rationalized series for merchant bars already in existence and the Euronorms for parallel-flanged beams. The first two Euronorms for merchant bars for special applications have been completed; these relate to screw and rivet stock and half rounds.

Work on quality standards has progressed satisfactorily. The Euronorm relating to deep-drawing and cold-bending sheet will be published at the beginning of 1967, and that concerning plate for boilers and pressure vessels is nearing completion. The standards relating to heat-treatment steels, viz. steels for tempering and annealing, case-hardening steels, nitriding steels, and free-cutting steels, are making rapid progress. Work on the standardization of stainless steels has been commenced in parallel with efforts in the same direction by I.S.O.

Difficulties have, however, been encountered in establishing certain quality Euronorms for concrete-reinforcing steels and general-purpose structural steels. In the latter case, the complexity of the problem of characterizing the different grades adequately, particularly as regards liability to embrittlement as a result of cold working and ageing, involved long and difficult discussions. Efforts to establish a sufficiently selective mechanical test had been begun while the standard was being drafted: the latter task had apparently been completed and the Euronorm was at the final stage of printing when certain research results led the Co-ordinating Committee to propose that the basic principles be re-examined. There will thus be some further delay before this very important standard is finally published.

## Bibliography for 1967

## COAL

•	(d = German f = French; i = Italian; n = Dutch)
13014	Technical Research: Coal. Position at June 30, 1965. Technical Research: Coal. Position at June 30, 1966.
11848	Modernization and Rationalization in the Saar and Lorraine Coalfields (collection of papers read at the 15th session of the International Commission on Mining Techniques, held in May 1965), 1966, 339 pages (d-f)
11466	The Charging of Coke-Ovens with Preheated Coal  Research Bulletin No. 1 (Valorization)  1966 (d-f)
11734	The Combustion of Coal  Research Bulletin No. 2 (Utilization) 1966 (d-f-i-n)
11735	The Firing and Combustion of High-Volatile Coals on Grates Research Bulletin No. 3 (Utilization) 1966 (d-f-i-n)
12951	Mechanization of Stone-Drifting SVM 40 Roadway Tunneller Research Bulletin No. 4 (Mining Techniques) 1966 (d-f)
12952	Baumgarte Package Water-Tube Boiler with Shaker Grate Research Bulletin No. 5 (Utilization) 1967 (d-f)
3933	Babcock P.FFired Package Water-Tube Boiler Research Bulletin No. 6 (Utilization) 1967 (d-f)
3934	Sudden Outbursts of Firedamp, I (Cerchar)  Research Bulletin No. 7 (Mining Techniques)  1967 (d-f)
3935	Sudden Outbursts of Firedamp, II (Inichar)  Research Bulletin No. 8 (Mining Techniques)  1967 (d-f)

- 3931 Testing of Dams and Stoppings in Abandoned Mines Research Bulletin No. 9 (Mining Techniques) 1967 (d-f)
- 3936 Telemonitoring and Remote Control of a Shearing Face Steinkohlenbergwerk Friedrich Heinrich AG, Kamp-Lintfort Research Bulletin No. 10 (Mining Techniques) 1967 (d-f)

#### Section 3: The General Objectives

#### THE GENERAL OBJECTIVES FOR STEEL'1)

322. As announced in last year's Report,<sup>2</sup>) a new draft set of General Objectives for Steel to 1970 was submitted by the High Authority during the year under review to the Consultative Committee and to the appropriate Committee of the European Parliament. This draft was discussed by the Consultative Committee's working party in July and in plenary session in September. On the basis of these discussions the High Authority made a number of changes, and the Objectives were finally published at the end of 1966.<sup>3</sup>) At the same time discussions were started with the Parliamentary Committee, which prepared a report for submission to the House at the session of January-February 1967.

Since the Objectives have already been published, only an outline need be given here.

323. The general economic background to the Community steel industry's operations in the next few years will be one of sustained expansion, causing the demand for iron and steel products to grow both within the Community and in the world at large; on the other hand, world capacity will continue substantially in excess of world requirements for quite some time to come. The industry will thus be producing for an expanding Community market, but will be exposed to fierce competition from third-country producers, especially in the world market.

The primary aim for the industry is therefore clear: it must be able to produce more steel—perhaps 95m. tons in 1970 and 110m. in 1975, as compared with 85m. in 1965—with plant that is sufficiently modern to stand up to outside competition. Present estimates of the capacity that will be available in a few years' time indicate that plant modernization must take pride of place, involving the replacement of many installations, changes in the pattern of steelmaking processes, and much reorganization, including in some instances shutdowns. This will necessitate what amounts to a remodelling of the industry, on which indeed a start has already been made.

<sup>1)</sup> For the General Objectives for Coal see Nos. 88 ff. above.

<sup>2)</sup> See Fourteenth General Report, No. 286.

<sup>3)</sup> They appear, with a number of technical annexes, as No. 3 of the General Objectives for Steel Series. They were first published in Official Gazette No. 244/66 of December 30, 1966.

#### Estimated Sales Potential

324. According to the experts, the increase in G.N.P. between 1965 and 1970 is likely to be only slightly less than over the five previous years. For the Community as a whole the rate should be 4.4%, with slightly higher figures for Italy and France and slightly lower for the other countries.

Since there is little likelihood of much increase in the working population, investment will have to continue at a high level if these growth rates are to be achieved. Moreover, if the Community's external trade is to be kept in balance, indirect exports of steel, particularly in the form of capital goods, will have to increase appreciably. With the support of these two sizeable outlets and despite the stagnation in certain sectors such as shipbuilding, activity in the steel-consuming industries should undergo considerable expansion: this will, however, be only partly reflected in the demand for steel products, owing to the reductions in specific consumption of steel, which are in some sectors very marked, not so much because steel has been replaced by other materials as because of changes in the design of the goods manufactured and the improved performance or the steels being turned out.

Total internal demand for iron and steel products may be expected to rise from 59m. tons in 1960 and 72m. in 1965 to 85m. in 1970 and 100m. in 1975. The latter figures are of course only rough approximations, with a number of factors of uncertainty involved.

325. The world overcapacity which has existed for some years, as a result of extensions by the traditional producers and the emergence of new ones, will in all probability last for several years longer. With competition consequently exceedingly stiff, Community exports and imports will continue to be affected by short-term factors, and so will be liable to fluctuate considerably. However, with all due reservations, we may tentatively put net exports in 1970 at round about 10m. ingot tons.

## Competitive Capacity

326. For some years the iron and steel industry has been in the throes of a technological revolution, which has not as yet been fully exploited in the Community.

The main features of this development are the appearance of new techniques, the best-known of which are the oxygen-steelmaking and continuous-casting processes, or major changes in existing ones, as in the preparation of blast-

furnace burdens and the injection of liquid or gaseous fuels into the blast-furnace. Generally speaking, this progress has particularly favoured large-scale plant, especially in the blast-furnace and rolling-mill sectors. Now the Community industry is still operating quite a lot of small-scale installations, even for producing ordinary steels, and except in very special cases these will have increasing difficulty in remaining competitive vis-à-vis their counterparts. For the production of special steels or certain specialized steel products, size of plant is less important.

While completely new steelworks have little trouble in adopting the most modern techniques, this is not the case for existing works, which are often not very large, and in fact quite simply physically too small to make efficient use of the latest machinery. In such cases modernization cannot be carried out gradually but involves the reorganization of the whole works: if this is not feasible, there is probably nothing for it but to close, or perhaps to discontinue production at one stage or another of the cycle, say pig-iron or crude steel, and bring in the metal for the rolling-mills from other works, either in the same district or elsewhere.

With so many different cases arising, no hard-and-fast rule can be laid down for the modernizing of the Community's production apparatus. But if this is to be achieved—as it must—promptly and effectively, the iron and steel industry with definitely need to reorganize into a new pattern, with a few large concerns handling at any rate the quantity production (except where special local considerations suggest otherwise): these will be able to build or extend the necessary large-capacity plants, while the smaller ones still left in different areas can be more efficiently utilized at some or all of the production stages.

The usual procedure is by mergers between existing enterprises but in special cases temporary hire-working agreements may be concluded between works to make for fuller utilization of existing capacity.

Financial problems will be lessened if more is done than hitherto to exploit the opportunities—which do exist, as can be seen if we compare the showings of different enterprises—for improving productivity at no great cost. At the same time care must be taken to ensure that capital is only invested in plant which can be counted on to remain remunerative and competitive.

327. Equally important if the industry is to be properly competitive is that it should be able to obtain its raw materials as cheaply as possible. In face of the growing disparity between the production costs of indigenous iron ore and coal and the landed prices of their imported counterparts, it is imperative that the Community enterprises should get their raw materials and energy on more or less the same terms as do their competitors outside, though it is of course also necessary to make some provision for reasonable security of supply.

Taking into account the probable scrap resources of the Community and changes in the breakdown as among the different steelmaking processes, a steel production of 95m. tons in 1970 would require with a pig-iron production something like 69m. tons. Iron-ore requirements, reckoned in Fe content, would thus rise from 53m. tons in 1965 to 58m. in 1970 and 68m. in 1975. The working of extensive deposits of high-grade ore in other parts of the world, and the rapid technical progress on the shipping side have seriously eroded the competitive capacity of the indigenous ores, sales of which must be expected to continue gradually declining in the years ahead. Accordingly, the flow of imported ores is likely to increase from 31m. tons Fe content in 1965 to about 38m. in 1970, in which case the proportion of the requirements of ferrous matter met from indigenous ore and scrap would come to around 65%.

The reduction in the blast-furnace coke rate will continue, with the result that total consumption of coke, including that used for sintering, will remain approximately at the present level. With the abundant supplies available, both indigenous and imported, the steel industry can pick and choose, and will of course choose to buy whatever coke is cheapest, having due regard to the disparities in quality of the different coking coals and the problems arising from the present technical state of the Community coking-plants.

- 328. It is also vital that early steps should be taken to rationalize distribution. This involves a reorganization of the sales machinery, and close consultation between the steel industry and consumers to decide on action to reduce the present unnecessarily wide range of products to more sensible and manageable proportions. These adjustments should result in some quite appreciable savings in both production and distribution costs.
- 329. However, given the rapid technical progress now going on in the steel-consuming and potentially steel-consuming industries it will be necessary to go a great deal further than this. While the efforts put into scientific and technical research, which is modern industry's most valuable asset, must be maintained in the production sphere, they must from now on be just as extensive in the sphere of steel utilization. The iron and steel industry cannot simply go on offering consumers the traditional range of products: it must work closely with them in actively devising new products and new applications for steel.

## Manpower Problems

330. The radical technical changes which have been occurring in the iron and steel industry over the past few years, and will certainly continue for several more, are naturally not without effect on the occupational skills and relative

sizes of the different personnel categories. At the same time, the fight to remain competitive and the inescapable structural reorganization of the industry will entail a reduction in its total personnel strength the incidence of which will vary widely from area to area but in some may mean very marked decrease indeed in the number of jobs available.

It is therefore imperative that there should be a proper policy enabling these problems to be tackled in time, more particularly by appropriate occupational training, prompt reabsorption of workes rendered redundant, and systematic redevelopment of the areas concerned.

#### Conclusion

331. The Community iron and steel industry has made considerable efforts over the last fifteen years to adapt itself to the new circumstances of a common market. All the indications are, however, that the next few years will see rapid and far-reaching changes in both steel production and steel consumption all over the world, due partly to technological progress and partly to the major alteration in the position regarding raw-material supplies.

It is by this time quite out of date for the steel enterprises to imagine that they can cope on a national basis with all the problems confronting them. What is now needed more and more is a Community approach, placed squarely in the world context.

A Community steel policy must of course also take into account the needs of the economy as a whole: that is to say, it must be properly in line with industrial policy overall. Only so can the steel industry continue to play its part in ensuring smooth and sustained economic growth.

332. Change is a "must" for a pretty sizeable portion of the Community steel industry. Agreed, for financial and social reasons the process will need to be phased—but phased over the shortest possible period.

The difficulties the Community steel industry has been experiencing in the last few years can be overcome only by active exertions on the part of all those in their different capacities bear a share of responsibility in its development.

Both managements and men will certainly be very much alive to the scale of the coming further changes in the production apparatus and in works-level and company-level organization. Only by vigorous and well-thought-out measures based on a long-term view of what needs to be done will it be possible

to carry through promptly and effectively the necessary series of productivity improvements, plant conversions and replacements, works reorganizations, replannings of whole producer areas, and adjustments to the increased use of imported materials.

All the Community industries are having their problems in this time of sweeping technological change. The High Authority, realizing the special difficulties involved by the adjustment of a heavy industry, will continue to deploy all the means at its disposal to help the process go through smoothly.

In particular, it will do its utmost to see that the steel enterprises in all the member countries are able to purchase their raw materials and energy on something approximating to world-market terms. It is prepared to provide larger sums for technical and standardization research aimed at tailoring production more closely to requirements. As in the past, it will make full use of the discretionary powers afforded it by the Treaty in ruling on projected industrial concentrations designed to render the Community steel industry more efficient and more competitive vis-à-vis the rest of the world. And on the social and regional side it will aid redevelopment and readaptation by every means the Treaty permits.



#### CHAPTER FIVE

#### SOCIAL POLICY

#### INTRODUCTION

333. Both socially and economically, 1966 was witnessed by a further accentuation of the structural changes in the Community industries already observed in previous years.

These are particularly noticeable in the two extractive industries, where the rundown of production capacity is continuing, but they are also gaining momentum in the steel sector, which is going through a phase of readjustment.

The contraction on the mining and readjustment on the steel side both tend to underline the social problems involved in the spread of technical progress in industry and the intensification of international competition in the markets for the basic products.

To safeguard employment and improve living and working conditions in line with economic progress are now more than ever two major objectives of European social policy.

In the near future there will be more and more tailoring of enterprises and labour forces to the new conditions, and more and more joint activity by the public authorities and the employers and workers to determine in advance the rate at which these necessary changes and improvements should take place and how they are to be achieved in the general context of social and economic progress. The Governments' efforts to adapt regional structures can be effectively helped by the various activities permitted to the High Authority under the Treaty.

334. For example, to help in solving employment problems, the High Authority not only, at the Governments' request, granted the unusually, large sum of 16,600,000 dollar units of account towards readaptation operations between February 1966 and January 1967, but also endeavoured to extend and improve the readaptation arrangements in the member countries.

In addition, the High Authority was able to give a sometimes decisive stimulus to the creation of new activities by agreeing to grant redevelopment loans amounting to 54,800,000 units of account—almost double the total of loans approved for this purpose between 1960 and 1965.

There is no doubt that readaptation and redevelopment will be needed on a still greater scale as time goes on, and it therefore remains essential that the High Authority should pursue a very active financial policy.

Moreover, the High Authority's duties in the social field are not confined to helping to ensure continuity of employment, but extend to a wide variety of tasks aimed at improving conditions for the working population.

In view of the problems which have to be solved, the responsibilities of the High Authority are increasing, whether with regard to studies serving to spotlight the various social effects of technical progress or to the carrying-out of specific measures to improve the workers' well-being.

In 1966 the High Authority gave particular attention to problems connected with adult and managerial training, the effects of mechanization and automation, a rational housing policy for the various regions, the reception and training of migrant workers, and the definition of principles for accident prevention in the iron and steel industry. It launched a new programme of medical research concerned with the treatment and rehabilitation of burns cases, and stepped up its documentation work on developments regarding terms of employment and industrial relations in the six countries.

Fully realizing the scale of the trend towards concentration in the basic industries for which it is responsible, the High Authority continued to pay close attention to the social repercussions of mergers of enterprises referred to it for approval.<sup>1</sup>)

335. During the year under review, the High Authority submitted first to the Consultative Committee and then to the Council of Ministers its Memorandum on E.C.S.C. coal policy up to 1970. The Memorandum gave due attention to

<sup>1)</sup> See No. 214 above.

social questions, and made a number of suggestions, such as the establishment of mining as a regular career and the institution of an E.C.S.C. bonus and special loyal-service bonuses. In drawing the attention of the Consultative Committee and the Council to the importance of measures of this type, the High Authority stressed that they would be calculated to secure for the industry an adequate supply of young, stable skilled labour, which is absolutely vital to its whole future.

In the implementation of its Decision No. 3/65 concerning the Community system of State subsidies to the coalmining industry, the High Authority worked hard to see that the arrangements permitted the miners' social-security systems<sup>1</sup>) to continue to function satisfactorily.

336. In the High Authority's view, the experience gained in the social field through the activities of E.C.S.C. is of great importance for the future structure of Europe, and equally invaluable to the Governments and to the two sides of industry. The High Authority is therefore seeking to draw general attention to the permanent lessons to be learned from these fifteen years.

At the request of the trade unions,<sup>2</sup>) it organized two teach-ins in 1966, the first at Menton in February and the second at Turin in October, which were attended by top officials of the Catholic and free miners' and steelworkers' unions and by representatives of other workers' associations.

337. In the future, too, every effort will have to be made, not only to safeguard both the health and the employment of the workers against certain adverse effects of innovations and reorganizations but also to enable them to share in the general rise in the standard of living. This policy will continue to be on consultation and discussion with all concerned.

In the face of developments which have already occurred and those still to come, the High Authority would reaffirm its determination to overcome these difficulties by making the most imaginative and dynamic use necessary of the possibilities afforded by the E.C.S.C. Treaty.

See Nos. 140 ff. above.
 The brochure produced on this occasion, Thirteen Years of Social Activity by the High Authority of E.C.S.C (Doc. No 8260/65)was widely distributed during the first half of 1966.

#### Part One

### **EMPLOYMENT SITUATION**

# Section 1: Trends in Employment in the E.C.S.C. Industries1)

338. At September 30, 1966, the total personnel strength of the E.C.S.C. industries (workers, clerical, technical and managerial staff and apprentices) was 1,229,600, as against 1,318,500 the previous year.

The reduction in manpower in the three industries was thus even faster than in the preceding twelve months, —88,900 as compared with —42,000. This trend is in line with the forecasts made by the High Authority for the period 1965-70, taking into account changes in objectives and conditions of production.

- (a) The estimates for the collieries indicate that the reconstruction of the coalmining industry which has been in progress since 1957 will take several more years yet, and will result in a considerable reduction in the number of jobs available between now and 1970.
- (b) Considerable changes in the manpower situation are also expected in the iron and steel industry, where the more recent need to adapt the structures of numerous enterprises will result in corresponding changes both in the numbers employed and in their distribution between skilled and unskilled.
- 339. These drops in manpower do not imply a proportional increase in the number of discharges: it has been observed that enterprises are making every effort to soften the blow
- (a) by suspending or reducing recruitment;
- (b) by encouraging voluntary departures;
- (c) by advancing the retiring age for the older workers;
- (d) by organizing transfers from one plant or pit to another.

Such measures have been made possible by better forecasting and co-ordination, through more round-table conferences, industry plans and contractual agreements at different levels. The development of such procedures, which

<sup>1)</sup> See Statistical Annex, Tables 41-49.

make for more systematic planning of discharges and better guarantees as to re-employment and income for the workers affected, should do something in the future to lessen employment difficulties, which in certain regions are still on a sufficient scale to cause anxiety.

#### MANPOWER DEVELOPMENTS

## Coalmining Industry

#### General trend1)

The number employed in E.C.S.C. collieries fell from 699,700 at September 30, 1965, to 637,400 at September 30, 1966—a substantially greater drop than in the previous year (-62,300 as compared with -35,100, or -9% as against -5%). All coalfieds were affected, the Ruhr (-32,200) and Belgium (-10,900) the most markedly.<sup>1</sup>)

1966 also saw a substantial increase in short-time working, due to the unfavourable economic trend during the first six months of the year.

### Changes in the number of underground workers

241. The number of workers in the coalmining industry at September 30, 1966, was 358,900, 42,800 less than at September 30, 1965.

The quarterly variations were approximately as follows:

4th quarter 1965, —600 1st quarter 1966, —11,500 2nd quarter 1966, —14,600 3rd quarter 1966, —16,100

Table 63 shows that, as in 1965, the shortage of underground workers was due more to reduced recruitment than to increased wastage, the wastage being in fact smaller than the previous year: owing more particularly to the unpromising state of the labour market in most of the mining areas, the number of workers leaving the pits of their own accord fell from 43,700 to 36,900.

<sup>1)</sup> See Statistical Annex, Table 42.

On the other hand, progress in the reconstruction of the coalmining industry was accompanied by a marked increase in the number of men transferred from one pit to another. These amounted to 20,200 between January and September 1966 and account for almost 55% of the intake of underground workers.

TABLE 63

Changes in intake and wastage of underground workers (Community overall)

	Recruitment from outside the industry	Workers leaving underground employment or leaving the industry <sup>1</sup> )
January-September 1960	20,200	88,100
January-September 1961	27,300	89,400
January-September 1962	29,300	80,000
January-September 1963	39,100	73,000
January-September 1964	42,500	67,100
January-September 1965	26,900	62,100
January-September 1966	17,600	59,800

<sup>1)</sup> Discharges on medical grounds, retirements, deaths, transfers from underground to surface duty, dismissals, voluntary departures, other causes.

#### Manpower requirements and resources

342. As a general rule, transfers of workers from closed-down pits have been sufficient to cover the collieries' declared requirements; only in the case of certain skilled tradesmen are some coalfields having difficulty finding the labour they need.

The Ruhr and Aachen coalfields estimated their requirements at the beginning of October 1966 at about 6,000 miners and 2,300 skilled tradesmen. At the same time, the records of the employment offices showed that 5,700 workers from the coalmining industry were out of work.

In Belgium the employment offices are no longer notifying any vacancies in the mining sector. The number of unemployed from the Belgian coalmining industry increased by more than 20% in one year, and had reached 3,400 by October 1966; two-thirds of this number however, are considered as not altogether, or not really at all, suited to mining. About 1,600 mineworkers still in employment are included in the figures for those seeking employment, which indicates a desire on their part to change their jobs.

The number of unfilled vacancies in the French coalmining industry is less than 150 while the number of placements varies between 300 and 400 per month.

### Short-time working

- 343. Short-time working due to poor sales, which reappeared in 1965, affected all the Belgian and German coalfields and some mines in the French Centre/Midi. In all, there were 2,381,362 idle shifts in the twelve months to October 1966 (see Table 64).
- 344. In the Federal Republic of Germany short-time working started to increase substantially in November 1965, mainly in the Ruhr. The 1,386,135 shifts not worked in the Ruhr represent 65% of the Community total. More than 150,000 workers from this coalfield were laid off for periods ranging from one to 20 days between October 1, 1965, and September 30, 1966.1)

In the Aachen coalfield, five pits out of six stopped working for four days. The nine pits in the Saar also closed for three days in March and one day in April 1966.

- 345. In the two last-mentioned areas, compensation paid out by the Federal Government under the Colliery Stocks Act was used to make up the wages of the workers affected. In the Ruhr, 47% of the idle shifts were covered by compensation; wage losses in respect of non-compensated short time are estimated at DM 28-29m.
- 346. In Belgium, short-time working became very extensive indeed during the first half of 1966. The number of shifts not worked between October 1, 1965, and September 30, 1966, was 774,026, of which 76% were in the Campine, 19% in the Charleroi coalfield and 5% in the Borinage and Centre coalfields. The number of men affected was 8,400 at Charleroi and 23,600 (two-thirds of the total then employed) in the Campine. The idle periods were mostly long, sometimes as much as 40 days during the period under review. Wage losses were partly made up out of the substantial compensation paid by the social-security authorities.
- 347. In France, short-time working reappeared in the Centre/Midi collieries in February 1966. One day was lost at the four pits in the department of Loire, two days at two pits in Auvergne, and 10-14 days at five mines in the Cévennes,

<sup>1)</sup> See Statistical Annex, Table 43.

TABLE 64

Short-time working at pits owing to poor sales

		October 1, 1964-September 30, 1965	eptember 30, 196	15		October 1, 1965-September 30, 1966	eptember 30, 190	99
	Pits	Shifts	Produc	Production lost	Pits	Shifts	Produc	Production lost
	anecieu	not worked-)	tons	(;%	affected	not worked¹)	tons	(*%
Ruhr	1	5,205	6,000	00.0	89	1,386,135	3,567,000	3.22
Aachen Lower Saxony Saar	67	8,250	16,000	0.70	10 61 60 10 61 60	51,266 21,103 92,659	51,000 37,000 199,000	0.65 1.85 1.46
Germany (Fed. Rep.)	8	13,455	22,000	0.01	84	1,551,163	3,854,000	2.88
Southern Belgium Campine	21 5	132,513 102,929	157,900 193,100	1.52 1.97	26	185,187 588,839	255,300 1,007,400	2·77 11·32
Belgium	26	235,442	351,000	1.74	32	774,026	1,262,700	86-98
Centre/Midi	5	23,842	34,000	0.35	12	56,173	81,000	0.83
France	<b>4</b>	23,842	34,000	0.07	12	56,173	81,000	0.16
Community	34	272,739	407,000	0.18	128	2,381,362	5,197.700	2.43

) Underground and surface. In % of the coalfield's total production during the twelve months.

affecting approximately 15,000 men between October 1, 1965 and September 30, 1966. The distribution of the 56,000 shifts not worked was therefore 88% in the Cévennes, 9% in the Loire and 3% in Auvergne.¹) There was no short time in the Nord/Pas-de-Calais and Lorraine coalfields.

## Iron and Steel Industry

#### General trend2)

348. The number employed in the Community iron and steel industry was 565,000 at September 30, 1966, as against 587,300 at September 30, 1965.

The drop in numbers employed, which had begun the year before (-3,700 or -0.6%) thus became more substantial (-22,300 or -4%), being particularly marked in the Federal Republic of Germany (-10,200), France (-8,900) and Belgium (-3,000). In other countries the level of employment remained practically stationary.

### Changes in numbers employed

349. As in the collieries, the contraction in the labour force was mainly the result of reduced recruitment from outside the industry. Enterprises made a point of employing those rendered redundant by rationalization measures, so

TABLE 65

Changes in numbers employed in the iron and steel industry (workers, exclusive of apprentices)

	Intake <sup>1</sup> )	Wastage <sup>2</sup> )
January-September 1960	64,100	46,200
January-September 1961	55,800	50,200
January-September 1962	55,000	57,300
January-September 1963	49,800	57,300
January-September 1964	64,700	56,200
January-September 1965	50,200	57,100
January-September 1966	39,300	55,800

<sup>1)</sup> Workers recruited from outside the industry (exclusive of apprentices).
2) Workers leaving the industry, of their own accord or otherwise.

2) See Statistical Annex, Table 39.

<sup>1)</sup> In France compensation for short-time working is paid by the Mines Unemployment Fund after the third shift lost in one month, or from the fourth shift in two months.

that recruitment of workers from industries other than iron and steel fell by 30% as compared with the previous year. This drop was only partly offset by the appreciable decline (-10%) in the number of men leaving the industry.

Table 66 shows that for the first nine months of 1966, the drop in intake was particularly marked in Italy (-49%) and Belgium (-29%), less marked in France (-13%) and Luxembourg (-15%), and about equal to the Community average in Germany (Fed. Rep.) and the Netherlands (-18%).

 $TABLE\ 66$  Intake from outside the industry, by countries

	January-September 1965	January-September 1966
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	22,700 4,800 12,700 6,500 1,300 2,200	18,700 3,400 11,000 3,300 1,100 -1,800

Wastage figures were down in all countries except France, the Netherlands and Germany (Fed. Rep.); in Germany (Fed. Rep.) there was an appreciable increase in discharges (-1,200) and ahead-of-schedule retirements (+200). The

TABLE 67
Personnel losses, by countries

	Total de	partures¹)	Volutary	departures	Dism	issals
	JanSept.	JanSept.	JanSept.	JanSept.	JanSept.	JanSept.
	1965	1966	1965	1966	1965	1966
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	25,700	26,800	13,300	13,300	3,200	4,400
	7,000	5,400	4,000	2,800	1,300	700
	16,500	16,800	8,100	7,500	1,500	1,600
	4,700	3,800	900	1,100	1,700	1,000
	1,500	1,200	400	400	100	100
	1,700	1,800	900	1,200	300	200

<sup>1)</sup> Exclusive of transfers between plants in the same country.

number of men leaving of their own accord remained stable in Germany, increased slightly in Italy and the Netherlands, and dropped sharply in Belgium and France (see Table 67).

#### Short time

350. In Belgium short-time working, which began in the Liège area in 1965, built up at the beginning of 1966 and reached the Charleroi district by March, dropping sharply again during the third quarter of the year. In all 33,000 man-days were lost in the first nine months of 1966.

A number of large German concerns were forced to cut the working week by 2-4 hours during the autumn of 1966.

Some French plants, most of them in Lorraine, were also compelled to reduce working time for periods of varying length.

## Iron-Ore Mines

### General trend1)

351. Between September 30, 1965, and September 30, 1966, the number employed in Community iron-ore mines went down by 4,300, from 31,500 to  $27,000 \ (-14\%)$ , as compared with 3,200  $\ (-9\%)$  in the corresponding period 1964-5.

Employment figures are falling in all the mining areas and particularly in Lorraine (-2,200), Northern Germany (Fed. Rep.) (-900) and Central Germany (Fed. Rep.) (-700).

## Changes in numbers employed

352. The contraction is mainly the result of rationalizations and cutbacks, which in a number of orefields have led to an increase in the number of discharges. As several mines closed altogether, there were fewer opportunities for transfers to other mines than in the past, and this helped to reduce the intake of workers. Numbers recruited from other industries increased slightly, with the main emphasis on maintenance workers (electricians and mechanics).

<sup>1)</sup> See Statistical Annex, Table 45.

TABLE 68

Changes in numbers employed in the iron-ore industry (workers exclusive of apprentices)

	October September	1, 1964- r 30, 1965	October Septembe	1, 1965- r 30, 1966
	Actual number	%	Actual number	%
Workers on the books at beginning of period	29,400	100	26,500	100
Intake Workers from other iron-ore mines or returning from mili- tary service New entrants  Total	600 800 1,400	$\begin{array}{cccc} + & 2 \cdot 1 \\ + & 2 \cdot 7 \\ \hline + & 4 \cdot 8 \end{array}$	400 900	+ 1·5 + 3·4 + 4·9
Wastage Discharges on medical grounds, retirements, deaths, call-ups Fransfers to other iron-ore mines Johntary departures Other losses Total	900 400 800 2,100	- 3·1 - 1·4 2·7 - 7·1	1,000 200 1,000 2,600	3·8 0·7 3·8 9·8
Vorkers on the books at end of period	26,500	90.5	23,000	86.8

#### DENIZEN WORKERS1)

### General Trend

353. The general shrinkage in the labour force was not without its effects on denizen workers, whose numbers dropped by 15,400 in one year. In the three industries this fall was not, as in previous years, confined to Community denizens (-5,100) but also, and in fact mainly, affected foreign denizens (-10,400).

0

See Statistical Annex, Table 47.
 The term "denizen worker" is used to mean any worker employed at a colliery, steel plant or iron-ore mine in a Community country of which he is not a citizen. Denizen workers fall into two categories, "Community denizens" (nationals of another Community country) and "foreign denizens" (nationals of a non-Community country).

At September 30, 1966, the E.C.S.C. industries were employing 63,000 Community denizens and 97,800 foreign denizens, i.e. 160,800 denizen workers in all, representing 14.5% of the total labour force. Most of this number are still Italian (29%), North African (19%), Turkish (11%), Spanish and Portuguese (10%), and Polish (8%). This diversity of origin continues to present both employers and workers—particularly those who are recent immigrants—with difficult problems of occupational and social adjustment.

## Coalmining Industry

354. Between September 30, 1965, and September 30, 1966, the number of denizen workers employed in Community collieries fell by 11,200 (-10%) to 95,800. The proportion of these workers in the total labour force, which varies considerably from country to country, remained practically unchanged from the previous year.<sup>1</sup>)

The drop in the number of denizen workers is mainly the result of restrictions imposed on the recruitment of this type of labour. In Belgium the measures introduced by the Government in 1965 to halt recruitment continued in force in 1966, and in the Netherlands the collieries stopped recruiting abroad. In Germany (Fed. Rep.), while immigrants still accounted for 10% of new intakes in the year under review, the number of jobs available for them dropped from between 1,600 and 1,700 at the beginning of 1966 to 400 at the end of September. In France, where there are now hardly any jobs available for such workers, the intake decreased by nearly 15%, in one year.

Table 48 in the Statistical Annex shows that, as in the past, the majority (85%), of denizen workers are employed underground.

## Iron and Steel Industry

355. At September 30, 1966, 62,000 denizen workers, 4,000 fewer than at September 30, 1965 (-6%), were employed in the Community's iron and steel industry. This brought the proportion of denizen to total workers down from 14% to 13.8%. Their numbers decreased in France (-2,300), Germany (Fed. Rep.) (-1,200) and Belgium (-700), remained stationary in the Netherlands, and increased slightly in Luxembourg.

<sup>1)</sup> See Fourteenth General Report, No 321.

The reduction is due mainly to reduced recruitment. The number of new denizen workers was 12,700, accounting for 25% of the total intake for the period under review, as compared with 31% the previous year.

During the same period, 16,700 denizen workers, or 25% (as against 27%), left the iron and steel industry to take up employment in other industries.

### Iron-Ore Mines

356. From September 30, 1965, to September 30, 1966, the number of denizen workers fell by 300. At the end of this period there remained only 3,100, of whom 2,000 were Italian and 500 Polish; 2,600 of these are employed in the French iron-ore mines, where they account for 17.5% of the industry's labour force.

### E.C.S.C. Labour Cards

357. From October 1, 1965 to September 30, 1966, three E.C.S.C. labour cards were added to the 1,806 which had been issued between September 1, 1957, and September 30, 1965, to workers with approved qualifications.

During this same period, 41 cardholders applied for and obtained either an extension or renewal of their card.

#### PERSONNEL PATTERNS

- 358. The considerable changes occurring in the Community industries as regards rationalization, concentration and mechanization affect not only total numbers but also the age pyramid and skills pattern of the labour force. As shown by Graphs Nos. 14 and 15 and Table 46 of the Statistical Annex, developments over the past few years confirm the main trend of the preceding period, 1) viz.
- (a) an increase in the proportion of foremen and executive-level employees to workers;
- (b) changes in the qualifications and skills required, in the direction both of a general upgrading of functions and of an increased diversification of trades, often resulting in their splintering almost to vanishing-point.

<sup>1)</sup> See Twelfth General Report, Nos. 375 ff.

## Coalmining Industry

The contraction in colliery personnel is chiefly in the number of workers proper, especially those directly employed on production. Hence the number of underground workers required for a daily production of 1,000 tons has dropped by 40% in nine years and the corresponding proportion of surface workers by 35% (Table 69).

TABLE 69 Personnel on the books1) of the Community collieries per '000 tons produced per day2)

	1957	1960	1964	1965	1966*)
Underground workers	736	607	484	476	450
Underground supervisory and tech- nical personnel	41	39	36	37	37
Total underground (a)	777	646	520	513	487
Surface workers	256	219	173	171	165
Surface supervisory and technical personnel	26	28	27	. 27	29
Total surface (b)	282	247	200	198	194
Total operational personnel (a + b)	1,059	893	720	711	681
Personnel in associated industries (workers and clerical staff) (c) Administrative and sales staff (d)	76 <b>3</b> 9	69 35	67 31	68 31	69 <b>32</b>
Total (a + b + c + d)	1,174	997	818	810	782

Exclusive of apprentices.

Personnel on the books (yearly average) divided by average production.

First nine months of 1966.

Despite an increase in personnel in certain ancillary services (fitters, electricians), the proportion of workers proper in the total personnel strength of the coalmining industry thus dropped from 90% to 86.6%.

The drop was less marked for salaried staff on the sales and administrative side, so that the relative size of this category increased slightly during the same period (3.9% of the total as against 3.4%)

The figures for the higher grades (supervisory staff, technical executives and engineers) remained stationary, so that their proportion of the total employment figure has now risen from 6.6% to 9.5%.

360. This trend is due not only to the growing volume and complexity of planning work, but also to the increased control and supervision necessitated by the use of modern equipment.

Technical progress has affected all categories of personnel, as is shown by the upgrading and expansion of the range of qualifications and, in the case of underground workers, a shift from mining skills towards technical qualifications (engineering, hydraulic or electrical). Moreover, in mechanized workings there is a marked shift in emphasis from purely physical to intellectual endowments (technical knowledge and competence, orderliness and organization, adaptability, etc.).

## Iron and Steel Industry

361. In the iron and steel industry, the absolute, and still more the relative, increase in clerical, technical and managerial staff has been very marked, especially since  $1960 \ (Table \ 70)$ .

Personnel employed in the Community iron and steel industry, exclusive of apprentices

(yearly average)

						('000)
	1955	1957	1960	1964	1965	19661)
Process workers <sup>2</sup> ) General and ancillary	236-3	252.7	264-7	263.7	264.4	264.5
workers <sup>2</sup> )	182.7	202.4	211-0	211.5	210-2	192-3
Total workers	419.0	455·1	475.7	475.2	474-6	456.8
Clerical, technical and managerial staff	63.7	70.4	77.2	94·4	101.5	103-1
Total personnel <sup>3</sup> )	482-7	525.5	552-9	573.6	576-1	559.9

<sup>1)</sup> First nine months of 1966.

There are several reasons for this. First, the rational operation of increasingly complex production units and the need for stricter production, quality and cost control call for expansion of the research programming and control departments, which require large numbers of personnel in these categories.

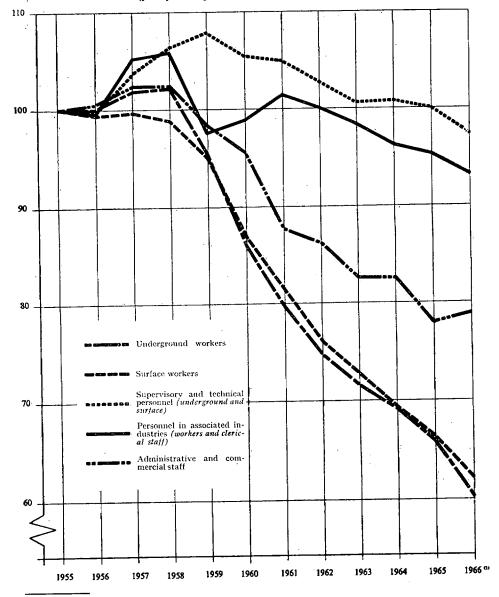
Secondly, a number of categories traditionally rated as "workers" are now in effect assuming the duties of technicians.

Exclusive of apprentices.

## GRAPH No. 14

## Changes in Numbers on Collieries' Books from 1955 to 1966 by Occupational Categories

(yearly averages on the books, 1955 == 100)



<sup>1)</sup> Average for first nine months (provisional figures).

Lastly, the Dutch iron and steel industry now treats all personnel as salaried, without distinction between clerical staff and workers, and has introduced a 14-group job classification. Before this reform "salaried staff" already accounted for more than one-third of the total number employed.

For the Community as a whole, the proportion of clerical, technical and managerial staff in the iron and steel industry's labour force rose from 13·3% in 1957 to 18·4% in 1966.¹) This increase, which varied from country to country, is particularly marked in the case of technical staff and engineers. For instance, between 1957 and 1966 technical staff employed in the French iron and steel industry increased by 64% and engineers by 57%, as against an increase of only 30% for the whole group "clerical, technical and managerial staff" over the same nine years.

However, the example of the most modern plants, and particularly coastal plants, where clerical staff usually represent more than 20% or even 30% of the total number employed, suggests that this latter category will probably also increase in the future.

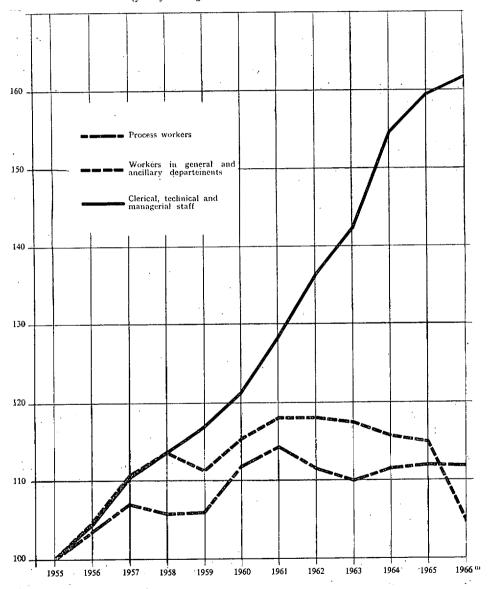
- 362. Another consequence of the technological changes is that the ratio of maintenance staff to production workers continues to rise both in production departments and in general and ancillary services (transport, energy, etc.). Thus, while the number employed in general and ancillary services in the French iron and steel industry dropped by 1.3% between 1960 and 1965, within this group maintenance workers increased by almost 6%. The proportion of maintenance staff in general and ancillary services in the French iron and steel industry has thus increased from 50% to 54% in five years.
- 363. These quantitative changes, which are repeated in many other industries, are accompanied by an appreciable rise in the level of skills required for most maintenance work and in the most important jobs in production departments. Thus between 1957 and 1964 the German iron and steel industry recorded a rise of 18% in the number of skilled workers as against an increase of only 5.5% in the total number of workers; the corresponding French figures are 16% and 3% respectively.

<sup>1)</sup> See Statistical Annex, Table 46.

#### GRAPH No. 15

# Changes in Manpower in the Steel Industry between 1955 and 1966 by Occupational Categories

(yearly averages on the books, 1955 = 100)



<sup>1)</sup> Average for first nine months (provisional figures).

## Section 2: Occupational Training

364. Present trends in personnel structures, as described in the preceding section, are sufficient proof that the general spread of technical progress, which is indispensable if enterprises are to survive and hence if levels of employment are to be maintained, calls for proper planning and intensive development of occupational training.

When an ever-increasing proportion of the labour force is enabled to acquire the progressively higher qualifications required by technological changes, not only are the chances of a better deal for the workers enhanced, the amount of readaptation that will be needed in the future is lessened, since the process helps enterprises to modernize and make themselves competitive, and does away with the absurd situation of a continuing shortage of skilled men amid an overall surplus of personnel.

The High Authority is therefore keeping a watchful eye on matters of occupational training, and endeavouring to follow and publicize changes in requirements and resources in this field while using its knowledge to assist in dealing with present problems.

## POSITION IN THE E.C.S.C. INDUSTRIES

- 365. For the Community as a whole, 1966 confirmed trends noted in previous years:
- (a) the number of apprentices in the mines continued to shrink, while the number in the iron and steel industry remained more or less the same;
- (b) the Governments and enterprises went ahead with the organization of adult training, both initial, for new entrants, and advanced, for personnel already employed.

Qualitatively, the industries are trying to bring their men's skills into line with the new conditions by means of a whole series of changes both in what they teach and in how they teach it.

#### Statistical Data

## Apprentice training1)

366. The number of apprentices in the Community industries, which stood at 38,000 in September 1965, was down to 36,000 by September 1966. Since the numbers in the other categories of personnel were also falling more rapidly than before, the proportion of apprentices to the total number employed remained unchanged at 2.9%.

367. In the coalmining industry the contraction was still more marked in 1966: in September there were 21,900 apprentices as against 23,500 the previous year, a drop of 7%, and they represented 3.3% of the industry's total manpower, as against 3.4%.

As shown in Table 53 of the Statistical Annex, all the Community countries were affected by this decrease, with the exception of Belgium which, as in the previous twelve months, recorded a slight increase (+3%). The decrease was a very substantial one indeed in the Netherlands (-35%); it was also fairly sizeable in France (6%) and Germany (Fed. Rep.) (5%).

368. In the iron and steel industry the number of apprentices dropped between September 1965 and September 1966 from 14,100 to 13,900, and the proportion rose a trifle, from 2.4% to 2.5%. This comparative stagnation covers slightly different trends in the various member countries: the number of apprentices continued to rise slightly in Germany (Fed. Rep.) (+5%), remained unchanged in Luxembourg and Italy, and decreased considerably in France (-12%) and the Netherlands (-20%).

369. By September 1966 the iron-ore mines' apprentice strength was only 200, representing 0.5% of the total labour force, the number having again shrunk heavily in France (-50%), though it remained about the same in Germany (Fed. Rep.).

## Adult training

370. The High Authority is endeavouring to fill in the gaps in the national statistics relating to the occupational training of adults by obtaining information direct from the enterprises and employers' and workers' organizations. To this

<sup>1)</sup> See Statistical Annex, Table 49.

end it has forwarded them a questionnaire drawn up in collaboration with the Statistical Office of the European Communities.¹) However, certain practical difficulties, due to the novelty of the information required, have so far delayed the collection and thus the processing of the replies; discussions are at present going on with the organizations in an effort to overcome these difficulties.

## Progress in Training

## Coalmining industry

371. In all the Community coalfields, personnel problems—forecasting of requirements, recruitment, guidance and training—are now being given priority by colliery managements.

Efforts to adapt training to technical requirements are proceeding along the same lines as in previous years, with a view to

- (a) expanding training all round, with the focus more and more on adult workers;
- (b) reframing the objectives and programmes for the training of skilled workers and foremen to ensure greater diversification in methods and levels of training together with greater emphasis on general, scientific, technical and administrative subjects (management and leadership training, work organization, etc.);
- (c) introducing sandwich courses for all categories of personnel, with the operational departments themselves assuming increasing responsibility for training, and the training departments giving encouragement and advice;
- (d) constantly adapting training methods and facilities, by setting up machine teaching centres, introducing new tuition techniques, and making increased use of audio-visual aids.

It is, however, to be regretted that in many coalfieds the results of these efforts are gravely handicapped by present recruiting conditions and the excessive labour turnover. Generally speaking, the enterprises are finding that the intellectual standard of the juveniles recruited is farther and farther below the level of ability required to absorb the training provided.

<sup>1)</sup> See Fourteenth General Report, No. 334.

## Iron and steel industry

372. The present state of training in the iron and steel industry differs according to the department and production stage involved.

In the crude-steel and blast furnace sectors traditional methods of recruitment and training are still used for most process workers. Even to-day, enterprises often take on grown men with no previous experience in the industry, who are gradually introduced to more and more difficult tasks by experienced workmates. This "on the job" training generally lasts for several years, since permanent employment in a particular capacity is only possible after the man has passed through all the stages.

However, the tendency towards systematic training already observed in previous years is on the increase in the more modern plants for really skilled jobs. While the number of juveniles undergoing State-recognized training in the two countries where it is provided for production trades, France and Germany (Fed. Rep.), remains fairly small, an increasing number of enterprises are providing or arranging for selected adult workers programmes of systematic training for skilled jobs, including a grounding in theory.

- 373. Progress is much more rapid on the production side in the rolling-mill sector. Since technical progress is tending to eliminate most manual jobs at modern mills, the traditional methods of recruitment and training have become impracticable. For highly skilled tasks enterprises are more and more recruiting young workers who have received a thorough training in a metallurgical trade, or are giving systematic process training which requires sound basic knowledge and generally lasts for three years. At the same time, they are endeavouring to raise the quality of all production personnel by organized advanced training, often in the form of at-works courses.
- 374. In the case of maintenance and ancillary personnel, full systematic training has for some time been the rule in the blast-furnace and steelmaking as well as in the rolling sector. Depending upon the country, the necessary skills are acquired either by attending a technical college or by serving a practical apprenticeship in a firm, supplemented by instruction in theory. By and large the role of the enterprises in the training of maintenance workers is tending to become more important, owing to the increasing complexity of the work proper to each type of plant.

Training for certain new and very specialized maintenance jobs (electronics technicians, measuring and control technicians) is at present posing special problems. Enterprises are often obliged to call in outside experts and plant designers to train an initial nucleus of personnel for assignment to the new plant.

375. The traditional system of progressive promotion from the ranks of the workers as a means of recruiting supervisory personnel has now been abandoned at all modern plants. Since enterprises are now trying to make good the shortage of technical staff by increasing the number and responsibilities of foremen, the qualifications required for reaching this grade are steadily becoming higher, and can only be acquired after a period of systematic initial or further training at centres run jointly by a number of enterprises (which are becoming more and more common), or by means of at-works courses.

#### WORK OF THE HIGH AUTHORITY

#### Studies

376. The above remarks are based on surveys carried out by the High Authority in a number of Community enterprises. The study programme launched in 1961 in order to obtain factual information on changes in the labour and present trends in training within the E.C.S.C. industries has now reached a stage where the first conclusions may be used for an exchange of experiences and for definite planning work.

# Surveys on the Impact of Technological Progress

377. Following the surveys of blast-furnaces and steelworks, a third report on rolling-mills has now been published.<sup>1</sup>)

The three reports will be examined by the representatives of training departments and employers' and workers' organizations from the iron and steel industry during a study session to be held in Luxembourg early in 1967. This meeting will provide an opportunity for more detailed study of the impact of technological progress on the maintenance side and on certain of the ancillary services.

378. The findings of the research in the coalmining industry are to be followed in the same way. A meeting of experts and representatives of the industry will study the surveys carried out by the High Authority at mechanized faces and try to extract the main principles to be followed in directing the recruitment and training of underground personnel.

<sup>1)</sup> The impact of technical change on the structure of occupations and on training in the steel-rolling departments.

## Sample survey on occupational retraining

379. The considerable expansion of readaptation (see Nos. 388 ff.) has led the High Authority to devote its attention to the role that occupational training can play in the provision of alternative employment. In order to obtain full and accurate information on this subject, the High Authority carried out a number of sample surveys covering enterprises and other bodies concerned with the retraining of workers from the extractive industries or from the iron and steel industry.

These visits made over the last few months will not, of course, provide a complete inventory of the measures so far taken in the Community, but will enable certain definite lessons to be drawn from a number of important experiments connected with the administrative, technical and teaching organization of retraining programmes

## Co-operation with Great Britain

380. The U.K.-E.C.S.C. Council of Association continues to constitute an important forum for the exchange of information and experience between the High Authority and the British Government on the training of personnel for the extractive and iron and steel industries.

The working parties set up to study these questions<sup>1</sup>) held a number of meetings in 1966, and joint reports were prepared. Subjects discussed included in particular

- (a) recruitment and apprenticeship of young miners;
- (b) training of personnel for mechanized pits;
- (c) readaptation and transfer of miners;
- (d) impact of technological progress on personnel patterns and training in the iron and steel industries of the E.C.S.C. and the United Kingdom.

In addition, a study visit to Great Britain gave members of the Sub-Committee on Occupational Training (Coal)<sup>2</sup>) a practical introduction to the apprenticeship schemes and other training methods in use at the National Coal Board's collieries.

<sup>1)</sup> See Fourteenth General Report, No. 345.

<sup>2)</sup> Ibid., No. 343.

#### Achievements

## Coalmining industry

381. The High Authority's work to promote co-operation between the manufacturers and users of mining equipment in the training of machine operators continues to yield good results. An increasing number of manufacturers are taking into account the proposals put forward regarding the content and presentation of technical literature to be used in training.<sup>1</sup>)

The High Authority is now working on a set of model lessons for training machine operators which will serve as a practical embodiment of its proposals and provide an opportunity for interesting exchanges of experience between the training departments of the various coalfields.

382. The High Authority is also concerned with the type of training needed to meet the new qualification requirements for all categories of personnel which will result from the development of remote control and automation techniques and from changes in the organization, management and administration of enterprises.

With this in view it is at present studying the possibility of preparing a manual on remote control and automation techniques for use in training personnel in the mines. It is also hoped to organize a seminar for managerial staff on the application of the new techniques in the coalmining industry at both production and management level.

## Iron and steel industry

- 383. The first Community training manual<sup>2</sup>) has now been completed in its original language. This manual, which deals with new production techniques in the iron and steel industry, is intended for all skilled workers, and will be published in four volumes as soon as it has been translated and adapted for use by instructors in the various countries.
- 384. As part of its work in connection with managerial training, the High Authority has set up a study committee which will deal more particularly with sales executives in the iron and steel industry. With the assistance of experts

<sup>2</sup>) Ibid., No. 338.

<sup>1)</sup> See Fourteenth General Report, No. 340.

on these matters, it is planned to examine sales methods currently in use so as to determine what improvements are needed in view of the latest teachings of business sciences and of practical experience. On the basis of this work a training programme specially designed for steel sales executives will later be prepared.

385. Following the proposals made during the first Steel Utilization Congress,<sup>1</sup>) the High Authority is now studying the possibility of preparing a number of teaching programmes for the metallurgical industries in the underdeveloped countries. These programmes will aim at giving the largest possible number of workers the essential instruction required for the manufacture and maintenance of simple metal tools commonly used in farming, building and so on.

The High Authority has been in touch with the International Labour Office concerning action to be taken for this purpose.

#### Work in the general interest

386. The steps taken by the High Authority to ascertain how programmed instruction techniques can be used in the E.C.S.C. industries are arousing increasing interest among heads of training departments. For their information, the High Authority has published the proceedings of the conference organized to study this question in November 1965.<sup>2</sup>) In addition, in view of the numerous requests received, it has decided to republish the model courses, more than 5,000 copies of which were circulated to training centres for trial. The first practical applications of these courses are already confirming the effectiveness of the teaching method.

With a view to extending the use of programmed instruction techniques, the High Authority is now collecting and comparing observations and suggestions from all those who have used the model courses. In this way, it hopes to further and co-ordinate the work on new programmes, and to promote closer co-operation at all levels between those in charge of training.

387. As in former years, the High Authority made available to training centres a number of teaching aids, such as films, publications, wall charts and so on. In collaboration with the European Institute for Occupational Training, it also provided a quarterly educational documentation service,<sup>3</sup>) in the form of reference sheets and bibliographical notes, 1,200 copies of which were distributed. This material has been very well received by training specialists.

<sup>1)</sup> See Fourteenth General Report, No. 190.

<sup>&</sup>lt;sup>2</sup>) *Ibid.*, No. 339. <sup>3</sup>) *Ibid.*, No. 341.

## Section 3: Readaptation of Workers

388. The drop in the numbers employed in the E.C.S.C. industries was accompanied by a considerable expansion in the work of readaptation during the period under review. The number of workers helped by the High Authority, the amounts set aside for this purpose, and the geographical area covered were all bigger than in previous years. The provisions of Article 56,2 of the Treaty were applied in 1966 in all member countries of the Community, including, for the first time, Luxembourg.

This increase is the result both of the quickening process of structural change in the three industries and of the co-ordination of the Governments' and enterprises' efforts to safeguard the level of employment. With improved forecasting of the economic future and the development of a sense of collective responsibility towards the workers threatened by the changes, readaptation is becoming less and less a matter for improvisation and more and more a subject for long-term planning, *inter alia* through agreements between enterprises, growing numbers of which are themselves arranging for the re-employment of their personnel, and even providing assistance in addition to that given by E.C.S.C.

The High Authority has meantime been seeking to reinforce the safeguards offered to workers by improving the systems already in force. Arrangements for the first Community readaptation operation in Luxembourg have been laid down in a basic agreement concluded with the Government of the Grand Duchy, while numerous modifications have been made to the earlier agreements with other countries in order to bring them into line with modern needs.

#### READAPTATION ARRANGEMENTS

389. Being of recent origin,¹) the arrangements for Italy and the Netherlands were alone in escaping major alterations in 1966. The changes made in other countries are making for that levelling-up — what the Treaty calls "harmonization in an upward direction" — which is one of the Community's key objectives. The same forms of assistance are now standard practice almost everywhere, and in each case the degree of protection is tending to become much the same in all countries.

<sup>1)</sup> See Fourteenth General Report, Nos. 349 and 350.

390. This general trend is, moreover, by no means incompatible with an increasing diversification of the actual measures to accord with the individual characteristics of the recipients, and particularly their age, state of health and family situation: the difficulties of re-employment warranting special treatment affect the same categories of workers in all countries.

In this connection mention should be made of the effort to adapt the aid arrangements—in this case, the ceilings—to the needs of the executive grades, who are likewise coming to be increasingly effected by the rationalizations. The High Authority attaches special importance to their speedy re-employment since they exert a fairly considerable influence on the psychological aspects of redevelopment, while the laying-off of the most highly qualified personnel represents a waste of human resources which is particularly serious when most industries are suffering from a shortage of such staff.

# Agreement between the High Authority and the Luxembourg Government

- 391. Under the agreement signed on December 5, 1966, workers in the Luxenbourg mines and steel industry will in future enjoy the following guarantees
- (a) In the event of dismissal for economic reasons, unemployed workers will receive, for a maximum period of one year, a tide-over allowance equal to 90% of their former wage for the first four months; 80% for the following four months; 70% for the last four months.
- (b) Workers obtaining alternative employment at a lower rate of pay can claim, for the same period, a wage differential bringing their income up to 90% of their former wage.
- (c) Workers undergoing occupational retraining will be entitled to the same pay as before, until the end of the training period, but not beyond 18 months from the date of discharge.
  - All these allowances are calculated on the basis of a former net monthly wage of not more than LF 12,000 for those out of work or undergoing occupational retaining, and LF 14,000 for those re-employed.
- (d) Workers obtaining alternative employment some distance from their homes may, for a period of eighteen months, claim a refund of their additional daily travel expenses, or, if they have to change their residence.

a refund of the actual costs of removal and a lump-sum resettlement grant of LF 10,000, (plus LF 1,000 for each dependent child, up to not more than LF 14,000).

Finally, the agreement provides for a Community contribution towards the cost of occupational retraining (overheads and possibly also cost of equipment) for a period of eighteen months from the date of discharge.

All these arrangements may in certain cases, subject to authorization by the departments concerned, be applied to workers taking up alternative employment outside the frontiers of the Grand Duchy.

## New French Arrangements

392. The alterations made in December 1966 to the readaptation system applicable in France have three aims:

- (1) to improve the financial safeguards guaranteed to workers who have become redundant, by raising the monthly ceiling on which the tide-over and wage differential allowances are calculated. In the case of a re-employed worker the guarantee now covers not only 90% of the wage up to FF 1,200, but also 80% of the FF 1,200-2,000 bracket and 60% of the FF 2,000-3,000 bracket. The ceiling for calculating the tide-over allowance has also been increased from FF 1,000 to FF 3,000, the rates payable being on a descending scale according to the pay bracket and allowance period;
- (2) to encourage workers to take training courses. Two measures have been taken with this end in view:
  - (a) firstly, the period for which the allowance is paid (one year) may be extended by the period of training up to a limit of six months,
  - (b) secondly, workers who qualify at the end of a course are entitled to a bonus, calculated on the basis of FF 77 per week of training, to an amount not less than FF 1,000 or more than FF 2,000;
- (3) to encourage workers to look for and accept other employment, by means of two allowances which already exist in other countries:
  - (a) a lump-sun refund of travel and subsistence costs for two days for the worker and his wife at the place of prospective re-employment,
  - (b) payment, for a maximum period of six months, to re-employed workers who cannot immediately move their families, of a daily separation allowance equal to three times the guaranteed minimum inter-industry hourly wage (at present approximately FF 6 per day).

# Changes in Other Agreements

393. In Germany and Belgium, the High Authority and the two Governments have endeavoured, without introducing any new forms of aid, to improve many details of the present arrangements. Measures likely to be of benefit to all workers include

- (a) the improvement of wage guarantees by raising the monthly ceilings¹) from BF 12,500 to BF 14,000 and from DM 1,000 to DM 1,300, and by increasing, in Germany (Fed. Rep.), the rate of wage differentials for re-employed miners (minimum increase from 60-65% to 65-70% of previous gross salary or 85-90% of net salary);
- (b) higher lump sum compensation for loss of concessionary coal (BF 500 instead of BF 400 and DM 240 instead of DM 180) and, in Belgium, an increased resettlement allowance for small distances;
- (c) the extension of severance allowances in Germany (Fed. Rep.) from 1 to 2 years, in certain cases.

Some of these improvements are combined with a change in the method of calculation, as for instance in the case of the wage ceilings applicable in Germany which are now fixed by reference to those of the national pensions scheme.<sup>2</sup>)

- 394.. In both countries there has been a substantial increase in the supplementary assistance granted to workers who are at a disadvantage by reason of their age or of a physical disability:
- (a) in Belgium the guaranteed-wage period has been extended from 12 to 18 months after discharge (at a rate of 60% for the tide-over allowance and 100% for the wage differential for these two categories of workers);<sup>3</sup>)
- (b) in Germany (Fed. Rep.) the period during which the wage differential is paid has also been extended from 12 to 18 months for colliery workers over 45 years of age.

There is no ceiling for wage differentials in Belgium.
 It was also decided in Germany (Fed. Rep.) to refund the cost of daily fares to and from work where these exceeded DM 20 per month, in cases where this method of calculation was more favourable than a 50% refund.

<sup>3)</sup> Defined as miners over 45 years of age and with 20 years of underground service, other workers not less than 50 years of age, clerical workers not less than 40 years of age, workers who are at least 30% physically or 20% mentally disabled.

In addition, disabled workers entitled to certain pensions who leave the mine by agreement with their employer are treated as discharged disabled persons and, like the latter and certain miners over fifty years of age, are entitled either to the usual tide-over allowance or to a lump sum, the rate of which has been raised from DM 3,000 to DM 4,000.

Finally, the High Authority substantially broadened the basis on which it contributes to the temporary assistance which some enterprises grant to workers still unemployed after the allowance ceases to be payable. The assumption of responsibility for half this assistance, which originally was only to be paid to certain disabled persons, has now been extended to all redundant workers who are entitled to pensions or are over 55 years of age; in addition, the monthly assistance ceiling has been raised from DM 400 to DM 500 and the period of payment from 1 to 2 years (or from the 13th to the 36th month following discharge).

#### READAPTATION OPERATIONS

395. From February 1, 1966, to January 31, 1967, the High Authority set aside 16,600,000 dollar units of account for readaptation assistance to 58,392 workers.

The expansion already observed during the previous year<sup>1</sup>) has thus gained further momentum this year, the funds set aside and the number of recipients calculated for almost doubling between 1965 and 1966.

Table 71 shows that miners in the German, Belgian and Dutch collieries still represent the great majority (87%) of these workers; readaptation operations are, however, also increasing in the iron and steel industry (9% of the recipients), particularly in Germany (Fed. Rep.) and France.

The workers are distributed by countries as follows: Germany (Fed. Rep.) 59%, Belgium 17%, Netherlands 16%, France 5%, Italy 3%, Luxembourg 0.3%.

396. Table 72 summarizes year by year decisions to apply Article 56,2 of the Treaty from the time it came into force.

Tables 50 and 51 of the Statistical Annex show by country and sector the amount of financial assistance granted by the High Authority under Section 23 of the Convention containing the Transitional Provisions and Article 56,2 of the Treaty.

<sup>1)</sup> See Fourteenth General Report, No. 351.

TABLE 71

High Authority readaptation assistance approved under Article 56,2 of the Treaty

(February 1, 1966-January 31, 1967)1)

	Coalmining industry	g industry	Iron-ore mines	mines	Iron and Steel industry	el industry	Total per country	country
Country	No. of workers	Amount <sup>8</sup> )	No. of workers	Amount <sup>2</sup> )	Amount <sup>2</sup> ) No. of workers Amount <sup>2</sup> ) No. of workers	Amount²)	No. of workers	Amount <sup>2</sup> )
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	31, 452 9, 969 211 9, 500	7,262 3,000 160 3,480	802 1,169 150 150	119 455 - 100 - 100	2, 115 121 1, 430 1, 413	238 22 572 1,142 —	34, 369 10,090 2,659 1,624 1,624 9,600	7,619 3,022 1,027 1,302 100 3,480
Community	01,102	100,00	171 (7	1	0,10			

1) The readaptation figures in last year's report were given up to January 31, 1966.

5) In million units of account.

#### RE-EMPLOYMENT OF RECIPIENTS OF READAPTATION ASSISTANCE

397. Last year's Report set out the main conclusions drawn from the information collected by the High Authority on the re-employment of recipients of readaptation assistance since Article 56,2 came into force.¹) These results, updated to include the figures for workers made redundant in 1965, have been published in the form of annotated tables.²)

Information at present available on activities during 1966 confirms the most recent trends, viz.

- (a) in the iron and steel industry, an extension of re-employment operations by enterprises within the sector;
- (b) progress with action to attract successor enterprises, and increasing participation by these in readaptation;
- (c) a concomitant expansion in the work of occupational retraining, which is reaching more and more workers, although still not enough;
- (d) persisting special difficulty for elderly and physically-handicapped workers in finding employment.
- 398. As was noted in preceding General Reports,<sup>3</sup>) this last problem has been specially studied by the High Authority. Ideas put forward and tried in a number of Community countries have been inventoried and their effectiveness assessed. It would appear that, although no method can be regarded as the complete answer to the employment problems of elderly and handicapped workers, a combination of psychological, legal and financial measures may yield good results. Meetings are to be held with Government departments and employers' and workers' organizations to study ways and means of applying the findings of the survey. Already, as we have seen,<sup>4</sup>) the joint High Authority/Government assistance arrangements have been modified in favour of workers of this kind.

# Germany (Fed. Rep.)

399. Eight large collieries in the Ruhr and Saar, employing a total of 22,000 workers, stopped production 1966. Information available in December for six of these shows that, of their 15,000 workers,

<sup>1)</sup> See Fourteenth General Report, Nos. 354 ff.

<sup>2</sup> Readaptation undertaken in Federal Germany, Belgium and France under Article 56 of the ECSC Treaty: The record and the results 1960-65.

<sup>&</sup>lt;sup>8</sup>) See Thirteenth General Report, Nos. 410 and 411, and Fourteenth General Report, No. 367.
<sup>4</sup>) See also Fourteenth General Report, Nos. 350 and 367, and Thirteenth General Report, Nos 410.

TABLE 72

# Chronological recapitulation of readaptation assistance approved under Article 56,2 of the Treaty

(March 29, 1960-December 31, 1966)

	No. wor	of mines ks.concer	or ned	Net		mated no. o kers affecte	
Country	Coal	Iron and steel	Iron- ore mines	amounts committed	Coal	Iron and steel	Iron- ore mines
Germany 1961	2			437,500.00	2,426	_	_
(Fed. Rep.) 1962	19	2	16	4,414,875.00	14,350	2,104	3,060
1963	19	31)	13 <sup>1</sup> )	3,853,250.00	18,480	928	2,730
1964	11	2	3	1,061,250.00	5,863	710	499
1965	202)	1	2 <sup>3</sup> )	2,049,875.00	13,671	294	1,515
1966	264)	5	35)	7,619,250.00	31,452	2,115	802
1960-1966	97	13	37	19,436,000.00	86,242	6,151	8,606
Belgium 1960	3			595,000.00	2,347		_
1961	10	<u> </u>		1,298,000.00	6,514		· —
1962	3	1	<u> </u>	343,000.00	2,149	135	<u> </u>
1963	2	<b>—</b>		80,000.00	933		
1964	2 <sup>3</sup> )	-	1	609,000.00	1,908	306	37
1965	63)	1	·	2,005,000.00	4,556	$1,250 \\ 121$	
1966	83)	1		3,022,000.00	9,969		
1960-1966	34	3	1	7,952,000.00	28,376	1,812	37
France 1961	9	_	2	1,403,568.12	2,277		703
1962	33)	1	5	2,264,303.04	2,090	1,642	264
1963	3	-	8 <sup>3</sup> )	399,250.77	160		906 6 <b>34</b>
1964	I —	1	43)	303,354.62	-	46	870
1965	-	18\	73) 62)	571,660,06 1,027,194.31		1,490	1,169
1966		1 <sup>3</sup> )	6-7	1,021,194.31			
1960-1966	15	3 <sup>2</sup> )	32	5,969,330.92	4,527	3,178	4,546
Italy 1965	1 1	9	8	3,817,711.87	650	2,655	1,201
1966	1	6		1,301,600.00	211	1,413	_
1960-1966	-	15	8	5,119,311.87	861	4,068	1,201
Luxembourg 1966			1	100,000.00	_	_	150
1960-1966		_	1	100,000.00	_		150
Netherlands 1965				690,607.73	2,700	_	
1966	2	-	-	3,480,662.99	9,500		
1960-1966	3	_		4,171,270.72	12,200		
Grand total	151	34	79	42,747,913.51	132,206	15,209	14,540
•	264 n	nines or	plants	161,95	5 workers	affected	

<sup>1)</sup> Exclusive of 4 cases already approved.
2) Exclusive of 1 case already approved.
3) Exclusive of 2 cases already approved.
4) Exclusive of 8 cases already approved.
5) Exclusive of 8 cases already approved.

- 2,500 remained in employment at the same colliery;
- 2,300 were transferred to other pits owned by the same firm;
- 5,600 were redeployed into other enterprises;
- 1,700, a great number of whom were older workers, were still registered as seeking employment.

No information is available on the 2,400 workers who did not register with employment offices.

- 400. Article 56 was also invoked in respect of a number of closures of small iron-ore mines coupled with more extensive production cut backs in the Salzgitter orefield. Most of the workers affected were transferred to other mines or re-employed in enterprises round about. About 40 are still unemployed.
- 401. In the iron and steel industry one enterprise discharged 315 workers, 250 of whom were able to find other employment. 600 of the 800 men discharged by a second enterprise were also re-employed within two months of the closure.

## Belgium

- 402. The largest shutdown in the Belgian coalfields in 1966 affected some 4,700 workers. Of the 3,200 who had left the pit before November, more than 1,150 were re-employed in the coalmining industry and approximately 1,250 in other sectors (about 660 in the metal-working and 200 in the building industry). The number of workers who were attending or had completed occupational training courses was then more than 650; 34, most of whom were near retiring age, were registered as unemployed.
- 3,500 workers were discharged from the South Belgian coalmines. Half of these were transferred to other pits while a large number attended training courses with a view to re-employment in other sectors. At the end of autumn 860 persons, most of whom were physically handicapped or fairly advanced in years, were listed as seeking employment.

#### France

403. The 1,300 workers dismissed as a result of further rationalizations in the Lorraine iron-ore mines were all offered alternative employment in the iron and steel industry. By the end of the year almost 50% of the workers had found

other jobs in the steel plants of the region, and about 60 were receiving occupational training. Of the workers who had refused the employment offered, ten were still unemployed; about 30 men who had not been able to adapt to their new occupation for health reasons were also out of work.

404. In the West a large steel plant which is to close completely by the end of 1967 laid off 380 workers during 1966. About 100 of these were pre-retired, while about sixty attended training courses, mostly for building and metallurgical trades. The establishment in the same area of a number of successor enterprises, the largest of which was assisted financially by the High Authority, 1) enabled the other redundant workers to find new jobs.

In Central France the closure of another steel plant made 410 workers redundant. Some 50 of these were retired ahead of schedule, and about 270 reemployed in the mechanical and electrical engineering industries. At the end of the year 90 workers, more than half of whom were over 50 years of age, were still seeking employment.

# Italy

405. The High Authority decided to implement Article 56 on behalf of the workers at three steel plants which were having to go out of business.

In one case the limited employment opportunities available locally resulted in only 170 of the 770 workers dismissed finding other jobs. In the other two cases, of a total of 590 steelworkers affected, 170 have been reabsorbed at other plants belonging to the same company. Generally speaking, the finding of alternative employment for redundant workers was hindered by the difficult economic situation and by their lack of skills.

In an attempt to remedy the last-mentioned deficiency, a big occupational training scheme was undertaken at Genoa, where 280 workers have followed the courses. The redevelopment operations in this area, which the High Authority has assisted with a number of loans, 2) should enable steelworkers still redundant to find employment in the near future.

<sup>1)</sup> See Thirteenth General Report, No. 423. 2) See No. 437 below.

## Luxembourg

406. The partial closure of an iron-ore mine, which is to cease production altogether during the first half of 1967, resulted in 70 workers being discharged in 1966. More than half of these have found jobs in heavy industry; at the end of the year only one miner was still registered as unemployed.

#### Netherlands

407. In connection with the large-scale rationalization scheme in progress in Dutch Limburg, Article 56 was implemented in respect of a mine which at the end of 1965 was still employing a total of 6,300 workers and salaried staff. Of the 3,000 workers who left between then and November 1966, 1,300 were transferred to other mines or associated industries, while 1,000 others found employment in other sectors (metallurgy and electronics, building, services). This last result was made possible by the organization of training courses, which 400 workers were attending at the end of October 1966, and the setting-up of successor enterprises, several of which received loans from the High Authority. About 100 physically-handicapped workers have been transferred to factories run by the Government-assisted Social Institutions Fund; 500 workers still unemployed are due for their pensions within the next five years.

<sup>1)</sup> See Nos. 441 ff. below.

# Section 4: Reconversion and Redevelopment

408. Mention was made in the last section of the increasingly important role of redevelopment in the readaptation of personnel from the extractive and iron and steel industries. The growing number of closures and other measures of reorganization are tending more and more to restrict openings for re-employment in regions where these industries accupy a dominant position, and the establishment of successor enterprises is thus becoming a matter of increasing urgency.

The High Authority, foreseeing this trend—which will certainly gain momentum during the next few years—took steps in September 1965 to set aside adequate funds for its policy of industrial redevelopment.¹) In 1966 extensive use was made of the new arrangements; a considerable number of redevelopment programmes received Community assistance, in the form of participation in specialized studies, infrastructure improvements and factory building.

Research of a general nature, carried out under the supervision of the expert committee with a view to improving knowledge of redevelopment methods and facilities, was also brought to a successful conclusion during the period under review.

#### ACTION IN MEMBER COUNTRIES

409. Applications for Community aid this year were indicative of the changing approach to redevelopment planning, and in particular of the progressive adoption of the ideas which the High Authority has put before the Council of Ministers.

The projects submitted, which previously tended to be unco-ordinated and small in scale, are now integral parts of genuine redevelopment programmes comprising the establishment of large or numerous production units. This fact, which ensures that the operations are better controlled, has a number of consequences:

(a) the implementation of the programmes is tending to be phased over longer and longer periods, so that very careful timing is needed to arrange for re-employment to take place as quickly as possible after discharge. Much certainly remains to be done in this connection: experience has shown in particular that better liaison between the old and the new enterprises

<sup>1)</sup> See Fourteenth General Report, Nos. 368-370.

would in many cases enable most of the material or psychological difficulties which still hinder these operations to be eliminated or at least reduced;

- (b) from the financial point of view, the capital investment involved in redevelopment is requiring larger and larger sums in all the countries. Taken in conjunction with the more favourable terms for Community grants, the result of this has been a substantial rise in the number and scale of applications to the High Authority;
- (c) in many cases, the setting-up of new factories is dependent upon the prior renovation of deficient or inadequate facilities. The High Authority has therefore again assisted in financing infrastructure improvements and the provision of basic equipment and factory buildings.

Although the High Authority has made every effort to keep up with these changes by increasing the amounts set aside for redevelopment—loans approved by the High Authority in 1966 and sanctioned by the Council of Ministers amounted to 54,800,000 dollar units of account as against a total of 30m. for the years 1960-1965—it is obviously not its function to meet all requirements in this sphere.¹) The value of the Community's activity, which financially is no more than a supplementary contribution, is chiefly that it serves at once as a magnet and a yardstick, through the principles governing the selection of projects: without overlooking the technical, economic and financial factors determining the viability of the future enterprises, the High Authority makes a point, in accordance with the Treaty, of restricting its assistance to projects which, by virtue of the number, type and location of the jobs they will create, are truly capable of ensuring the satisfactory re-employment of workers from the extractive and iron and steel industries.

# Germany (Fed. Rep.)

410. All the regional development surveys which were in progress in the Federal Republic were completed in 1966. In addition, the High Authority gave financial assistance to four operations covering different coalfields.

## Westphalia

411. In the Ruhr, where a number of large pits are ceasing or curtailing production, action by the local authorities has already led to the establishment of more than forty small and medium-sized enterprises over the last two years.

<sup>1)</sup> Sums actually paid out by the High Authority in 1966 in the form of loans to assist redevelopment amounted to 17m. units of account.

The High Authority decided to contribute to this effort and to grant a loan of DM 3m. for the construction of a bedding factory, to be set up at Wattenscheid on the site of a disused pit, which will by 1968 be employing 400 persons, 100 of them ex-miners.

- 412. The High Authority also granted a loan of DM 2,200,000 to a firm manufacturing motor-car parts, to enable it to open a branch at Ubach-Palenberg in the Aachen coalfield. The project will by its completion in 1968 have resulted in the creation of 425 jobs, up to 60% of wich may be reserved for miners already discharged from their employment and at present obliged to commute considerable distances, and for workers affected by the expected closure of other mines in the district.
- 413. Finally, a chemical works at Ibbenbüren on the borders of North Westphalia and Lower Saxony has received a loan of DM 3m. for an extension programme which will initially provide fresh employment for about 40 miners made redundant in 1966, and will later create more new jobs (1967-1968).

#### Saar

414. The survey on the problems of the Saar mining and steelmaking area<sup>1</sup>) has been completed and will be published and officially submitted in the course of the next few months. It estimates the number of jobs which will have to be created between now and 1980 in order to offset the effects of the contraction in the coalmining industry, and also makes suggestions for the location of the growth points that will be needed for this purpose.

## Lower Saxony

415. The High Authority made a grant of DM 6m. for the construction of a rubber processing factory at Helmstedt. This factory, which will be located on the site of a carbonization plant due to shut down in 1967, is to re-employ a considerable proportion (350) of the men affected, and thus assist in preventing westward emigration from the region which, because of its location beside the Iron Curtain, has special economic difficulties.

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<sup>1)</sup> See Twelfth General Report, No. 419.

#### Siegerland

The Sieg-Lahn-Dill study¹) has now been completed, and will soon be submitted to the High Authority. One of its main points is that the big development drive which has been mounted in this area with the assistance of two High Authority loans,2) has done much to solve the problems created by the closure of the iron-ore mines. Nonetheless, the still uncertain future facing certain other sectors will require the continuance and intensification of the drive as time goes on.

#### Bavaria

The results of the Amberg study³) were published and officially submitted by the High Authority and the expert committee at a press conference in Munich on December 16,1966.4)

Discussions are now being held with the regional authorities regarding ways and means of applying the data and proposals in the final report. High Authority has declared its readiness to continue, as far as its means permit, assisting current efforts towards industrial diversification in this area, where both the iron-ore mines and the iron and steel industry are faced with certain difficulties.

## Belgium

While continuing to assist major schemes in the Centre and Borinage, the High Authority has also agreed to help with the preparation and implementation of redevelopment programmes in other coalfields.

## Centre Borinage

The Special Council of Ministers approved the decision taken in principle by the High Authority in January 1966 to contribute a loan of BF 750m. toward

<sup>1)</sup> Sec Thirteenth General Report, No. 418, and Fourteenth General Report, No. 373.

<sup>2)</sup> Ibid., No. 419, and Fourteenth General Report, No. 374. Ibid., No. 418.

<sup>4)</sup> Regional Economy and Policy Series, Part II "Development and redevelopment Programmes," Vol. VII. Die Region Amberg, Tendenzen und Möglichkeiten ihrer wirtschaftlichen Entwicklung.

the equipping of several industrial estates in the Centre and Borinage region.1)

The first leg of the programme which will be spread over a number of years, is now under way.

## Liège district

- 420. At the suggestion of the Belgian Government, the High Authority took part in a market survey, requested by the Wérister collieries as a guide to efficient reconversion to the manufacture of public-works and civil-engineering equipment. This study was forwarded to the recipients, who are developing their production programmes along the lines indicated in its conclusions.
- 421. The High Authority also agreed to give financial assistance for a study on the redevelopment of industry throughout the Liège region. This survey is to show what specific measures are needed in order to stimulate development in the area and to speed up the process of making the industrial estates established with Community assistance fully productive.<sup>2</sup>)
- 422. Finally, the High Authority agreed to grant a loan of BF 10m. for a programme for the extension of an electrical-equipment factory at Ans-lez-Liège, in the immediate vicinity of the Ans-Rocour pit, which was shut down last November. Investment already effected under this programme has enabled 45 miners to find new employment, and this number will be increased to 60 in coming months.

## Limbourg

423. The problem of reviving Belgian Limbourg, which has been hard hit by the cutbacks in the coalmining industry, has been the subject of detailed discussion between the High Authority and the official bodies concerned. Following these talks, it was decided that a technical secretariat should be set up under the Governor of the Province, with the task of promoting the research necessary to implement the redevelopment programme now being worked out.

Since several basic studies on the region already exist, this research will take the form of additional specialized studies which will be decided upon and effected as the work progresses. The High Authority has agreed to grant Community technical and financial aid for this purpose.

<sup>1)</sup> See Fourteenth General Report, No. 376.
2) See Tenth General Report, No. 532.

#### France

424. 1966 saw the completion of the various surveys in hand dealing especially with the southern part of the country, and the granting of Community assistance to several large-scale operations forming part of the redevelopment programmes for the two large mining areas in the North and East.

#### Pas-de-Calais

425. For some years the contraction of the coal market has been reflected in the Nord/Pas-de-Calais coalfield by a steady shrinkage in the labour force, which will doubtless continue at the same rate over the next few years. Since the openings for transferring workers from one pit to another and for workers to emigrate abroad—of which considerable use has been made in the past—are tending to decrease, it has been recognized that there is urgent need for extensive industrial diversification, particularly in the western part of the coalfield, where technical operating difficulties are aggravating the effects of the market trend.

The diversification programme put forward by the French Government was approved by the High Authority, which agreed to make two loans totalling FF 30,900,000 towards the establishment of an industrial estate of 200 hectares (which may later be extended to 400 hectares) in the Bassée region near Lens, and the construction there of 50,000 square metres of industrial buildings, which will be erected to the order and plans of enterprises before being leased to them with option to purchase.

This project will extend over a ten-year period, and it is estimated that the factories which will be set up on the new site will create between 10,000 and 20,000 jobs.

426. The High Authority also decided in principle to loan FF 2m. towards the building of a factory to make air-conditioning equipment, at Labuissière in the same region. This operation will provide 200 new jobs by 1969, 50 of which will be reserved for redundant colliery workers, while the others may be taken by miners' sons who will be trained at the factory.

#### Lorraine

427. In Lorraine, over and above the problems created by the contraction in the coalmining industry, there are now others—which will certainly grow in scale during the next few years—arising out of the progressive closures of iron-ore

mines and the adjustments which will be needed in the steel industry. In view of this prospect the High Authority participated in 1964-65 in a study of the area's development potential.<sup>1</sup>)

The responsible authorities have taken a number of steps to prevent a decline in employment, including, as in the Pas-de-Calais, the setting-up of an industrial promotion office, the modernization of transport infrastructures, the preparation of industrial estates and the provision of financial incentives to enterprises. The High Authority agreed to join in this effort and granted three loans totalling FF 44,400,000 towards the following projects:

- (a) the preparation of industrial estates covering 288 hectares close to the localities where re-employment problems are most acute;
- (b) the construction there of 30,000 square metres of factory premises, which will be leased to successor enterprises with option to purchase;
- (c) the building of 80 dwellings for managerial staff, in order to attract to the region the higher-grade personnel required to run the future factories.

The number of new jobs expected to be created by this programme (which may be supplemented by the preparation of a further 414 hectares of industrial estate property) is estimated by the French Government at between 12,000 and 14,000

428. For the immediate future, the High Authority has approved in principle a loan of FF 3m. for the extension of a successor enterprise located in the Briey orefield, where closures are in progress. The enterprise to receive this assistance, which specializes in the production of car seats, polyester foam and bedding, at present employs 400 persons: the extension programme will create 200 further jobs by 1968, for all of which preference will be given to miners becoming redundant in the near future.

## Centre/Midi

429. In order to make the maximum use of the experience gained during the redevelopment work at Le Boucau,<sup>2</sup>) which in many ways may be regarded as a model, the High Authority has commissioned a survey of the conditions under which it was carried out and the methods which led to its success. The conclusions of the survey, which is now being completed, will be made available to all bodies having responsibility for redevelopment in one capacity or another.

2) Ibid., No. 381.

<sup>1)</sup> See Fourteenth General Report, No. 377. and Twelfth General Report, No. 422.

- 430. The series of studies dealing with the Decazeville region<sup>1</sup>) was completed in 1966. They show that the problem of the industrial revival of this region goes far beyond the reconversion of collieries, and that in consequence the High Authority can only give supplementary assistance, as part of a more general development programme.
- 431. The various research projects on the Montceau-les-Mines/Le Creusot/Chalons-sur-Saône triangle,¹) undertaken at the request and under the direction of the local authorities represented in the "Triangle Committee," have also been concluded and the findings embodied in a summary report which has been published with the aid of a High Authority grant. The report is designed to provide all interested parties, particularly potential investors, with information on the resources and possibilities of the region.
- 432. Lastly, the survey on the department of Hautes-Alpes, 2) which was completed in a very short time, has been handed to the appropriate authorities.

## Italy

433. While continuing to devote the closest attention to the problems of the Sulcis coalfield in Sardinia, the High Authority has made every effort, by means of various loans and grants, to assist the redevelopment of certain other regions affected by the difficulties in the steel industry.

#### Sardinia

434. The steps taken in 1966 to promote the industrial development of Sardinia have confirmed the value of the earlier research carried out in this connection with E.C.S.C. assistance.<sup>3</sup>) The technical and economic data assembled concerning the possibility of setting up metallurgical industries have served as a basis for decisions by the Italian authorities in this regard, while the study on the development schemes in progress in the island was most useful to the Committee of Ministers for Southern Italy in their preparation of a scheme for the co-ordination of all publicly-aided projects throughout the Mezzogiorno. The two reports are shortly to be released to the Press, and will then be generally distributed.

<sup>3</sup>) Ibid., No. 382.

See Twelfth General Report, No. 422.
 See Fourteenth General Report, No. 380.

The social survey of the Carbonia region, an objective analysis of the problems and advantages of the population of this coalfield, will also be widely distributed, particularly among potential investors.

#### Aosta valley

- 435. The High Authority has approved a loan of Lire 4,700m. for a modernization programme to be carried out by the Società Cogne S.p.A., which mines and processes the iron ore found in the Aosta valley. This important reconversion scheme, which is due for completion by 1969, will enable about 1,000 workers threatened with redundancy to keep their jobs.
- 436. As a complement to this programme the High Authority is taking part, at the request of the Italian Government, in a social and economic survey, in preparation for the establishment of small and medium-size enterprises which will widen the range of industries in this region. A committee including representatives of the regional authorities and of the Community will conduct the survey and process its findings.

#### Genoa region

437. To tackle the unemployment caused by the closure of a large steelplant in Genoa, the city authorities and the employers' and workers' organizations have jointly worked out a redevelopment programme providing for the establishment of a considerable number of small and medium-sized enterprises. The High-Authority has agreed to assist six of these enterprises, which appear to be the best placed to offer alternative employment, with loans totalling Lire 1,570m. The activities involved vary considerably: they include mechanical and electrical engineering, production of aircraft parts, manufacture of recording and measuring instruments, processing of foodstuffs, and so on. Of the 500 jobs which will be created, more than 400 will be reserved in the first instance for former steel-workers.

## Province of Brescia

438. The High Authority is fully cognizant of the difficulties of the iron and steel industry in Brescia, on which it published a report in 1963.1)

<sup>1)</sup> See Twelfth General Report, No. 425.

The employment situation continues disquieting throughout the Province. A Community loan of Lire 200m. towards extensions planned by a firm manufacturing moulds for plastic, thermoplastic and thermosetting products will help to ensure the reabsorption at Rezzato of 80 steelworkers at present unemployed.

# Luxembourg

439. The preliminary studies for the establishment of a central sub-contract handling office in Luxembourg¹) have been concluded, and the findings communicated to the authorities and the employers' and workers' associations. The Luxembourg Chamber of Commerce, in consultation with the representatives of the other countries, is now contacting the industrial firms directly concerned with the implementation of the project.

#### Netherlands

440. In order to prevent current and planned closures in the Limburg coalfield from causing a sharp drop in employment there the Dutch Government has approved a large-scale redevelopment scheme which, the High Authority notes, is to a great extent in accordance with the basic principles it has itself formulated in this connection: it is a long-term programme involving substantial participation by the public authorities and centred mainly on the creation of large industrial complexes which will provide jobs for a large number of workers and act as power-houses in the economic development of the region as a whole.

The four operations the High Authority is preparing to part-finance all come within this programme.

441. The largest project, which is being assisted by a Community loan of Hfl. 35m., is for the building of a car factory at Born-Nieuwstad, near the large Maurits colliery, which closed in 1966. Van Doorne's Automobielfabriek N.V. ("Daf") plan to use this new plant to produce new "popular" and "medium" models, thereby extending their production range which has hitherto been confined to the "Daffodil".

The project has been granted a Government guarantee and various concessions. It will be carried out over a number of years, and between the end of 1967 and the end of 1972 will create some 6,000 new jobs, at least half of which

<sup>1)</sup> See Fourteenth General Report, No. 384.

will be reserved for workers from the coalmining industry. The re-employment timetable and the retraining to be provided have been discussed between the company and the collieries.

- 442. The High Authority also decided to set aside Fl. 3,620,000 for the construction, on a nearby site, at Sittard, of a factory for carpets and floor coverings. The personnel, numbering between 100 and 150 in a first stage and 250 in 1970, will consist entirely of ex-mineworkers.
- 443. At Eijsden, which has a large commuter population, the High Authority is to loan Fl. 1,250,000, towards the installation of a factory producing parts for heating and air-conditioning equipment and sheet-steel household articles. Thanks to the projected expansion, the factory, which is being transferred with its staff of 270 from Maastricht, will be employing between 60 and 90 redundant miners by 1968.

TABLE 73

High Authority redevelopment assistance approved between February 1, 1966, and January 31, 1967, and endorsed by the Council of Ministers

	Amount	New jobs	
Location of project	in national currency	in units of account (rounded)	to be created
Germany (Fed. Rep.) Ubach-Palenberg, Aachen Ibbenbüren, Westphalia Helmstedt, Lower-Saxony	DM 2,200,000 3,000,000 6,000,000	550,000 750,000 1,500,000	425 40-50 536
Belgium Centre/Borinage	BF 750,000,000	15,000,000	()
France Pas-de-Calais Lorraine	FF 30,000,000 44,400,000	6,260,000 8,990,000	(10,000-20,000) (12,000-14,000)
Italy Aosta valley Genoa region Rezzato/Brescia	Lire 4,700,000,000 1,570,000,000 200,000,000	7,520,000 2,510,000 320,000	1,000-1,200 500 80
Netherlands Nieuwstad, Limburg Sittard, Limburg Eygelshoven, Limburg	F1. 35,000,000 3,620,000 2,500,000	9,670,000 1,000,000 690,000 54,760,000	6,000 100-150 100-140

444. Lastly, the High Authority granted a loan of Fl. 2,500,000 for the establishment at Eygelshoven, another key point in the area, of a modern brickworks using a special production technique. The firm hopes to increase its present personnel strength of 100 to 140 at a later stage, and has undertaken to recruit at least 50% of the new intake from among workers laid off from nearby mines.

TABLE 74

High Authority redevelopment assistance approved in principle but not yet endorsed by the Council of Ministers¹)

(February 1, 1966-January 31, 1967)

Taraki da sa	Amoui	New jobs		
Location of project	in national currency	in units of account (rounded)	to be created	
Germany (Fed. Rep.) Wattenscheid, Ruhr	DM 3,000,000	750,000	400	
Belgium Ans-lez-Liège	BF 10,000,000	200,000	60	
France Labuissière, Pas-de-Calais Pierrepont, Lorraine	FF 2,000,000 3,000,000	405,000 608,000	200 200	
Netherlands Eijsden, Limburg	Fl. 1,250,000	345,000		
		2,308,000		

<sup>1)</sup> Endorsed on February 16, 1967.

#### GENERAL ACTIVITIES

445. The High Authority's expert committee on redevelopment has of course for some years been studying the industrial development and redevelopment methods used in the Community and the results obtained.

As was mentioned in last year's Report,<sup>1</sup>) the findings have been embodied in reports constituting a compendium of experience in the six countries and a basis for the more systematic planning of redevelopment. Study meetings are to be

<sup>1)</sup> See Fourteenth General Report, No. 387.

held at various levels to evaluate the information contained. As the redevelopment projects submitted to the High Authority this year already show, the participation of many people in public life has helped to ensure wider application of the methods which have been successful in a number of areas, such as setting up development promotion offices, installing industrial estates, providing factory buildings and so on.

446. The High Authority is now endeavouring to determine more precisely the types of product the successor industries should make to ensure good returns and steady expansion.

From all points of view, it is most important to attract to the depressed areas enterprises that will be able to pay good wages and put the area concerned on the road to economic recovery. The sudden spread of redundancy in the executive grades is further witness of the need for prompt action in this connection.

It has therefore been decided to update and supplement the study on new production lines,¹) which has been very well received by the authorities and the enterprises alike. The High Authority has entrusted this task to a research organization specializing in problems of long-term forecasting: the Community will thus have the benefit of this body's current research on the same lines on behalf of certain public authorities, and of its experience of the American market, where developments often foreshadow events on the European side. It will thus be possible to keep some kind of permanent record of the production lines to be recommended to intending investors, with notes as to the appropriate background conditions for each (optimum factory size, types of equipment needed, financing methods, labour skills, any State aid available, ability to stimulate further development, etc.).

<sup>1)</sup> See Thirteenth General Report, No. 428.

#### Part Two

#### LIVING AND WORKING CONDITIONS

# Section 5: Wages, Social Security and Terms of Employment

447. The High Authority continued its studies in connection with wages, social security and terms of employment. The material it assembles and publishes on these matters serves as an objective reference basis for the efforts of the two sides of industry in this direction.<sup>1</sup>)

At Community level regular contact has been maintained since 1956 through the two Joint Committees for the coal and the steel industry respectively (Government representatives also sit on the former one). The points emerging from these discussions can be and are freely made use of in the hammering-out of collective-bargaining agreements in the member countries; if they could be similarly referred to for the purpose of framing Community-wide agreements, it is obvious that this would be a big advance in the levelling-up of conditions which is one of the great aims of the Treaty.

448. On the controversial question of the European Miners' Charter,<sup>2</sup>) it is recalled that the union representatives in 1965 agreed for the time being to drop their insistence on a package deal, and instead to confine their claims to the introduction of a shift bonus on the German model throughout the Community and the introduction of a fidelity or loyal-service bonus.

In February 1966 the Catholic and free mineworkers' unions of the six countries submitted their official proposals on the subject to the High Authority, asking for an "E.C.S.C. miners' allowance" to embody both the two bonuses earlier suggested.

<sup>1)</sup> The High Authority also arranged during 1966 to bring out its newsletters on social developments in the Community at more frequent intervals. These are issued more particularly to keep people posted as to the latest position with regard to terms of employment and industrial relations in the six countries.

<sup>2)</sup> See Fourteenth General Report, Nos. 388 ff., and Thirteenth General Report, Nos. 431 ff.

The High Authority included this idea among the recommendations in its Memorandum on Coal Policy to the Council, which, as we have seen, contains a detailed analysis of the outlook for coal production up to 1970, together with the High Authority's suggestions for enabling the coal industry to retain the services of a sufficiently numerous, young, steady and skilled labour force.<sup>1</sup>)

The ad hoc Committee is now studying the matter; whether the recommendations go through will of course depend on the Council.

#### TRENDS IN THE E.C.S.C. INDUSTRIES

449. The various trends with respect to wages, social security, terms of employment and industrial relations in the two extractive industries and the steel industry are recorded in detail in the Community's more specialized publications, and in particular in the conspectus the High Authority draws up each year with the help of the employers' and workers' associations.<sup>2</sup>)

We accordingly here confine ourselves to adding a few particulars of the latest developments in this connection.

# Wages

- 450. Table 75 shows the most recent increases in direct hourly wages, as compared with the average annual rates of increase from 1953 to 1965. They were in general, except in Belgium, rather smaller than the previous years' average, especially in France and Germany (Fed. Rep.) (the figures for the iron-ore industry are particularly striking), and to a lesser extent in the Netherlands.
- 451. As always,<sup>3</sup>) the data needed to work out total wage costs and real incomes for last year will not be all to hand until the middle of 1967. The 1965 figures will be found in *Tables 52 and* 53 of the Statistical Annex.
- 452. It may be of interest to compare the average rates of pay in the E.C.S.C. sectors with those in other industries. The following table, showing the position in this respect in October 1965, has been compiled from the harmonized statistics now available for the average gross hourly earnings of workers in the European Community industries overall.

<sup>1)</sup> See Nos. 88 ff. above.

<sup>2)</sup> Trends in wages, terms of employment and social security in the Community industries, 1965 (Doc. No. 1430/66).

<sup>&</sup>lt;sup>8</sup>) See Fourteenth General Report, No. 407.

TABLE 75

Trend in direct hourly wages in the E.C.S.C. industries

	Germany (Fed. Rep.)	Belgium	France	Italy	Luxembourg	Netherlands
	DM	BF	FF	Lire	LF	F.
Coalmining industry						
(underground and surface)						
1965 :	4.59	54.51	4.25	412.90		4.09
ISCU-)	4.70	58.42	4.40	(a)		4.39
Average annual rate	%0.7	%6. <i>I</i>	%0.₹	Î		7.3%
of increase 1953-654)	7.1%	5.3%	%1.1	7.7%		8.3%
Iron-ore mines						
(underground and surface)						
19659)	4.48		5.79	467.63	72.52	
1966)	4.49		5.95	478.76	77.10	
Increase	0.5%		5.8%	2.4%	6.3%	•
Average annual rate of increase $1953-654$ )	8.5%		7.10/	70.70	. /00 7	
	0/		0/ -	0/	4.3%	
Iron and steel industry						
19656)	4.92	58.88	3.94	549.12	68.59	4.097)
1900°)	5.10	63.23	4.12	576.63	71.82	$4.34^{7}$
Average annual rate	9.1.6	% <del>**</del> -/	4.6%	2.0%	4.7%	6.1%
of increase 1953-654)	7.5%	5.9%	8.5%	7.4%	6.40/	0.00
	2		0/1	0/+.	0/±0	0/.0.6

1) Average for first nine months of 1966.

\*) Figures not available.

\*) Figures not available.

\*) These averages are not 1966 and 1966 compared.

\*) These averages are not 1966 part of 1966 divided by the number of years concerned, but take into account the cumulative effect of successive increases.

\*) Average for January, April, July and October.

\*) Average for January, April and October.

\*) Average for January and April.

TABLE 76

Average gross hourly earnings in the E.C.S.C. industries,
October 1965

(average g.h.e. of all male workers in the extractive

(average g.h.e. of all male workers in the extractive manufacturing and building industries = 100 in each country)

	Germany (Fed. Rep.)	Belgium	France <sup>1</sup> )	Italy	Luxembourg	Netherlands
Coalmining industry						140
Underground	111	128	118	119	-	142
Surface	80	89	90	. 88		101
·Overall	102	116	109	95	-	128
Iron and steel industry	108	-124	101	129	114	124
Iron-ore industry						
Underground	102		152	131	141	
Surface	86		112	95	108	_
Overall	96		142	109	125	

Source: Harmonized Statistics of Wages, October 1965 (No. 4/66 in the Social Statistics-Series of the Statistical Office of the European Communities).

1) September 1965.

As can be seen, E.C.S.C. workers are mostly better paid than the average, and substantially so on the steel side in Italy, Belgium and the Netherlands. All underground mineworkers are also well placed, except in the German iron-ore mines, where their pay is little higher than in industry generally; surface personnel on the other hand for the most part earn less than the rest of the labour force in their respective countries, except at the Dutch collieries and the French and Luxembourg iron-ore mines.

Comparison with the corresponding figures for October 1964, however, shows a decrease in the differential: the only groups to increase their lead were the Belgian underground miners, the Italian steelworkers and the Luxembourg iron-ore workers of both categories.

- 453. Knowledge of E.C.S.C. wage trends is becoming fuller and more accurate all the time as the Statistical Office of the Communities pursues its studies. The Office's latest activities include
- (a) the publication in 1966 of a survey on wages and salaries in the E.C.S.C. industries in 1964,1) which remedied a deficiency of information on employers' costs in respect of white-collar staff;

<sup>1)</sup> Wages E.C.S.C. 1964, in the Statistical Office's Social Statistics Series.

(b) the launching in October 1966 of a large-scale survey with a sample of 2m. workers in different industries, whose earnings, together with various other particulars (sex, age, number of dependants, mode of pay, area,etc.), will be recorded to give a picture of the wage spread and the influence of individual characteristics on the level of hourly and weekly remuneration.

## Social Security

454. After the structural remodellings of the previous year, 1966 was devoted more to consolidation and improvement of the current arrangements. In some countries the slowdown in general economic activity caused the authorities to defer the projected improvements in benefits and revive debate as to how they were to be financed. Index-linked benefits and contributions were of course put up as required, though in some cases considerable financial strain was involved.<sup>2</sup>)

### General insurance schemes

455. In Germany (Fed. Rep.), the Finance Planning Act passed to help preserve economic stability, which provides for budgeting several years ahead, has led to some changes in social security. A number of special Federal subsidies, notably in connection with disablement and old-age insurance, have been discontinued, and some of the improvements in the calculation of benefits (e.g. maternity allowances) postponed pending the introduction of the remodelled health insurance arrangements. Old-age and industrial-accident pension rates have, however, been put up, while the assessment ceiling for compulsory unemployment insurance has been raised for office and administrative staff who are not actually employers.

In Belgium, in addition to the normal adjustment of benefits linked to the cost-of-living index, there have been increases in the basic benefit rates for old-age pensions, occupational accident and disease insurance, and unemployment insurance. A holiday gratuity has been introduced for pensioners. With regard to health insurance, an Act of July 7, 1966, *inter alia* empowers the authorities to fix ceillings for professional fees should not enough medical and dental practitioners be prepared to enrol; this has since been done, the previous panel conventions having expired at the end of 1965.

<sup>2)</sup> See Fourteenth General Report, Nos. 408-409.

In France no reorganizations to speak of took place, but preliminary studies in this connection continued. In July the Caisse de l'Elat advanced the sum FF 1,500m. to the general social-insurance scheme to balance its finances. Some benefit rates were increased, including those for old-age pensions and family allowances, and new arrangements were introduced for the calculation of charges for medical treatment.

In Italy disablement, old-age and survivors' insurance has been extended to include shopkeepers, who now rank for this purpose with farmers and small tradesmen. Studies continued in preparation for the coming basic changes in, more particularly, the family-allowances and health-insurance arrangements.

In Luxembourg industrial-accident insurance was reorganized, payments to be in future linked (as those for health insurance already are) to the price index, and adjusted to the movement of wages at five-yearly intervals. "Second-degree disablement," denoting 50% incapacitation for work, was introduced as one of the bases for calculating disability pensions. The age limit for entitlement to orphans' pensions was raised to 25 for persons continuing their education.

In the Netherlands, in addition to increases in benefits and in some contributions, notably with respect to national old-age and survivors' pensions and family allowances, some structural changes have been made: the previous cash maternity benefits (*kraamgeld*) have been replaced by benefits in kind, while to the three classes of disablement recognized by the provisional Act on the subject has now been added a fourth, Class D, comprising persons with a disability of 45-55%.

### Mineworkers' schemes

456. In Germany (Fed. Rep.) the "countervailing allowance" to which, subject to certain conditions, the insured worker is entitled on reaching the age of 55 is in future also to be payable to those voluntarily leaving jobs at the mines. In addition, unemployed mineworkers are from now on to be able, like other insured persons, to draw unemployment pay for up to 52 weeks: hitherto mineworkers (who of course pay no contributions) received this for only 26 weeks. The Finance Planning Act has heavily slashed the contribution reserve previously required, which will mean an equivalent reduction in Federal subsidies, and other savings are to follow by elimination of certain budget heads.

In Belgium, the special concession permitting benefit to be paid in respect of the first day of unemployment—normally treated for insurance purposes as a dies non—was also granted in 1966 for mineworkers who had lost only one

shift in the month by short time. Mineworkers were of course also covered by the rise, by two steps of the index, in the daily rate of unemployment benefit, and by the increase in the basic benefits from January 1, 1967. In addition to these automatic movements, mineworkers' basic pension rates were put up from January 1, 1966, and a holiday gratuity was introduced for the pensioners, similar to that for pensioners under the general scheme.

In France the contribution ceiling was raised by nearly 6% from January 1, 1966. Sickness benefit and pensions, both linked to the miners' reference wage, were increased in line with the latter. Family allowances come under the general scheme, so that the mineworkers too were covered by the simplification of the abatement zones and the increase in the rates paid.

Parallel with the new general maternity benefit arrangements in the Netherlands, action was taken under the mineworkers' scheme also to replace the former cash payment by allowances in kind, the recipient being required to contribute a small amount towards the costs, though nothing towards the actual medical expenses in connection with the confinement. Contributions to both types of fund, those furnishing benefits in cash and those furnishing benefits in kind, were increased. Again parallel with the general national insurance, the board of the mineworkers' scheme after studying the state of the finances twice raised the rates for old-age pensions, decided to allow a special bonus on temporary pensions, and established improved bases of calculation for the new category of disablement pensions (45-55% disability).

### WORK OF THE HIGH AUTHORITY

## Wages

457. As well as regularly assisting the Statistical Office, the High Authority is continuing its own studies concerning the influence of technological and social progress on methods of payment in the E.C.S.C. industries.

In view of the considerable interest in this subject, it has been decided to make the findings available to a wide public. Accordingly, the High Authority issued a volume<sup>1</sup>) containing the papers read at its 1964 symposium on output-

<sup>1)</sup> Payment by performance (Doc. No. 11744/2/65).

linked wages in the steel industry, 1) and is planning shortly to publish also the results of its surveys on job evaluation 2) and on sociological aspects of wage arrangements. 3)

The studies on the relation between degrees of mechanization and modes of payment in the coalmines) are now well advanced. Investigations have been effected, on the basis of a standard schedule of points drawn up by the employers' and workers' representatives, in 35 stone-drift workings in the Community's main coalfields: the data assembled, which record in minute detail the differences nowadays in the precise nature of the men's duties and the corresponding adjustments in their pay, are now being considered by the two sides of industry, and will shortly be collated at Community level, the conclusions to form the basis for deciding how best to organize similar investigations in the future with respect to coal winnings.

## Social Security

### Migrant workers

458. In the activities of the Administrative Committee on Social Security for Migrant Workers, the High Authority played a constructive part in the remodelling of the existing enactments, endeavouring throughout to see that the workers in the industries under its jurisdiction, were given as generous a deal as possible.<sup>5</sup>)

As the upshot of the Committee's studies over the past two or three years, a draft Regulation was finally submitted by the E.E.C. Commission to the Council of Ministers, and was published in October 1966 6): this is to supersede not only the earlier Regulation No. 3, but also the provisions relating to cross-frontier commuters of whom there are a great many in the mining and iron and steel industries.

459. The High Authority is also continuing to devote attention to the special problems regarding non-Community nationals, who are not covered by these instruments. It has decided, in connection with its survey on the recruitment

<sup>1)</sup> See Thirteenth General Report, No. 435.

<sup>&</sup>lt;sup>2</sup>) Ibid., No. 437.

<sup>3)</sup> See Fourteenth General Report, No. 395.

<sup>4)</sup> Ibid., No. 393.

Ibid., No. 396.
 See Official Gazette, No. 194/66.

of such workers for the E.C.S.C. industries, 1) to make a detailed analysis of their social-security position under the laws of the different countries and the numerous bilateral and multilateral agreements in force.

### Comparative studies on social-security systems

- The High Authority maintains a constant flow of documentation to the two sides of industry on social security, to keep them abreast of the latest developments in this connection. In 1966 there appeared
- (a) the latest set of the High Authority/E.E.C. Commission comparative tables of social-security arrangements in the member countries:
- (b) a reissue, updated to July 1, 1966, of the brochure Supplementary Socialsecurity schemes covering workers in the Community industries, which briefly describes the various supplementary insurance schemes, statutory and contractual, covering miners and steelworkers;
- (c) a new brochure on cumulable and deductible social-security entitlements in the six countries, compiled at the request of the trade unions to round off the other publications on the subject—which offered only a compartmented picture of the different types of benefit payable—and so give a more accurate idea of the effective entitlements of the workers concerned. both under the general system and under the mineworkers' special schemes.
- The High Authority's seven social-security monographs, which unlike the ultra-condensed publications just mentioned provide full details of the relevant arrangements, in the Community countries and also Britain, have been brought up to date as at July 1, 1966. In addition, a less purely descriptive study has been prepared which analyses the political and social-economic as well as the legal aspects of social-security trends and developments in the same seven countries. The High Authority is currently also at work, using an agreed layout and presentation settled in advance by the Coal Committee of the E.C.S.C./U.K. Council of Association, on a new report comparing and contrasting the social-security arrangements in force in the Community and Britain at January 1, 1967.

## Special problems with respect to the collieries

As in the previous year,2) the High Authority carefully scrutinized the financial aid furnished by the member States in 1966 in connection with the social-insurance schemes in the coalmining industry, to make sure that it did

<sup>1)</sup> See Thirteenth General Report, No. 364.
2) See Fourteenth General Report, Nos. 320 and 399.

not infringe Article 2,2 of Decision No. 3/65. It is recalled that aid for this purpose in many cases constitutes as much as 90% of the total assistance received by the industry.

463. The working party on colliery social security which was set up by the Joint Committee on Harmonization of Terms of Employment (Coal) to help get the recommendations of the European Conference on Social Security put into practice!) met twice during the period under review: it was decided to concentrate in particular on financing, occupational accidents and occupational diseases, and short-time working, and a preliminary discussion took place on these three subjects.

# Terms of Employment

## Joint Committees on Harmonization of Terms of Employment

- 464. The two Joint Committees (each of wich has a High Authority chairman and secretariat) continued their activities, supplementing and bringing up to date existing documentation on terms of employment in the Community and studying new developments in this connection.
- 465. The Joint Committee (Coal) met in Bochum in November 1966. The Chairman, M. Fohrmann, Member of the High Authority, gave an account of the coal industry's present problems and the High Authority's efforts to tackle them.

The Committee then continued the discussion begun the previous December at Heerlen²) concerning the survey on colliery manpower turnover, the first stage of which had meantime been completed. The indications were that, in the four countries surveyed, wastage was highest among the men with the lowest seniority; the influence of other factors—nationality or area of origin, wages, skills, housing and the like—varied from one coalfield to another. In the light of these findings, the Committee is to discuss the best ways of reducing the constant comings and goings of personnel, which are in several respects—training costs, productivity, safety and so on—a serious handicap to the industry.

The Committee requested the High Authority to have a further comparative study made of the provisions for the welfare of juvenile mineworkers in the Community.

<sup>1)</sup> See Fourteenth General Report, No. 401.

<sup>2)</sup> Ibid., No. 403.

- 466. The Joint Committee (Steel) met twice in 1966, to consider
- (a) the interim findings of the survey on the turnover of manpower in the iron and steel industry, which was carried out in the first half of 1966;1)
- (b) the third part of the survey (now practically completed) on the impact of technological changes on productivity, wages, working hours and employment. Part III, a series of case studies, follows the overall statistical analysis published in 1963, a revised edition of which will be appearing shortly, and the inventory of legal and contractual provisions in the Community, published in October 1966;
- (c) the comparative tables, published in June 1966, on the de jure and de facto position of "on-loan" workers in the Community<sup>2</sup>)—men who, although not actually under contract to steel producers, may be required to act as process or maintenance workers in steel plants. The publication contains the Joint Committee's proposed definition of the contractual obligations created by the lending of labour in this way, together with an enumeration of the laws and regulations in each member country authorizing or prohibiting the practice, the relevant social-security provisions, and the rights and obligations of the parties.

At the Joint Committee's wish, the High Authority on May 26, 1966, held a teach-in for producers and workers on redevelopment and readaptation in the iron and steel industry.

467. The two Committees also examined the latest set of comparative tables summarizing the main legal provisions applying in the E.C.S.C. industries with respect to recruitment, types of contract, obligations undertaken by the parties, position of the worker in the event of stoppage of work, of short time or of alteration in the legal status of the enterprise, and termination of contract by the employer (individual dismissal or group lay-off), by the worker (handing in of notice) or under a defeasance clause. The tables are scheduled for publication in 1967.

In addition, the members of each Committee at the different meetings exchanged information on the main developments on the social side in the industry concerned. It was decided that this should always be done at all future meetings.

<sup>1)</sup> See Fourteenth General Report No. 404.
2) See Thirteenth General Report, No. 444.

### Committees on salaried personnel

468. The working parties consisting of representatives of the two sides of industry in the member countries and representatives of the High Authority considered the draft of the study on terms of employment for salaried personnel, 1) a series of comparative tables, which will be submitted to the two Salaried Employees Committees in 1967.

In order to establish broader-based relationship with the senior managerial grades, the High Authority decided to set up a liaison group with the federations belonging to the Confédération Internationale des Cadres. One meeting has already taken place and another is to follow: their purpose is to serve as a forum for discussion on the High Authority's coal policy and redevelopment and readaptation work.

### Labour law

469. In its series of comparative studies on labour law, the High Authority at the end of 1966 brought out *The employment contract in E.C.S.C. countries*, which in addition to comparing the state of the law on labour contracts in the different countries outlines the position in this connection in various paralegal fields, and emphasizes the importance of the contract in individual employer/worker relations.

Le Régime Juridique des Organisations Professionnelles, on the legal position with regard to employers' and workers' associations, was finalized in December and is to appear in 1967. A provisional edition has also been issued of the papers presented at the High Authority's seminar on management/labour relations at enterprise level.<sup>2</sup>)

## Non-Community nationals

470. In view of the large numbers of non-Community nationals employed in the coal and steel industries, the High Authority some time ago made a study of the arrangements for recruiting and selecting these men, and the terms of employment offered them in the Community.<sup>3</sup>)

<sup>1)</sup> See Fourteenth General Report, No. 402.

<sup>&</sup>lt;sup>2</sup>) *I bid.*, No. 405.

<sup>3)</sup> See Thirteenth General Report, No. 364.

As a follow-up, on a more sociological plane, it then came to be felt that special consideration should be given to the problem of integrating them into their new surroundings, both on and off the job. The High Authority accordingly decided early in 1966 to conduct a second study on the subject, and this has duly been done in all the member States, 1) at national, regional, local and enterprise level, in close co-operation with the employers' and workers' associations. Part of the study, which has now been completed, deals with social and welfare services for migrant workers: to this is to be added a series of short monographs describing the arrangements in question in a number of selected enterprises. The full study will be published in the near future.

<sup>1)</sup> Except Italy, where very few foreign workers are employed.

## Section 6: Workers' Housing

### GENERAL REMARKS

- 471. The aim of the High Authority's housing policy is at once economic and social, being
- (a) to increase the industries' efficiency by helping to provide accommodation for the workers close to the localities where E.C.S.C. enterprises are facing development or reorganization problems in consequence of the radical changes in their whole production set-up;
- (b) to secure better conditions in this often decisive respect for the largest possible number of miners and steelworkers and their families.

The High Authority has undertaken to date in all two experimental schemes and six major schemes which have come as a welcome addition to the member countries' own efforts to step up the building of good and inexpensive accommodation for workers in the basic industries. Its assistance has always been, and will continue to be, supplementary to the funds furnished by the public authorities, the enterprises and others.

- 472. For some years now building costs have been going up and up, a trend liable to have particularly unfortunate results for the prospective occupants of "popular" housing. Contributory factors have been
- (a) the soaring price of land, especially where it is short owing to industrial concentration;
- (b) rising materials and labour costs;
- (c) the high interest payable on the capital needed for this purpose;
- (d) the fact that most dwellings are now having to be better in quality, in line with the general rise in living standards.

These again combined in 1966 to send up building costs in the different countries. The High Authority's housing loans, granted on the same favourable terms as in the past, have thus been particularly appreciated by all concerned, in some cases indeed tipping the scale.

473. Up to now, just over one-third of the 103,000 dwellings part-financed by the High Authority have become the property of the miners and steelworkers

living in them. The proportion has shown little change over the last six years (36·5-38·5%), though in Germany (Fed. Rep.) preference seems to be going rather more, in consequence partly of higher building costs and related financial charges and partly of mobility of employment, to dwellings intended for leasing, and in France rather more to those for ultimate owner-occupation; in Luxembourg the latter arrangement has always been preferred.

The High Authority is bearing in mind that, given the sweeping changes now in progress in the production set-up, owner-occupation can sometimes be a handicap to geographical or occupational mobility. But, however that may be, it intends for its part to continue encouraging whatever arrangement may best serve to free the workers from the disadvantage of unduly close interdependence between job and accommodation.

### PROGRESS OF THE SCHEMES

474. Scheme VI, approved in 1965,1) was duly launched in 1966. It is to run from 1966 to 1968, during which period a total of 20m. units of account is to be disbursed in the form of 1% loans from the High Authority's special reserve; these will, as usual, be combined with loans from funds borrowed by it in the Community capital markets, and with other moneys mobilized at its instigation.

Particulars will be found in the Statistical Annex<sup>2</sup>) of the financing operations approved by the High Authority between February 1, 1966, and January 31, 1967.

# Germany (Fed. Rep.)

475. The Ruhr coalowners' federation puts requirements for 1966-67 at 15,000 new dwellings in this coalfield alone, 7,000 of them to be built as a priority measure at sites specially selected to assist the reabsorption of miners who are being obliged to move house in consequence of the reconstruction of the industry. The collieries concerned have undertaken to lend funds of their own for this purpose.

1

Under Scheme VI the High Authority is to set aside DM 6,400,000 from the special reserve for a first series of 1,500 dwellings in the North Rhine/Westphalia coalfield, the loan to be repayable at 1% over 34 years. Two banks in

See Fourteenth General Report, Nos. 413-414.
 See Statistical Annex, Table 55.

the area,1) acting as trustees, will furnish DM 15m. as a 50-year loan at 0.5%, the collieries will come in with their own contributions, and the remainder of the funds required will be made up by mortgage loans.

Also under Scheme VI, the High Authority plans to earmark a second sum towards housing for miners in the German coalfields generally.

476. The steel industry's current housing needs are estimated by the producers' federation at 27,000 dwellings in different parts of the country, half of them rating priority.

The High Authority has approved a first tranche under Scheme VI towards the financing in 1966 and 1967 of dwellings for some 2,000 German steelworkers. The amount committed is DM 11,590,000, to form a 35-year loan at 1%; in addition DM 33,410,000 will be made available out of 5-6% borrowings from various social-insurance groups, arranged through the Wirtschaftsvereinigung Eisen -und Stahlindustrie in co-operation with the Bank für Gemeinwirtschaft. The total of DM 45m. will reach the end borrowers as a 35-year loan at 4.75%, in the form of first mortgages. The rest of the money needed will come from the public purse and from the German steel industry.

## Belgium

477. In 1963 the High Authority decided to make available under Schemes III and IV a total of BF 450m. at 4.75% to the Société Nationale du Logement, Brussels, towards the erection of some 2,400 new dwellings for miners and steelworkers, the Belgian organization contributing an equal amount. Of these, 635 have been completed, 1,244 are building and 134 "in preparation."

Scheme V is also going ahead. The Authority set aside BF 150m. to part-finance approximately 500 dwellings for workers at the new Sidmar steel plant, near Ghent; this project, which is also being carried out by the Société Nationale du Logement, is now in the "preparation" stage.2)

As the funds allocated under Schemes III, IV and V have not yet been all drawn down, the High Authority has not so far made an appropriation under Scheme VI, but it is keeping in touch with the Belgian Government on the subject.

2) Acquisition of sites, drawing-up of plans, etc.

<sup>1)</sup> The Landesbank für Westfalen, Münster, and the Rheinische Girozentrale und Provinzialbank Düsseldorf.

### France

478. Some decrease is now observable in the coalmining industry's housing requirements, particularly of dwellings to be merely rented. The *Charbonnages de France* and the unions are favouring rent-purchase by young miners, as they feel this will make for a stable labour force and afford the men a measure of independence in their daily life.

The High Authority has stated that it will assist building projects in viable coalfields only.

- 479. In response to an application from the Charbonnages de France, endorsed by the Ministries responsible and the trade unions, the High Authority decided to earmark a first FF 3,660,000 from the special reserve under Scheme VI for 1966. Of this, FF 3m. is being lent at 1% for 20 years towards the building of some 300 dwellings, designed for rent-purchase in different coalfields. The remaining FF 660,000 was specially included to enable 50 dwellings to be built in the Montceau-les-Mines area in consideration of the particular hardship which has resulted there from the flood disaster in September 1965¹); this loan, also at 1% but repayable over 30 years, will be followed in 1967 and 1968 by others under the later tranches of Scheme VI.
- 480. The French steel producers' federation estimates that 3,000 new dwellings a year will be needed between 1966 and 1968, to house the industry's labour intake.

The High Authority accordingly decided to make available to the French steel and iron-ore industries under Scheme VI a total of FF 16m., repayable over 20 years at 1%. The first tranche of FF 5,400,000 for 1966 has been disbursed, with two more to come in 1967 and 1968.

With the aid of these funds, approximately 2,000 dwellings will be built, the financing being conducted trough a French organization specializing in this type of operation, the Caisse Foncière de Crédit pour l'Amélioration du Logement, which will relend the High Authority's contribution at 1.75%.

481. The High Authority's housing loans in the case of France usually cover 10-15% of the total building costs. An equal or larger amount is furnished by or through the *Charbonnages de France* and the steel and iron-ore companies, and the remainder of the funds comes from French financing houses<sup>2</sup>) and from the contributions of prospective owner-occupiers.

<sup>1)</sup> See Fourteenth General Report, No. 414.

<sup>2)</sup> E.g. the Crédit Foncier de France and the Crédit Immobilier.

### Italy

482. The Finsider corporation is running a building programme providing for the construction of 12,000 dwellings in all for workers at its member companies' different plants between 1961 and 1970.

The High Authority has part-financed 1,985 of these under Schemes III, IV and V, its contributions being combined with State subsidies and low-interest loans from the companies to ensure that the expense to the occupants is not more than they can afford, and in no case more than 25% of their net income. The position to date is 580 dwellings completed, 275 building and 1,130 "in preparation."

Finsider plans to build a further 1,000 dwellings in 1967 and 1968. The High Authority is now considering how it can assist under Scheme VI in order to reduce the cost to the companies as far as possible.

The High Authority also contributed through Schemes III, IV and V to building projects by Assider and Industrie Siderurgiche Associate on behalf of their workers.

The loans are granted for 20 years at 4·15% through the *Banca Nazionale del Lavoro*, in amounts covering not more than half the building costs involved. Not all the funds set aside have, however, been utilized, owing to financing difficulties encountered by some firms which have been hard hit by the recent state of the steel market.

## Luxembourg

483. The last of the Scheme V appropriation for Luxembourg was used up in the period under review. The High Authority is now preparing operations under Scheme VI for 1967 and 1968.

### Netherlands

484. The funds allotted to the Netherlands under Scheme V, now all drawn down, have part-financed 710 dwellings, of which 419 have been completed and 291 are building.

The High Authority is currently discussing with the coalowners' federation and the miners' unions whether to launch another series of operations in 1967-68. The steel industry calculates that 500 new dwellings will be needed in 1967 and another 500 in 1968, in connection with capital projects planned, and the High Authority is examining what can be done in this direction.

### EXPERIENCE GAINED FROM THE SPECIAL SCHEME

As it has repeatedly emphasized, the High Authority is particularly keen to work out constructive, original ways of dealing with one of the big problems of housing policy, namely how to ensure really good-quality dwellings fitting into well-laid-out complexes all of whose communal facilities and amenities are timed to be completed together.1)

With this aim, or rather this set of interrelated aims, in view, it included under Scheme V a special tranche to be devoted to the building of model "neighbourhoods" in five of the six countries.2) Operations are now under way in Germany (Fed. Rep.), France and the Netherlands, and will start in 1967 in Belgium and Italy: 2,350 dwellings are to be built in all. (see table 56 of the Statistical Annex)

The High Authority has drawn up an interim report summarizing the points of general interest noted in the preparatory stage. This is to be issued shortly, accompanied by plans, sketches and photographs: it records the various difficulties encountered, and the often enterprising and unconventional ways in which they have been tackled.

- As regards the actual dwellings, some original ideas for raising the standard of accommodation proved impracticable, as being either contrary to regulations in some way or unduly costly. "Popular housing" is after all intended for people of limited means, who cannot afford to pay very much rent, so that, even with subsidies from public funds, there is only a certain amount of scope for design and quality just as only a certain amount of money can be spent on the project; in addition, for the project to qualify for subsidization at all the architect has to comply strictly with the technical standards imposed. Consequently, several excellent plans could be carried out only in part, and others had to be tinkered with in various respects, often at the expense of either the internal or the external equipment or of the appearance generally.
- 487. As regards the communal facilities-schools, social centres, sports fields and playgrounds, post offices and so on—a good deal of delay tended to be caused in the launching of operations by the large number of different housing associations and building societies, different administrative regulations, different financing arrangements, and also different designs and layouts involved. This was

<sup>1)</sup> See Fourteenth General Report, Nos. 416 and 422; Thirteenth General Report, Nos. 458 and

<sup>464;</sup> Twelfth General Report, No. 467; Eleventh General Report, No. 548.

2) See Programme Spécial de Constructions dans le Cadre du Cinquième Programme d'Aide Financière de la C.E.C.A.: Directives Générales (Publications Departments of the European Communities, Doc. No. 8823/2/62/1, July 1962).

particularly the case in those countries where the channels and procedures for obtaining official authorization to proceed with this kind of project are strictly prescribed by law: the chairmen of the national committees had not infrequently to make special approaches to the Ministries responsible to expedite matters.

Again, it sometimes happened that, for technical budgeting reasons, the funds required to go ahead and build were not to hand at the right moment, with the result that some localities were unable to fulfil their legal obligations in this connection.

Finally, the provision of shops in time to serve the new neighbourhood proved a special difficulty: since it is impossible to be sure what the business prospects are until the neighbourhood is already inhabited, hardly any tradesman is prepared to take such premises in advance on speculation. To overcome this problem it would appear essential to work out an overall plan ensuring a smoothly-operating local "market" with most of the main trades represented, yet at the same time not interfering unduly with individual free enterprise.

- 488. Notwithstanding these difficulties, the experiment is proving valuable in a number of respects. The average standard of accommodation has been improved from a variety of angles: thus
- (a) all the dwellings have central heating, so that full use can be made of every room all the year round;
- (b) most have a second, general-purposes reception room, allowing the family to sit together or apart, as they prefer;
- (c) special care has been taken with regard to soundproofing, a point greatly appreciated by the families of workers on night shift.

The closest attention has also been given to general layout, including aspects as insolation, remoteness from traffic noises, separate pedestrian and motor precincts, green strips and proper spacing of the houses, so as to foster the development of a happy community. It is a rule wherever possible to put up communal radio and television aerials, in order not to let the appearance of the complex be spoilt by the familiar unpleasing "wire jungle." Each dwelling has its garage, or at least a car park close at hand.

489. The arrangements for ensuring close co-operation among all those with a part to play in the building of the complexes have functioned most successfully.¹) The national and local committees have built up a fund of valuable experience:

<sup>1)</sup> See Fourteenth General Report, No. 416.

all their members have worked hard and well, and it is much to be hoped that similar efforts will go into the preparation of the regular High Authority-aided schemes.

# RECAPITULATION OF THE HIGH AUTHORITY'S OPERATIONS TO DATE

490. From the time when it first began providing assistance for the building of houses for E.C.S.C. workers up to January 31, 1967, the High Authority contributed financially, under Experimental Schemes I and II and the six major loan-aided schemes, to the construction of 102,590 dwellings, of which 64,549 were to be rented and 38,041 rent-purchased. At the latter date, 85,995 of these were completed, 10,462 building and 6,133 "in preparation" (see Table 77).

TABLE 77

Operational position of Experimental Schemes I and II and Loan-Aided Schemes I-VI

at January 31, 1967

Country	No. of dwellings financed	of which:				
Country		in preparation	building	completed		
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	72,424 5,735 15,286 5,287 670 3,188	3,062 73 1,611 887 4 496	5,911 2,023 1,958 290 39 241	63,451 3,639 11,717 4,110 627 2,451		
Community	102,590	6,133	10,462	85,995		

491. At the same date, funds made available for the building of these 102,590 dwellings—from the High Authority's own resources, loans contracted by it and additional moneys mobilized at its instigation<sup>1</sup>)—totalled the equivalent of 240,480,000 units of account (see Table 78).

<sup>1)</sup> See Fourteenth General Report, No. 418.

TABLE 78

# Financial position of Experimental Schemes I and II and Loan-Aided Schemes I-VI

at January 31, 1967

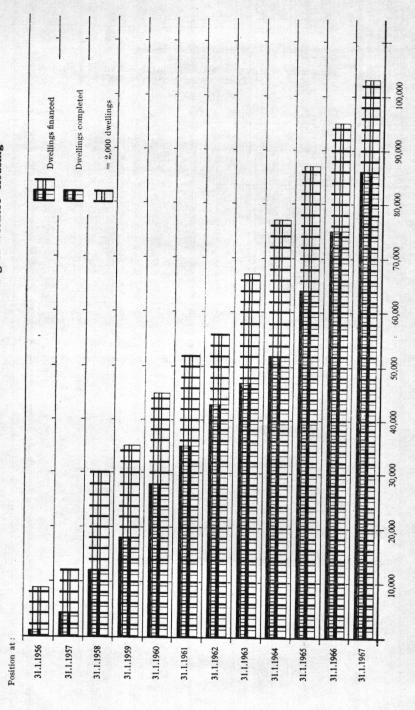
(\$'000,000 dollar units of account)

	High Authority advance		Additional funds mobilized	Total amount	Funds from other sources (housing	Total cost of
	from its own resources	from borrowings	at High Au hority instigation	advanced	associations, etc)	dwellings built
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands Community	42.70 4,60 24.04 6.54 1.75 4.40	13.24 19,26 8.04 1.70 2.14 44.38	96.68 2.30 5.06 2.06 — 5.97	152.62 26.16 29.10 16.64 3.45 12.51	602.86 26.68 114.58 25.21 5.19 8.43	755.48 52.84 143.68 41.85 8.64 20.94

Graph No. 16 shows in diagram form the High Authority's work to date in the housing field (dwellings financed and dwellings completed only).

GRAPH No. 16

The High Authority's Contribution to the Financing of Workers' Housing



# Section 7: Industrial Medicine, Health and Safety1)

GENERAL CONSPECTUS OF THE HIGH AUTHORITY'S ACTIVITIES

492. The High Authority's work in connection with industrial medicine, health and safety is conducted by means which it has progressively evolved and developed over the years with a careful eye on practical conditions in the mining and iron and steel industries, in accordance with the duties imposed on it by Articles 3, 46 and 55 of the Treaty.<sup>2</sup>)

Its research promotion activities have been steadily growing since 1954, one of its most fundamental principles being that the "improvement of living and working conditions for the labour force" which is among the main objects of E.C.S.C. depends quite as much on improved health and safety standards as on technical and economic progress.

The High Authority occasionally assists individual research projects, but for the sake of efficient and concentrated promotion it prefers as far as possible to organize large-scale, comprehensive programmes. In doing so it works in consultation with all those immediately concerned, and in particular with the workers' representatives, who help in drawing up the programmes and selecting the projects to be included.

The research results are disseminated in the first instance *via* these same channels of consultation and co-operation, but also in published form and through teach-ins. Also, the High Authority's contracts with research establishments and individual researchers contain specific provisions relating to patenting and publicization, to ensure that the results will be available to all.

493. In 1966 the High Authority went ahead with the following programmes already in hand<sup>3</sup>):

<sup>(1</sup> Tables 57-62 of the Statistical Annex show the trends in accident rates in the E.C.S.C. industries, with the latest known figures, and in some cases with explanatory notes. A study was made under the High Authority's second research programme on human factors and safety of the factors liable to produce distortions in accident statistics, especially in the case of the coal industry: the findings are to be published shortly, and will furnish a considerable corpus of additional data which will be turned over to the Statistical Office of the Communities and the Mines Safety Commission.

Tables 63-67 of the Annex give for the first time a picture of the incidence of occupational disease in the period 1961-64 (accompanied by a note by the Statistical Office stating that the figures, obtained from national sources, are not comparable). The figures are for diseases notified or rated as entitling the victim to compensation: they are to be referred for the opinion of the consultative committees concerned, which will study the differences emerging between country and country.

emerging between country and country.

2) See also E.C.S.C. Bulletin No. 60 (available in English), which contains a detailed account of the High Authority's research promotion policy in these fields.

3) Table 68 of the Statistical Annex shows the overall position as at December 31, 1966, regarding High Authority appropriations and commitments under the different research programmes relating to workers' wellbeing.

- (1) industrial medicine: programme of physiopathological and clinical research (1964-69) and programme on traumatology and rehabilitation (1964-68);
- (2) industrial health: second programme on dust control in mines (1965-68), and on the steel side, following completion of the first programme, miscellaneous projects in connection with converter "brown smoke":
- (3) industrial physiology and psychology: second programme on human factors and safety (1965-69) and first programme on ergonomics (1965-69).

During the period under review it also approved the launching of a further medical programme, this time on the treatment and rehabilitation of burns cases (1965-69). In addition, another new programme, on methods of combating air pollution caused by steel plants (1966-71, High Authority contribution 4m. units of account), 1) has now passed through practically all the preliminary stages, the Consultative Committee's view having been obtained on January 10, 1967.

494. The High Authority is meantime continuing to work up co-operation in all these fields with research circles, industry and the Governments.

The intensification of co-operation with industry is a development of considerable value. In the early days the employers and workers were consulted practically only with reference to the general aims: now they are also associated with the execution of the research programmes, the pooling of experience and the evaluation of results. Their experts, knowing health and safety to be Community issues, provide the High Authority with particulars needed to enable it to keep in touch with the movement of industry's needs and adjust its own promotion activities accordingly. This is especially the case with regard to information work among miners and steelworkers, which is being increasingly carried on by methods amounting as much to training as to information.

This ongoing co-operation has in addition encouraged the employers' and workers' associations to take an active interest in new approaches such as the establishment of ergonomic departments.

### MEDICINE

# Occupational Physiopathology

495. On March 30, 1966, the High Authority approved assistance for the nine projects making up the last leg of the programme of physiopathological and clinical research launched in 1964. The programme, which is costing the High

<sup>1)</sup> See Fourteenth General Report, No. 438.

Authority 3m. units of account, comprises altogether 90 projects, all of them by now well under way.1) 18 meetings were held in 1966 for the purpose of enabling researchers in the different sciences involved to co-ordinate their activities.

The new projects include in particular

- further fundamental research on substances inhibiting the ill-effects of (a) silica (centres in several Community countries have now developed synthetic polymers for clinical use);
- fuller investigation of the exact processes by which quartz particles attack (b) the respiratory passages;
- isolation of substances acting on the influenza virus and the pathological (c) secretions of the bronchi, and thus improving the body's defences against the dusts inhaled:
- means of combating the ill-effects of fumes produced in welding. (d)
- A symposium on bronchitis was held at Stresa on April 21-22, 1966. 496. conclusions drawn from the High Authority's research were that,
- in the matter of acute attacks of bronchitis, there are now prospects of (a) evolving new ways of preventing respiratory insufficiency;
- a number of new weapons have been added to the armoury for dealing (b) with chronic bronchitis:
- the ultimate aims of bronchitis research have been clarified. (c)

The working party concerned has finalized a Community questionnaire to be used in conducting an epidemiological survey on chronic bronchitis in the six countries.2)

## Traumatology and Rehabilitation (Traumata and Burns)

The High Authority on June 22, 1966, approved a grant in respect of 30 projects under the traumatology and rehabilitation programme, aid to which is to total 1,800,000 units of account.3) The projects are now in hand, supervised and co-ordinated by specialist working parties.

<sup>1)</sup> See Fourteenth General Report, Nos. 427-428.

<sup>2)</sup> Ibid., No. 429.

<sup>2)</sup> Ibid., No. 432, and Thirteenth General Report, No. 472.

### Fields covered include

- (a) certain specific aspects of the knitting of limb fractures;
- (b) equipment with prostheses of persons having lost an upper or lower limb;
- (c) functional retraining of persons having lost an arm, and factors likely to assist their occupational rehabilitation;
- (d) aspects of the sequelae of cranial injuries, and factors likely to assist the recovery and social and occupational reabsorption of persons so injured;
- (e) systematic examination of the cervical column in cases of cranial injury;
- (f) effects of injuries to the spinal cord resulting from fracture of the vertebral column;
- (g) ways of improving protection against spinal injuries to heavy-duty workers, and experiments with prostheses for such workers' use.
- 498. The new research programme devoted entirely to the treatment and rehabilitation of burns cases was also launched as planned, the High Authority approving on May 18 a grant of 1,500,000 units of account. The research is to be partly clinical, on such matters as the patient's diet, conditions liable to lead to infection and therapeutic control of diuresis, and partly fundamental, notably in connection with the repair of skin lesions by means of grafts.

Individual projects are shortly to be put up to tender in the *Official Gazette of the Communities*, while at the same time 21 specialized research centres have been asked to prepare their contributions.

#### HEALTH

## Coalmining and Iron-Ore Industries

499. Work went ahead steadily under the second programme on dust control in mines, launched in 1964 with a grant of 6m. units of account. As will be recalled, the first leg consisted of 67 projects undertaken by 12 centres specializing in mining research, and another project was begun in 1965 on the protective properties of hygroscopic salt pastes.<sup>2</sup>) In 1966 the High Authority commissioned a further project on factors influencing the genesis and progress of pneumoconiosis, to be carried out by the institute of occupational medicine of the Uni-

<sup>2</sup>) *Ibid.*, Nos. 435-436.

<sup>1)</sup> See Fourteenth General Report, No. 434.

versity of Cagliari; this will enable the High Authority-aided research which has been going on in different E.C.S.C. coalfields since 1957 to be extended to include the special dust conditions encountered in the mines at Sulcis.

- 500. Although the present programme is still in process of development, exploitable results are already forthcoming in all the fields covered, namely
- (a) adaptation of various water-infusion techniques used in coal-winning to different conditions;
- (b) improvements to underground machinery (development of wet and dry de-dusting devices, etc.);
- (c) improvements in caving and stowing methods;
- (d) dust prevention and suppression in iron-ore mines (research conducted more particularly in Germany (Fed. Rep.) and Italy);
- (e) development (in France) of an independently and continuously operating instrument for recording dust concentrations, which was selected by the Working Party on Dust Measurement as the control apparatus for the fresh series of comparative recordings decided on in 1966;
- (f) total impact of dust exposure on the organism.
- 501. These various research activities have also thrown up many points which are of the greatest interest, even though they cannot properly rate as final results. As it was felt that in future the work should be co-ordinated so as to take more direct account of interim observations of this kind, the High Authority decided to arrange meetings of experts to orient further researches; this should save time and trouble and ensure better consistency from the start as among the efforts of the different researchers. One such meeting, held in July 1966, reviewed recent progress in water-infusion techniques and indicated what lines of research could now usefully be followed in this connection, and a series of similar occasions will be organized with reference to the other main items of dust control research.

### INDUSTRIAL PHYSIOLOGY AND PSYCHOLOGY

502. The aims of the two programmes coming under this head, on human factors affecting safety and on ergonomics, were outlined in last year's Report, 1) and details were given of the work in progress. 2)

<sup>1)</sup> See Fourteenth General Report, No. 425.

<sup>2)</sup> Ibid., Nos. 439-444.

This continues to proceed satisfactorily, with particularly active co-operation from industry, in which the research is arousing much interest. Appreciative comment has encouraged the High Authority go ahead with vigour; on the basis of discussions with the employers and workers it is hoped to settle what studies remain to be carried out under the two programmes (which were adopted in 1964) and agree the extra financing arrangements needed to complete the ergonomic research, the appropriation for which will be fully drawn down during 1967.<sup>1</sup>)

## Human Factors and Safety

503. As was noted last year, some 20 projects are in hand. Researchers met at a study session in October 1966 to compare notes on their work with regard to personnel selection and training, the use and appropriateness of individual protective equipment, perception of signals, and the effects of different work loads.

Co-ordinated research is also in progress on the relation between safety and the environmental/organizational pattern, parallel with the activities of the Steel Industry Safety Commission's working party on accident-prevention arrangements.

A start was made in 1966 on disseminating the results of E.C.S.C. research concerning safety. Much has been learnt which sheds light on how accidents happen: the conclusions relate *inter alia* to

- (a) the risks of unexpected or unaccustomed action following hitches in production processes, and methods of preventing accidents from resulting:
- (b) the influence of environmental factors (temperature, degree of illumination, noise);
- (c) improvements to certain remote-monitoring systems.

## Ergonomics

504. Work is well advanced on the 30-odd projects referred to in last year's Report.<sup>2</sup>) Aspects dealt with include work loads, noise, vibration, work postures, heat, mental fatigue, visual perception and mental activities, some of the studies

<sup>1)</sup> See Statistical Annex, Table 68.

<sup>2)</sup> See Fourteenth General Report, No. 442.

being carried out as full-scale practical experiments under actual conditions on the spot. Two meetings were held in November 1966 for researchers to discuss their progress to date.

To quote a few examples, projects are in hand on the improvement of seats of transport and handling machines, with due regard to the conditions in which they are operated (bumpy ground, weight of the objects moved, etc.); of ear shields, to make them less trying to wear, particularly on jobs where it is important to take in instructions and signals correctly; of wrong postures, which can be corrected by job adaptation; and of visibility for instance in quality control work, the object being to reduce dazzle and so lessen the strain involved.

The privately-arranged portion of the programme includes a set of studies on mental stress in the superintendence of automated plant, which are being conducted at three research centres in Germany (Fed. Rep.), France and the Netherlands; two further sets are in preparation on continuous operation in the iron and steel industry and on anti-heat clothing, and it is also planned to undertake the compilation of material concerning ageing.

The researchers will make use of the documentation assembled by the Centre of Ergonomic Studies which was recently set up with High Authority assistance. E.C.S.C. ergonomic research is at present being carried on by teams from the German, French and Dutch coal industries and the Dutch steel industry: the German and French steel industries have also evinced interest and are keeping in touch with developments, and the High Authority hopes they will decide to join in the work too.

Over and above its primary object of enabling practical proposals to be drawn up for job adaptation in certain key connections, this research will be effected in genuine co-operation among the ergonomic study teams now gradually being built up in Community coal and steel enterprises.

### SAFETY

# Work of the Steel Industry Safety Commission

505. The work of the Steel Industry Safety Commission and its seven specialist working parties went ahead smoothly in 1966.1)

The Working Party on Accident Prevention Arrangements submitted to the plenary session of the Commission on November 30, 1966—ahead of schedule—its findings on the principles of accident prevention in enterprises; the

<sup>1)</sup> See Fourteenth General Report, No. 450.

Commission adopted these with a rider to the effect that, in view of the importance attaching to enterprises' policy in this matter, the principles deserved to be publicized on the widest possible scale, so that they could be put into practice throughout the Community. They are, incidentally, relevant for the purposes of all other industries as well as steel. The Commission will shortly be stating its views as to the modes of publicization which should be adopted to ensure that they reach as wide a circle as possible. As they are of such basic importance, they are given in full below.1)

The other six working parties were chiefly occupied during the year in assembling information, preparing memoranda and reports, and similar prepara-Their findings will not start to appear until 1967.

An information session was held on November 29 and 30, 1966, for the Commission and working parties, at which the regular British and Swedish observers were also present. As was indicated in last year's Report would be the

<sup>1) &</sup>quot;Accident Prevention
"Experience has shown that effective accident prevention demands a number of practical arrangements on the part of the enterprises themselves. The following ten general principles are considered by the Working Party to be basic to effective safety promotion in any enterprise.

<sup>&</sup>quot; 1. Top management must regard promotion of occupational safety and health as an essential part of its functions.

<sup>&</sup>quot;2. It must communicate this approach, preferably in writing, to all personnel, in the form of clearly-defined principles.

<sup>3.</sup> Safety and health promotion activities must be indissociably integrated into production operations. The mode of integration must be clearly defined for all departments and at all levels.

<sup>&</sup>quot;4. For the purposes of all accident prevention measures, it is desirable that the management and individual departments of the enterprise should be able to consult a special safety department coming directly under the management's authority, though this must not cause them to feel that they themselves are dispensed from their fundamental obligations in this respect.

<sup>5.</sup> Every member of the personnel, of whatever grade, is thus responsible for accident prevention in his particular sector, and answerable therefor to his superiors. Consequently, personnel assessment must take account of safety-mindedness alongside other points rating approval.

<sup>&</sup>quot; 6. All accident prevention arrangements must be co-ordinated as part of a consistent safety programme. Regular progress reports must be submitted to enable the pro-

gramme to be constantly adjusted in line with requirements.

7. Opinions should be sought on the programme from the workers' representatives, whose co-operation in all matters of occupational safety is of the utmost importance.

<sup>&</sup>quot;8. The programme must be based not only on evaluation of the records of accidents which have actually occurred, but also on a thorough study in advance of the hazards involved in each sector of operations.

<sup>&</sup>quot; 9. All safety measures comprised in the programme must go through a series of stages, viz. preparation, application, checking for proper observance, and evaluation of results.

<sup>&</sup>quot;10. In addition to the technical and organizational aspects of accident prevention, the provision of safety training for all grades is of the highest importance. Efforts should be made to have safety training given as an integral part of occupational training itself. Where this is not done, the enterprise's safety programme should include supplementary training in this connection."

case, reports were submitted describing the safety position in each member country's steel industry; the general debate which followed culminated in the adoption of various conclusions concerning accident prevention.

### DISSEMINATION OF RESEARCH RESULTS

## Industrial Medicine, Health and Safety

506. The High Authority continued its dissemination and information work, adjusting its arrangements as it went along in the light of experience of practical needs. The sheer scale of the programmes launched in 1965 and 1966 making it necessary to remodel the documentation to some extent in a form more convenient for the recipients' purposes, the High Authority decided to publish information on the state of research not, as heretofore, in single two-yearly volumes, but in annual sets of several separate brochures each devoted to a particular field, the first set to describe the position as at the end of 1966.

Continuing efforts were also made to improve efficiency of distribution in other respects.

## Channelling of Information to Direct Users

507. Special reprints of 72 articles published by researchers were issued in 1966 to 600 works medical officers and others directly concerned with the application of research results in industry.

Users having asked to be supplied more quickly with documentation in their particular language and particular line of work, it has come to be felt that the High Authority should set up a centre for the specific purpose of keeping all works medical officers in the Community abreast of the results of E.C.S.C.-sponsored research as these become available.

The documentary bulletin on pneumoconiosis, which goes to 1,900 users, continued to appear regularly in 1966 in German, French and Italian, and a similar bulletin on burns is now also being issued. These provide a conspectus of material published not only in connection with E.C.S.C. research but on work everywhere in the fields concerned.

The High Authority is also helping with the "descriptive notices" on occupational diseases which the E.E.C. Commission is bringing out: the notice on silicosis is currently being prepared with the aid of European experts.

Papers were read at the International Congress of Occupational Medicine which met in Vienna on September 19-24, 1966, concerning the High Authority's approach in the different research areas pertaining to occupational medicine. The High Authority was represented in 1966 at 14 conferences and meetings on matters relating to industrial medicine, health and safety.

Discussions were arranged between chief medical officers of large enterprises on subjects of practical interest. One subject which was gone into in detail was the medical examination of personnel: the discussions having brought to light considerable differences in the methods employed and the intervals at which examinations are held, it is now planned to arrange meetings in the individual countries to ascertain medical officers' views and work out ways of simplifying and improving the systems.

The safety engineers, medical officers and industrial psychologists belonging to the working party on Ergonomic and Safety Information met to discuss the results of the first research programme on human factors and safety.

With regard to industrial health and safety the High Authority also continued its dissemination of information  $vi\hat{a}$  both the spoken and the written word. As in the past, it regularly issued special reprints of articles published on Community-aided research. Other documents brought out included in particular the summary report on the results of the first programme on dust prevention and suppression in mines. 1)

In March 1966 the High Authority organized a restricted meeting of experts in the Campine coalfield of Belgium on the latest developments in dust control by means of water infusion in the seam.

A High Authority memorandum on accident prevention methods employed in the Swedish steel industry was circulated to members of the committees and working parties dealing with aspects of industrial safety, ergonomics and psychology; the Steel Industry Safety Commission is now considering how best to arrange for this to be issued to a wider public.

# Channelling of Information to Employers' and Workers' Organizations

508. The High Authority continued its various activities designed to keep both sides of industry informed of developments.<sup>2</sup>)

<sup>1)</sup> Publications Departments of the European Communities Doc. No. 3890/2/66/1.
2) See Fourteenth General Report, No. 453.

Four teach-ins for workers in the E.C.S.C. industries were held in the period under review, respectively at Hagen, Germany (Fed. Rep.), at Liège, Belgium, at Aosta, Italy, and at Esch-sur-Alzette, Luxembourg. Thanks to the experience gained in the organizing of such occasions since the first in 1964, the subjects dealt with and the way in which they were presented had considerable interest and appeal for the workers, resulting in valuable and constructive discussions between them and the researchers. The workers were particularly interested to hear about advances in medical and technical methods of pneumoconiosis prevention, and expressed approval of the fresh steps being taken to ensure healthier conditions in mechanized workings below ground at the mines.

With regard to accident hazards, the focus at the teach-ins was on causes and on the important part that top management, executive and supervisory personnel, the specialized departments and the workers themselves all had to play in accident prevention. Particular note was taken of the emphasis on the fact that safe actions and reactions are primarily a matter of safety-mindedness.

Appreciation was expressed of the value and importance of rehabilitation work, and special stress laid on the need for co-operation among all those concerned in it.

Accounts of the research on industrial physiology and psychology were heard with interest; it is felt that job analysis, especially in those sectors which are in process of technological change, affords means of organizing duties in such a way as to lessen the amount of physical effort involved while at the same time making for efficiency in production.

The proceedings of each teach-in are published in full and given a wide circulation, thereby ensuring that the impact is not lost with the passage of time.

The High Authority has been able to ascertain that the result has been to set going trains of thought favourable to safety-mindedness: new ideas are being examined and attention given to the possibilities for applying general concepts to particular situations.

Meantime the High Authority also went ahead with the compiling of documentation specially for issue to workers' organizations. Popular brochures have been prepared by specialists in this type of writing on subjects of pneumoconiosis detection and treatment, work at high temperatures and noise abatement: extra care has been taken in phrasing and presentation to make the information contained perfectly clear to the reader, and the drafts have been checked with works medical officers, health and safety engineers and others directly concerned, and with the workers' own representatives, to see that they really are so written as to produce the desired effect. The first brochure is now ready.

### MINES SAFETY COMMISSION

- 509. Three plenary sessions were held in 1966, at which the Commission
- (1) approved various documents by its working parties on subjects connected with the technical side and with human factors;
- (2) went into the details of a number of mining accidents;
- (3) finalized and adopted its Third Report, for the years 1961-65, together with a Summary Report;
- (4) received accounts of the current state of work in hand. Some brief particulars follow.

# Documents Approved

### 510. Technical aspects

The Commission approved

- (a) the final report on High Authority-aided research to develop a simple method of testing the heat resistance of rescue men and trainee rescuers;
- (b) guidelines on practical training in the building of plaster stoppings;
- (c) a report on improvements to contact arrangements between operational headquarters and rescue teams;
- (d) a report on rescue arrangements in 1963-64.

## Human factors

The Commission approved

- (e) a report and recommendations on the psychological and sociological aspects of safety policy;
- (f) a report and recommendations on the influence of piece rates on safety in coalmines.

## Accidents Studied

511. The Commission studied the circumstances and causes of the group accidents (involving more than five persons killed or seriously injured) which had occurred in the Community and Britain in 1965 and 1966.¹) These were

<sup>1)</sup> It is the Commission's practice to include Britain in its surveys. British observers attend its proceedings.

- the firedamp explosion at Pit 7, Lens-Liévin, France, on February 2, 1965
   killed);
- (2) the firedamp explosion at Cambrian Colliery, Britain, on May 17, 1965 (31 killed);
- (3) the firedamp explosion at Mont-Cenis Colliery, Germany (Fed. Rep.), on July 22, 1965 (9 killed);
- (4) the firedamp and dust explosion at La Tronquié Colliery, Carmaux, France, on November 24, 1965 (12 killed);
- (5) the firedamp explosion at Rossenray Colliery, Germany (Fed. Rep.), on February 16, 1966 (16 killed);
- (6) the dust explosion at Unser Fritz Colliery, Germany (Fed. Rep.), on June 30, 1966 (7 killed).

Four of these explosions were due to sparking. In at least two human error was shown to have been mainly to blame.

# Third Report of the Commission

512. At its session on November 4, 1966, the Commission adopted the Third Report on its activities in 1961-65.1)

At the suggestion of the Restricted Committee, a Summary Report was also drawn up giving the gist of the main Report (which runs to several hundred pages) divided into three sections, on the work of the Commission, statistics, and safety developments.<sup>2</sup>)

Concerning the Commission's work, the Summary Report concisely outlines the initial basis, the means employed, the conclusions reached and the problems still to be tackled. It is thus a handy compendium of accurate information on the safety problems which have been or are being jointly studied at Community level.

The statistics for fatalities and serious injuries during the last eight years are recapitulated in a series of new graphs and diagrams, with notes in which it is sought to trace certain trends in the movement of the accident rate and to analyse these in the light of technical and economic developments during the period reviewed.

Now printing.
 Publications Departments of the European Communities Doc. No. 13047/2/66/1.

With regard to safety, the Report records that most countries are engaged in amending their regulations to bring them into line with the rapid changes going on in mining technology. The new regulations tally a good deal more closely as between country and country than formerly, and incorporate the bulk of the recommendations put forward by the Commission and the earlier Conference on Safety in Coalmines. Of 61 Commission recommendations issued between 1961 and 1965, 51 (= 84%) have been adopted by all the producer countries; the remaining ten, however (relating to human factors), have not.

The Summary Report was approved by the Commission on November 4, and was forwarded in December to the High Authority and the Council of Ministers.

# Work in Hand and in Preparation

513. The Commission's working parties and sub-committees continued their studies in connection with fires and underground combustion, rescue arrangements, electricity, and winding ropes and shaft guides. Particulars are given in the Third Report and Summary Report just referred to.

Meantime the working party on Flammable Dusts, after lengthy preparations, fot under way in 1966 with a study on means of preventing dust explosions from propagating. Currently in preparation are a programme taking into account the recent extension of the Commission's jurisdiction to include occupational health and, in particular, dust control, 1) and a study on comparability of statistics which the Commission has decided to have carried out.

<sup>1)</sup> See Fourteenth General Report, No. 449.

## FINANCIAL ANNEX

This year's Financial Annex comprises only the two tables for the loans raised and granted by the High Authority up to December 31, 1966.

In addition to its General Report the High Authority each year publishes

- (a) a report on administrative expenses (under Article 17 of the Treaty);
- (b) estimates of administrative expenses (under Article 78 of the Treaty);
- (c) the report of the Official Auditor (under Article 78 of the Treaty).

In accordance with a procedure introduced at the request of the European Parliament, the High Authority also submits the Community Budget, containing particulars of the implementation of the previous year's estimates, together with the estimates for the year ahead.

Lastly, the High Authority describes its own financial activities in the general statement on the Community's financial position and in the financial report.

 ${\it TABLE \ I}$  Borrowings of the High Authority

Amount outstanding as at	(equivalent in dollar units of account		227, 750, 000	109, 675, 516 72, 000, 000	44, 230, 939
Amount out	(equi	68, 900, 000 17, 400, 000 23, 350, 000 25, 000, 000 30, 000, 000 15, 000, 000	8,442,425 483,091 25,000,000 7,500,000 37,500,000 5,750,000	24,000,000 24,000,000 24,000,000	13, 812, 155 6, 906, 077 1, 392, 265 1, 876, 829 435, 359 6, 906, 077 11, 049, 724
	equivalent in dollar units of account		310, 000, 000	113,994,362	51,864,641
Initial amount	equiva dollar units	100,000,000 35,000,000 50,000,000 35,000,000 25,000,000 30,000,000 15,000,000	12,500,000 744,362 25,000,000 25,000,000 7,500,000 37,500,000 5,750,000	24,000,000 24,000,000 24,000,000	2, 762, 431 13, 812, 155 6, 606, 077 1, 657, 459 5, 524, 862 2, 762, 431 483, 425 6, 906, 077 11, 049, 724
I	in currency concerned	100,000,000 35,000,000 56,000,000 35,000,000 25,000,000 16,000,000 20,000,000	50,000,000 2,977,450 100,000,000 100,000,000 30,000,000 150,000,000 23,000,000	15,000,000,000 15,000,000,000 15,000,000,000	10,000,000 25,000,000 6,000,000 10,000,000 10,000,000 1,750,000 40,000,000
		ns\$	DM	ပ္	Ĕ
£	(years)		25 20 11 15 12 18	20 20 20 20	20 20 20 20 20 20 20 20
Interest	p.a.	37/8 $5.51/2$ $44/2-5$ $43/4-53/8$ $5/4$ $6/4$ $61/4$ $61/2$	8 4 10 10 10 10 10 10 10 10 10 10 10 10 10	$5^{1}/_{2}$ 6	14 4 4 4 4 4 4 5 5 5 5 6 6 6 6 6 6 6 6 6
	Year	1954 1957 1960 1960 1962 1966 1966	1955 1957 1964 1964 1965 1965	1963 1966 1966	1961 1961 1962 1962 1963 1964 1964

30,382,454	20,867,541	· · · · · · · · · · · · · · · · · · ·	19,590,710	20,000,000	15,251,600	559,748,760
•	7,146,418	1, 701, 145 1, 945, 557 1, 944, 008 6, 000, 000 5, 000, 000	3,000,000		2,956,000 295,600 6,000,000 6,000,000	
30,382,454	737 950		20,100,000	20,000,000	16,400,000	662, 478, 707
	11, 434, 269 2, 058, 168 523, 690 13, 721, 123	2,000,000 2,000,000 2,000,000 6,000,000 5,000,000	3,000,000	,	4,000,000 400,000 6,000,000 6,000,000	
150,000,000	50,000,000 9,000,000 2,290,000 60,000,000	5,000,000 100,000,000 100,000,000 100,000,0	150,000,000	20,000,000	200,000,000 20,000,000 300,000,000 300,000,000	
FF.	SF	L		u.a.¹)	BF	
20	18 5 5 18	25 25 25 25 25 25 25 25 25 25 25 25 25 2	20	50	. 25 25 25 25 25 25 25 25 25 25 25 25 25	as a
5	$4^{1/4}$ $5^{1/4}$ $4^{1/2}$ $4^{1/2}$	2 5 7 7 8 4 7 7 8 4 7 7 7 8 7 7 7 8 7 7 7 7	53/8	53/4	2/10 2/1/2 2/1/2	
1964	. 1956 1961 1961 1962	1957 1957 1961 1961 1962	1964	1966	1957 1957 1962 1963	

1) The present value of the unit of account is that of the unit of account of the now defunct European Payments Union as laid down in Article 26,2 of the E.P.U. Charter, viz. 0.88867088 grammes of fine gold.

TABLE 2

Breakdown of Loans and Guarantees Granted as at December 31, 1966, by Types of Investment and by Countries

(Initial amounts)

('000,000 dollar units of account)

				1 000	,000 aunar an	us oj account)
		Loans				
	from borrowed funds	from the High Authority's own resources	Total	Guarantees	Total of loans and guarantees	%
A. Type of investment Coalmining industry¹) Iron-ore mines²) Iron and steel industry Housing for miners and steelworkers Industrial redevelopment Readaptation Research (experimental housing schemes) Other projects Total	221.05 30.25 319.64 34.39 40.60	72.0 6.18 5.84 2.96 0.72 87.70	221.05 30.25 319.64 116.39 46.78 5.84 2.96 0.72 743.63		221.05 30.25 366.35 116.39 46.78 6.14 2.96 0.72	27.96 3.83 46.33 14.72 5.92 0.78 0.37 0.09
B. Geographical distribution Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands  Community	327.12 54.73 109.58 152.43 2.70 9.37 655.93	46.17 4.0 19.83 7.44 2.40 7.86	373.29 58.73 129.41 159.87 5.10 17.23	35.0 	408.29 58.73 141.12 160.17 5.10 17.23	51·64 7·43 17·85 20·26 0·64 2·18

<sup>1)</sup> Including coking-plants and thermal power-stations.

s) Including sintering plants.

# STATISTICAL ANNEX

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# TABLE 1

# Community Production of Hard-Coal

(by countries and coalfields)

"000 metric tons)

Ruhr 7, 284- Aachen 7, 754 Lower Saxony 1, 918 1, 918 1, 918		1953	1957	1960	1961	1962	1963	1964	1965	19661)
-	114,417 6,439 2,422 16,235	115,551 6,588 2,333 16,418	123,209 7,619 2,328 16,455	115,441 8,188 2,425 16,234	116,083 8,356 2,211 16,090	115,898 8,050 2,269 14,919	117,156 7,785 2,260 14,915	117,565 7,817 2,261 14,657	110,904 7,817 2,160 14,197	102,908 7,403 1,979 13,679
Germany (Fed. Rep.) 151,345	139,513	140,889	149,612	142,287	142,741	141,136 142,116	142,116	142,201	135,077	125,970
Campine 6,536 Southern Belgium 13,049	9,712	9,483	10,331 18,755	9,385 13,080	9,611 11,928	9,807	10,067 11,351	10,141 11,146	9,706	8,489
Belgium 29,585	30,384	30,060	29,086	22,465	21,539	21,226	21,418	21,304	19,786	17,495
Nord - Pas-de-Calais 28, 238 Lorraine 6, 739 Centre-Midi 11, 087 Other mines <sup>3</sup> ) 440	3, 29,406 3, 12,210 7, 13,157 592	27,554 12,001 12,606 427	28,725 14,297 13,373 400	28,940 14,703 12,092 226	26,925. 14,011 11,239 182	27, 144 14, 287 11, 807 121	24,669 13,163 9,854 68	26,567 15,628 10,786 49	25,489 15,547 10,208 103	25, 278 15, 482 9, 482 57
France 46, 504.	4 55,365	52,588	56,795	55,961	52,357	52,359	47,754	53,029	51,348	50,338
Italy, all coalfields 598	8 1,089	1,126	1,019	.736	740	691	585	472	389	418
Dutch Limburg 13,488	8 12,532	12,297	11,376	12,498	12,621	11,573	11,509	11,480	11,446	10,052
Community 241,520	0 238,883		236,961 247,888	233,947	229,998	226,983	223,382	228,487	218,046	204,273

<sup>1)</sup> Provisional figures.

1) Frovisional figures.

1) Frourisional figures.

1) From 1960 onwards.

2) Non-nationalized mines, including Aumance from 1965 onwards.

N.B.

2) Non-nationalized mines, including Aumance from 1965 onwards.

N.B.

2) The figures are not wholly comparable as between one country and another, nor indeed, in the case of Germany (Fed. Rep.), as between one coalifield and another, owing to differences in the breakdown of coal grades. The proportion of indidings and surry produced in the Ruhr. Aachen, Lower Saxony and Dutch Limburg owing to differences in the breakdown of coal grades. The proportion of indidings and fullain coalieds is reckoned ton for ton all grades.

b) For the years 1954, 1955 and 1958, see Signistical Annex to Tenth and Eleventh General Reports, Table 2.

TABLE 2 Underground Output per Man/Shift in the Community Hard-Coal Mines (by countries and coalfields)

(kilogrammes)

Coalfield - Country	1938	1958	1957	1963	1964	1965	19661)
Ruhr	1,970	1,486	1,614	2,575	2,688	2,766	3,000
Aachen Lower Saxony	1,409 1,380	1,186 1,130	1,314 1,264	1,998	1,989	2,139	2,213
Saar	1,570	1,676	1,800	2,060 2,531	2,114 2.616	$\begin{bmatrix} 2,139 \\ 2,740 \end{bmatrix}$	2,353 2,960
Germany (Fed. Rep.)	1,877	1,480	1,606	2,521	2,614	2,705	2,922
Campine	1,5232)	$(1,428)^3)$	1,583	2,097	1,980	2,102	2,154
Southern Belgium	1,0042)	$(1,075)^3$	1,125	1,630	1,603	1,697	1,725
Belgium	1,0852)	(1,164)3)	1,253	1,820	1,763	1,874	2,005
Nord-Pas-de-Calais	1.136	1.277	1,596	1 800	1 700	1 000	
Lorraine	2.014	2,088	$\frac{1,390}{2,310}$	1,663	1,709 3,113	1,662 3,239	1,707 3,453
Centre-Midi	1,176	1,343	1,634	1,977	2.024	2,044	2.045
Other pits	·	974	1,219	1,819	1,775	2,072	2,053
France	1,226	1,416	1,682	1,958	2,046	2,039	2,104
Italy (Sulcis)		609	957	2,000	2,532	2,906	2,788
Dutch Limburg	2,371	1,567	1,499	2,087	2,140	2,197	2,245
Community	1,5904)	1,413	1,560	2,272	2,333	2,397	2,540

<sup>1)</sup> Provisional figures.

N.B.

See Notes to Table 1.

<sup>P) Including supervisory personnel.
Estimated figures.
Exclusive of Sulcis in 1938.</sup> 

TABLE 3 Pithead Stocks of Hard-Coal

('000 metric tons at end of year)

Coalfield - Country	1952	1960	1963	1964	19 <u>6</u> 5	,1966¹)
Ruhr	445	5:159	2.353	7,025	11,669	12,362
Aachen	12	222	109	291	651	817
Lower Saxony	8	368	659	795	925	976
Saar	462	1,400	635	517	1,354	2,818
Germany (Fed. Rep.)	927	7,148	3,776	8,629	14,5984)	16,973
_		0.055	171	687	1.238	1,485
Campine	667	$\frac{2,255}{4,310}$	283	802	1,182	1,561
Southern Belgium	1,006	4,310	200		1,102	17,001
Belgium	1, 673	6,565	454	1,489	2,419	3,046
	1.550	.4 ≝9n	2,008	1,474	2,412	4,286
Nord-Pas-de-Calais	1,553	$4,532 \\ 4,764$	2,628	2,612	2,722	3,383
Lorraine Centre-Midi	$1,181 \\ 1,442$	3,903	1,695	1,608	2,039	2,744
France <sup>2</sup> )	4,200	13,202	6,123	5,703	7,185	10,413
Italy, all coalfields	53	93	68	73	24	27
Dutch Limburg	237	655	378	-898	·1 ;204	1,383
Community	7,090	27,664	10,798	16,792	25,431	31,842
of which: low-grade fuels8)	•	.47%	61%	.35%	25%	

<sup>1)</sup> Provisional figures.

For years not shown see Statistical Annex to Tenth General Report, Table 5.

<sup>2)</sup> Including stocks at non-nationalized mines.

<sup>3)</sup> Middlings, slurry and pulverized fuels.

<sup>4)</sup> Exclusive of undistributed stocks at depots close to consumer centres (967,000 tons at Dec. 31, 1965, and 3,848,000 in 1966).

TABLE 4 Production of Coke-Oven Coke

(Community)

('000 metric tons) Germany (Fed. Rep.) Year Saar Belgium France Italy1) Netherlands Community 36,671 37,233 37,776 7,636 9,216 8,631 9,220 1938 3,108 5,107 1,739 3,143 57,404 6,407 2,350 2,327 3,285 3,245 3,381 1952 3,888 62,3791953 3,590 5,945 61,514 1954 34,921 3,666 6,147 2,49959,833 1955 40,520 3,939 6,600 10,725 2,949 3,901 68,633 43,435 45,193 43,439 4,206 7,270 1956 12,249 3,411 4,238 74,809 1957 4,324 7,156 12,564 12,468 13,092 4,243 3,687 77,168 1958 4,081 4,175 6,906 3,360 74,431 1959 38,405 4,335 7,217 3,054 4,083 70,187 1960 44,541 7,539 13,605 3,715 4,518 73,919 1961 44,296 7,252 13,447 3,897 4,555 73,447 42,863 7,195 1962 4,330 4,274 13,482 72,144  $41,588 \\ 43,268$ 7,204 13,4234,5951963 4,263 71,0741964 7,398 7,334 13,941 13,378 4,683 5,737 4,514 73,803 43,275 1965 4,286 74,009  $1966^{2}$ ) 39,801 6,961 12,929 6,254 3,830 69,775

TABLE 5 Stocks of Coke at Coking-Plants (Community)

('000 metric tons)

Year	Germany (Fed. Rep.)	Saar	Belgium	France	Italy	Netherlands	Community
1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965	4,5 5,0 1,0 1,0	18 34 19 12 20 53 51 18 475 973 977 665 983 889	101   200   127   71   87   237   276   291   270   266   218   148   162   120	187 435 375 164 175 448 708 688 576 732 757 430 682 578	52 63 58 62 50 129 321 209 111 165 69 104 420 282	63 99 82 82 68 163 342 301 221 297 128 117 270 285	531 4,260 2,645 555 578 1,653 7,015 8,583 6,653 6,433 6,249 2,464 4,054

<sup>1)</sup> Provisional figures.

Including Trieste from 1955 onwards.
 Provisional figures.

TABLE - 6 Community Hard-Coal Imports from Third Countries

Country of origin	U.S.A.	U.K.	Poland	U.S.S.R.	Other third	Total
Country of destination					countries	
Germany (Fed. Rep.)	1 1					
1957	15,904	497	560	38	147	17,147
1962	5,9891)	490	408	16	157	7,058
1963	$6,092^{1}$	600	397	30	89	7,308
1964	$6,285^{1}$	637	365	44	123	7,455
1965	$6,471^{1}$	523	380	59	148	7,581
1966	5,557	454	375	17	140	6,542
Belgium					35	2,820
1957	2,138	564	33	50	39 57	$\frac{2,820}{1.320}$
1962	923	273	,	$\begin{array}{c} 66 \\ 423 \end{array}$	136	3.814
1963	2,103	1,148	4	267	116	3,197
1964	1,784	972	58	169	45	2,739
1965	1,947	320	259 167	178	7	2,106
1966	1,615	139	107			
France		-40	1,281	605	169	9,701
1957	6,903	742 791	$\begin{array}{c} 1,261 \\ 226 \end{array}$	947	242	2,983
1962	778	$\frac{791}{2,124}$	361	1,836	566	7,464
1963	2,577	1,064	542	1,722	501	5.844
1964	2,015	806	472	1,557	261	5,013
1965	$1,916 \\ 1,740$	707	556	1,453	114	4,570
1966	1,740					
Italy	0.001	100	125	239	107	8,805
1957	8,201	132	991	1.200	392	8.090
1962	5,407	101	784	1,315	393	9,860
1963	7,233	$\begin{array}{c} 136 \\ 73 \end{array}$	425	1,264	450	9,400
1964	7,189 8,383	13	437	1,067	315	10,214
1965	7,253	289	779	1,347	313	9,980
1966	- 7,200					ļ
Netherlands	4 501	697		69	37	5,384
1957	$\frac{4,581}{2,250}$	1.445	215	131	112	4,152
1962	3,267	1,607	213	312	122	5,528
$1963 \\ 1964$	3,187	1,387	223	261	93	5,151
1964	2,205	936	221	118	33	3,514
1966	1,824	398	151	39	5	2,420
			·		-	
Community	97 0009	2,6353)	1,999	1,001	495	43,959
1957	37,8282)	3 099	1,840	2,360	960	23,640
1962	15,345 $21,2764$	$5.626^3$	1,759	3,922	1,407	33,990
1963	20,462	4,1373)	1,613	3,559	1,283	31.052
1964	20,462	$2,600^3$	1,769	2,969	802	29,062
1965 · 1966	17,988	1,987	2,028	3,034	578	25,618
. 1900	.   17,000	1,00,	-,			ļ

<sup>1)</sup> Including purchases for American troops stationed in Germany — 1962: 1,054; 1963: 1,026; 1964: 1,449; 1965: 1,492 to the Saar and 13 to Luxembourg.
1) Including 87 to the Saar and 13 to Luxembourg.
1) Including 6 to Luxembourg in 1953, 2 in 1957, 12 in 1963, 4 in 1964 and 2 in 1965.
1) Including 5 to Luxembourg in 1963.
N.B.
N.B.
N.B.
Near years not shown see Statistical Anneres to Fighth Ninth and Tenth General Reports or Bulletin of the Statistical

For years not shown see Statistical Annexes to Eighth, Ninth and Tenth General Reports or Bulletin of the Statistical Office of the European Communities and Energy Statistics, Yearbook 1966.
The 1966 figures are provisional.

TABLE 7

Intra-Community Trade in Hard-Coal and Hard-Coal Briquettes

- (								٤	('000 metric tons)
Countries of destination		1952	1953	1954	1960	1963	1964	1965	19661)
Belgium		317	169	1,930	2,019	2.429	2.738	3 106	3 060
_		3,706	3,828	4,256	6,729	6,350	5,889	5,515	6,068
	•	. 993 2001	3,421	3,505	3,426	1,229	593	516	1,542
Netherlands 2		2,143	2,544	3,028	2,917	158 3,493	124 2,619	2,825	$\frac{71}{3,471}$
Total 9	6	9,262	10,611	12,837	15,250	13,660	11,964	12,064	14,211
Germany (Fed. Rep.) France/Saar <sup>3</sup> )		1 998	107	226	196	712	369	359	222
		381	688	576	295	1,012	0 0 0	<b>5</b> 07	3/19
Luxembourg Netherlands		65 574	1,070	38 2,166	33 781	28 234	19	6 615	539
Total 2,	2,	2,576	3,869	4,603	2,076	2,354	2,204	1,734	1,139
Germany (Fed. Rep.) 3,	ຕ	940	4,320	4,239	620	544	451	494	350
<del></del>		169 214	147	331	232	135	216	163	85.
-		155	129	132	8.8	17	‡ eo	ც 4-	- T
Vetherlands		4	106	10,	53	7	74	131	138
Total 4	4	4,482	5,173	5,129	986	738	788	755	009

Netherlands	Germany (Fed. Rep.) Belgium France/Saar <sup>3</sup> ) Italy I wemboure	4 4	175 175 44	124 521 386	516 834 1,128	767 945 1, 271 13	517 943 1,227 18	496 1,061 1,150 9	473 1,092 807 9
	Total	4	263	1,031	2,498	3,004	2,710	2,723	2,389
	Grand total	16,315	19,916	23,600	20,810	19,756	17,666	17,276	18,339
	of which: Germany (Fed. Rep.) Belgium France/Saar³) Italy Luxembourg Netherlands	3,959 490 4,934 3,888 2,721	4,437 1,013 5,732 4,735 4,735 3,720	4,589 2,783 6,239 4,498 5,204	1,332 3,085 8,628 3,769 3,769 3,760	2,023 3,509 9,000 1,279 211 3,734	1,337 3,897 8,425 8,425 654 150 3,199	1,279. 4,330 7,419 560 3,571	1,054 4,239 7,250 1,562 4,148

<sup>1)</sup> Provisional figures.
2) From 1960 onwards, the tonnages for the Saar are included in the figures for the Federal Republic of Germany.
3) From 1960 onwards, the figures relate only to France.

For years not shown, see Statistical Annexes to Eighth, Ninth and Tenth General Reports or Bulletin of the Statistical Office of the European Communities and Energy Statistics, Yearbook 1966.

 $TABLE \ \ 8$  Intra-Community Trade in Coke

('000 metric tons)	1966¹)	2,701 269 2,998 162	6,174	66 184 3 365	626	122 14 9 9 13	167
0.)	1965	3,339 2,339 3,238 196	7,056	92 172 - 433 2	669	157	168
	1964	3,783 214 3,471 250	7,753	181 0 277 5	467	169 0 , 4 4 , 2	175
	1963	91 4,578 396 3,234 450	8,749	10 348 — 236 6	601	108 1 11 6	127
	1960	3, 912 79 3, 522 289	7,847	27 397 32 239	695	39 9 19 —	29
	1954	2,212 2,212 2,773 346	5,402	451 ————————————————————————————————————	562	184	188
	1953	2,768 11 2,798 270	5,855	21 — 220 102 22	365	168	158
	1952	3,442 2,970 179	6,593	201 197 — 140 5	543	120	120
	Countries of destination	Belgium France/Saar³) Italy Luxembourg Netherlands	Total	Germany (Fed. Rep.) Francc/Saar³) Italy Luxembourg Netherlands	Total	Germany (Fed. Rep.) Belgium Italy Luxembourg	Total
	Country of supply	Germany (Fed. Rep.)²)		Belgium		France Saar <sup>2</sup> )	

Netherlands	Germany (Fed. Rcp.) Belgium France/Saar <sup>3</sup> ) Luxembourg	2 518 234	2 17 448 203	24 24 565 —	206 205 1, 193 312 39	232 255 979 185	202 491 1,035 237 21	285 580 936 179 13	250 451 758 78 14
	Total	754	670	838	1,955	1,668	1,986	1,993	1,551
	Grand total	8,104	7,075	6,990	10,564	11,160	10,388	9,923	8,542
	of which: Germany (Fed. Rop.) Belgium France/Saar <sup>3</sup> ) <sup>4</sup> ) Italy Luxembourg Netherlands	321 4,251 3,444 184	181 25 3,363 3,103 292	188 76 3,228 3,121 3,121	272 258 5,504 4,073 289	350 347 5,921 424 3,661 456	375 525 525 525 3,987 3,987	534 627 4,454 258 3,850 98	438 509 3,667 295 3,450 182

Provisional figures.
 From 1960 onwards, the tonnages for the Saar are included in the figures for the Federal Republic of Germany.
 From 1960 onwards, the figures relate only to France.
 Including some small tonnages delivered by Italy.

For years not shown, see Statistical Annexes to Eighth, Ninth and Tenth Reports or Bulletin of the Statistical Office of the European Communities and Energy Statistics Year-book 1966.

 $TABLE \ \ g$  Development of Coal Prices in the Community  $^1$ )

Product		j	R	uhr	Aa	chen		Saar
Туре	Size	Month and year	Price	V.M. %	Price	V.M. %	Price	V.M. %
1	2	3	4	5	6	7	. 8	9
Anthracites	French nuts	Apr. 53 Jan. 65 Jan. 66 Jan. 67	22.80 32.88 32.88 32.88	7-10 7-10 7-10 7-10	24.06 34.32 34.32 34.32	< 10 < 10 < 10 < 10		
Anthracitic/ low-volatile	French nuts	Apr. 53 Jan. 65 Jan. 66 Jan. 67	19.37 29.88 29.88 29.88	10-14 10-12 10-12 10-12	20.63 27.72 27.72 27.72	10-14 10-14 10-14 10-14		
Low-volatile dry's	small nuts	Apr. 53 Jan. 65 Jan. 66 Jan. 67	19.37 26.16 26.16 26.16	10-14 12-14 12-14 12-14	20.63 27.72 27.72 27.72	10-14 10-14 10-14 10-14		
Semi-bituminous	singles	Apr. 53 Jan. 65 Jan. 66 Jan. 67	13.66 18.48 18.48 18.48	14-19 16-20 16-20 16-20	14.92 18.84 18.84 18.84	14-19 16-19 16-19 16-19		
High-volatile bituminous	No. 2 nuts (doubles)	Apr. 53 Jan. 65 Jan. 66 Jan. 67	13.32 17.04 17.04 17.04	28-40 33-40 33-40 33-40			17.83 18.96 18.96 18.36	40-42 40-43 40-43 40-43
High-volatile bituminous	No. 5 nuts (grains)	Apr. 53 Jan. 65 Jan. 66 Jan. 67	13.20 17.04 17.04 17.04	28-40 33-40 33-40 33-40			13.60 17.16 17.16 17.16	39-41 37-42 37-42 37-42
Bituminous	washed duff or coking fines	Apr. 53 Jan. 65 Jan. 66 Jan. 67	12.63 16.68 16.68 16.68	19-28 18-30 18-30 18-30	13.89 18.24 18.24 18.24	> 19 > 19 > 19 > 19	13.54 17.76 17.76 17.76	33-40 33-40 33-40 33-40
Coke	large	Apr. 53 Jan. 65 Jan. 66 Jan. 67	15.26 21.89 21.89 21.89		16.52 24.24 24.24 24.24		20.29 23.28 23.28 23.28	

<sup>1)</sup> The prices, expressed in dollar units of account are per metric ton f.o.t. at colliery or coking-plant, exclusive of all taxes but including, for Ruhr and Aachen products, the contribution payable at the time to the miners' housing fund and the compensation levy invoiced over and above the schedule prices. To them should normally be added the taxes payable in the country of disposal at the dates in question.

Nether	lands		Belgi	um		Nord/Pas	de-Calais	Lorra	ine
		Cobecha	r-South	Cobechar-	Campine	Price	v.M. %	Price	V.M. %
Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.III. 76		
10	11	12	13	.14	15	.16	17	18	19
21.60 33.15 33.98 33.98 21.60 31.77 31.77 21.60 28.31 28.31 28.31 14.40 16.99 16.99	10-14 8-10 8-10 8-10 10-14 10-12 10-12 10-12 10-14 12-14 12-14 12-14 14-18 14-18	27.60 42.00 42.00 36.50 27.60 35.10 34.50 27.60 35.10 29.60 16.40 21.40 17.90	< 10 < 10 < 10 < 10 < 10 < 10 10-12½ 10-14 10-12 10-14 10-15 10-14 10-16			26.57 31.61 31.61 31.61 26.57 29.58 29.58 29.58 29.58 29.58 29.58 29.58 29.58 29.58	< 11 < 10 < 10 < 10 < 10 11-13 10-14 10-14 11-13 10-14 10-14 10-14 13-22 14-18 14-18		
13.77 15.06 15.06 15.33 16.55 20.72 21.55	20-25 20-25 20-25	17.20 18.10 18.10 17.00 15.70 15.70 14.70 14.20 15.30 16.40		18.20 18.20 16.60 16.20 16.20 16.20 14.90	> 28 ½ 26-30 26-30 > 28  > 28½ 26-30 26-30 > 20 26-30 > 20 20-28½ 20-28 20-28 20-28	17.63 17.63 17.63 15.83 15.50 15.50 15.50		17.83 17.73 17.73 17.73 13.89 14.79 14.79 14.79 12.63 14.79 14.79 20.29 21.99 21.99	40-42 40-42 40-42 40-42 39-41 39-41 39-41 36-39 36-39 36-39 36-39

## Volatile-matter content

The types and sizes selected for each country have remained the same for the whole of the period under review. In some cases the figures given for the volatile-matter content of the product vary, owing either to a change in the range stated, or to changes in the method used to determine the content itself.

 $TABLE\ 10$  Comparative Movement of Coal Prices in the Different Coalfields of the Community

,		1953	= 100		Ruhr	prices in	same yea	r = 100
	1958	1965	1966	1967	1958	1965	1966	1967
Ruhr				1			İ	i –
Anthracite	113	144	144	144	1	1		
Anthracitic/low-volatile	114	154	154	154			1	1
Low-volatile/dry's	114	135	135	135			ŀ	i
Semi-bituminous High-volatile bituminous	119	135	135	135		1		1
No. 2 nuts	116	100	1,00	, , , ,	-	1		İ
High-volatile bituminous	110	128	128	128				
No. 5 nuts	116	129	129	129		-		1
Washed bituminous fines	115	132	132	132	İ	1		1 .
Coke	125	143	143	143				
A achen								
Anthracite	120	143	140	1.40	,,_	1	Í	1
Anthracitic/low-volatile	120	134	143 134	143 134	113	104	104	104
Low-volatile/dry's	121	134	134	134	113	93	93	93
Semi-bituminous	117	126	126	126	107	100	$\begin{array}{c c} 106 \\ 102 \end{array}$	106
Washed bituminous fines	115	131	131	131	110	109	102	102
Coke	127	147	147	147	109	111	111	111
Saar								
High-volatile bituminous					1	ļ		
No. 2 nuts	95	106	106	103	١,,,			
High-volatile bituminous	00	100	100	103	111	111	111	108
No. 5 nuts	109	126	126	126	97	101	101	101
Washed bituminous fines	112	131	131	131	104	106	106	106
Coke	104	115	115	115	111	106	106	106
Netherlands								
Anthracite	125	153	157	157	100			
Anthracitic/low-volatile	121	142	142	142	$\frac{105}{118}$	$101 \\ 106$	103	103
Low-volatile/dry's	111	134	134	134	109	108	106 108	106 108
Semi-bituminous	129	118	118	118	114	$\frac{100}{92}$	92	92
Washed bituminous fines	111	109	109	111	105	90	90	92
Coke	126	126	130	130	110	95	98	98
Belgium (South)								
Anthracite	125	152	152	132	135	128	128	111
Anthracitic/low-volatile Low-volatile/dry's	124	127	127	125	154	117	117	115
Semi-bituminous	124	127	127	107	154	134	134	113
High-volatile bituminous	143	130	130	109	123	116	116	97
No. 2 nuts	114	105	105	99	127	100	100	700
High-volatile bituminous	1	100	100	טט	121	106	106	100
No. 5 nuts	123	105	105	98	121	92	92	0.0
Washed bituminous fines	120	108	108	115	118	92	92	86 98

		1953 =	= 100		Ruhr pr	rices in sa	me year :	= 100
	1958	1965	1966	1967	1958	1965	1966	1967
Belgium (Campine) High-volatile butiminous No. 2 nuts High-volatile butiminous No. 5 nuts Washed bituminous fines	110	106	106	97	123	107	107	97
	119	108	108	99	116	95	95	87
	118	103	103	107	115	88	88	91
Nord-Pas-de-Calais Anthracite Anthracitic/low-volatile Low-volatile/dry's Semi-bituminous High-volatile bituminous No. 2 nuts High-volatile bituminous No. 5 nuts Washed bituminous fines Coke	100	119	119	119	103	96	- 96	96
	97	111	111	111	116	99	99	99
	97	111	111	111	116	113	113	113
	102	107	107	107	105	98	98	98
	97	99	99	99	112	103	103	103
	99	98	98	98	102	91	91	91
	97	101	101	101	96	87	87	87
	105	108	108	108	103	93	93	93
Lorraine High-volatile bituminous No. 2 nuts High-volatile bituminous No. 5 nuts Washed bituminous fines Coke	93	99	99	99	108	104	104	104
	105	106	106	106	96	87	87	87
	108	117	117	117	94	89	89	89
	106	108	108	108	112	100	100	100

TABLE 11

# Changes in Prices of U.S. Coking Coals

						(\$ per metric ton)
Period	Price Hampto	Price f.o.b, <sup>4</sup> ) Hampton Roads	Average fr Hampton-F	Average freight charge Hampton-Roads-A/R/A	Pric A/	Price c.i.f. A/R/A¹)
	Sewell/ Pocahontas <sup>1</sup> )	Mixed coking fines <sup>1</sup> )	e e	(,	Sewell*)/ Pocahontas*)	Mixed*) coking fines*)
1953 June	10 75/11 50	00 01		-		
December	00.11/01.01	9.55	4.3		15.06/15,81	14.69
1954 June December		8.57	4.56			13.66
1956 June		9.06	6.88			15.94
December	12.50/12.75	11.76	10.00		1	21.51
1964 June	10.74/11.46	10.41	(5) (5) (6) (6)	23	14 05/14 77	26.81
1965 Inne	* :	*	3.79	3.80	14.54/15.95	16.72/12.72
December	10.74/11.46	10.41	3,65	3.65	14.39/15.11	14.06/14/06
1966 January	10.86/11.58	10.47	3.62	3.62	14.48/15.20	14.09/14.09
February	***************************************	77.01	3.65 9.00	3.62	14.48/15.20	14.09/14.09
March	. «		00.00 00.00	3.79	14.65/15.47	14.26/14.36
April		• 4	ê - 9	3.38	14.24/14.96	13.85/13.85
May	*	•	2.73	0 73	7 / 6	-   -   -   -   -   -   -   -   -   -
June	11.11/11.83	10.59	?	:	19.39/14.31	Ξ.
August	* 1	* (		1		
September	* *	10.78	2.20	2.20	13.31/14.03	12.98/12.98
October	* *	, OI	2.55	2.55	13.66/14.38	13.33/13.33
November	. *	00.01	-	1 6	 	<u> </u>
December	11.80/12.21	11,11	6.13	2.79	13.90/14.62	13.64/13.64
1907 January	11.80/12.21	11.11	2.20	2.20	14 00/14 41	/ 61
				)	14.41/00:41	19.51/15.51

Average quarterly prices for short-term contracts.
 Mean between maximum and minimum rates charged during the month in respect of single voyages A/R/A (= Antwerp-Rotterdam-Amsterdam).
 Weighted average of rates noted during the month in respect of single voyages A/R/A.
 The c.i.f. prices shown are the sum of spot prices for coal freight rates. They reflect the influence of marginal demand on the day-to-day prices charged in respect of short-term contracts.

TABLE 12

Trend in Total Energy Consumption in the Community and the Individual Member Countries, in Terms of Primary Energy

('000,000 metric tons H.C.E.)

	Hard coal	Brown coal	Oil	Primary gas <sup>1</sup> )	Hydro- electricity <sup>2</sup> )	Total consump- tion <sup>3</sup> )
1965						
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	113·9 21·53 61·1 11·5 3·93 19·54	32·0 0·08 1·7 0·4 0·11 0·12	96·8 19·05 67·3 60·4 1·09 26·54	3·6 0·07 7·0 10·1 — 1·99	7·1 0·10 18·5 18·6 0·33 0·01	253·4 40·83 155·6 101·0 5·46 42·20 598·5
Community <sup>3</sup> )	225.4	34.4	271.3	22.7	44.7	598.5
1966 (estimated)  Germany (Fed. Rep.)  Belgium  France  Italy  Luxembourg  Netherlands  Community <sup>3</sup> )	102·7 20·42 57·4 11·9 3·64 12·18	32·0 0·07 1·6 0·5 0·05 0·11	108·0 20·18 74·3 66·8 1·27 28·31	4·8 0·19 7·4 10·7 0·01 3·96	8·8 0·08 21·2 18·5 0·38 — 49·0	256·3 40·94 161·9 108·4 5·35 44·57
1967 (forecast)  Germany (Fed. Rep.)  Belgium  France  Italy  Luxembourg  Netherlands	97·2 19·07 58·1 12·3 3·35 11·40	32·1 0·04 1·9 0·8 0·06 0·10	119·0 21·39 82·5 74·1 1·37 29·44	6·8 0·64 7·9 12·0 0·01 6·51	7·3 0·39 19·4 18·6 0·40	262·4 41·53 169·8 117·8 5·19 47·45
Community <sup>3</sup> )	201.4	35.0	327.8	33.8	46.1	644·1 <sup>8</sup> )

<sup>1)</sup> Including net external trade balance.

<sup>3)</sup> Including geothermal and nuclear electricity and net external-trade balance.

a) Rounded figures, which may therefore differ from the sum of the individual items.

 $TABLE\ 13$  Changes in the Shares of the Different Products in the Coverage of International Primary-Energy Requirements

(in %) Hard Brown Oi1 Primary Hydro-electricity Total coal gas1) 1965 Germany (Fed. Rep.) 45.0 12.6 38.21.4 2.8 100 Belgium 52.70.246.7 0.20.2100 France 39.21.1 43.3 4.511.9 100 Italy 11.3 0.459.8 10.0 18.5 100 Luxembourg 72.0 $2 \cdot 1$ 19.9 6.0100 Netherlands 32.1 0.3 62.94.7 100 Community 37.7 5.7 45.3 3.8 7.5 100 1966 (estimated) Germany (Fed. Rep.) 40·I 12.5 42.1 1.9 3.4 100 Belgium 49.9 0.249.3 0.40-2100 France 35.4 1.0 45.9 4.6 13-1 100 Italy 11.0 0.561.69.917.0 100 Luxembourg  $68 \cdot 1$ 0.8 23.8 0.27.1 100 Netherlands 27.30.363.58.9 100 Community 33.75.648.4 4.4 7.9100 1967 (forecast) Germany (Fed. Rep.) 37.1 12.2 45.32.6 2.8 100 Belgium 45.90.1 51.5 1.6 0.9 100 France 34.21.1 48.6 4.711.4 100 Italy 10.4 0.7 62.910.215.8 100 Luxembourg 64.51.1 26.50.37.6100 Netherlands 24.00.2 $62 \cdot 1$ 13.7 100 Community 31.3 5·4 50.9 $5 \cdot 2$ 7.2100

<sup>1)</sup> Including net external-trade balance.

<sup>3)</sup> Including geothermal and nuclear electricity and net external-trade balance.

# TABLE 14

# Community Balance-Sheet for Iron-Ore

	-	•				('000 metric	('000 metric tons Fe content)
	1961	1962	1963	1964	1965	1965 (9 months)	1966 (9 months)
Anailabilities	46,288	44,751	43,542	51,623	54,766	40,839	39,184
1. Production of saleable ore 2. Net imports from third countries imports	$\begin{array}{c} 26,493\\ 19,7951\\ 19,9991\\ 2041 \end{array}$	$\begin{array}{c} 25,728 \\ 19,0231 \\ 19,210^1 \\ 1871 \end{array}$	22,583 $20,9491$ $21,1021$ $1531$	$23,319$ $28,304^1$ ) $28,450^1$ ) $146^1$ )	$\begin{array}{c} 22,589 \\ 32,177^1) \\ 32,284^1) \\ 107^1) \end{array}$	$\begin{array}{c} 16,766 \\ 24,0731 \\ 24,1521 \\ 791 \end{array}$	$15,940 \\ 23,244^1) \\ 23,323^1) \\ 79^1)$
Consumption	45,219	44,483	43,441	49,897	52,810	39,558	38,736
1. by sintering plants Community ores	14,540 7,066	17,813 8,319 9,494	21,558 10,388 11,170	25,944 11,613	29,981 12,035 - 17,946	22,146 9,004 13,142	23, 434 8, 692 14, 742
third-country ores 2. by blast-furnaces Community ores	29,837 18,712	25,721 15,866	21, 134 11, 386 0, 748	23,075 10,833 12,252	21,954 9,783 12.171	16,736 7,373 9,363	14,657 6,638 8,019
third-country ores 3. by steelworks Community ores third-country ores	$\begin{array}{c} 11,126 \\ 865^2 \\ 242^2 \\ 724^2 \end{array}$		$(749^{2})$ $(115^{2})$ $(634^{2})$	878 <sup>2</sup> ) 56 <sup>2</sup> ) 822 <sup>2</sup> )	876 <sup>2</sup> ) 58 <sup>2</sup> ) 818 <sup>2</sup> )	$676^{2}$ $48^{2}$ $629^{2}$	$645^{2}$ $39^{2}$ $606^{2}$
Stock changes	+ 927	227	344	+1,282	+ 1,473	+ 1,132	887
at works elsewhere	++ + 422 206		+ 417 + 15 + 58	+ 772 + 414 + 96	+ 876 + 449 + 148	+ 877 + 284 - 29	798 34 + 55
Difference due to errors and omissions	_ 142	495	445	444	- 483	- 149	439
		-	  -  -				

<sup>1)</sup> Estimated.2) Partly estimated.

N.B. For the years 1957-1960, see Eleventh General Report.

TABLE 15

Community Production of Crude Iron-Ore

Period	Germany (Fed. Rep.)	Belgium	France	Italy	Luxembourg	Community
1952 1954 1958 1960 1961 1962 1963 1964 1965 1966 <sup>1</sup> ) Difference between 1965/1966 (in %)	15,408 13,039 17,984 18,869 18,866 16,643 12,898 11,613 10,847 9,466	132 81 124 160 115 81 96 62 91 125	41,184 44,362 60,167 67,724 67,395 67,117 58,476 61,472 60,126 55,657	1,320 1,601 2,150 2,138 2,065 1,983 1,709 1,572 1,368 1,252	7,248 5,887 6,636 6,978 7,458 6,507 6,990 6,680 6,315 6,529 + 214 + 3·4	65,292 64,970 87,060 95,869 95,899 92,331 80,169 81,399 78,747 73,029

<sup>1)</sup> Provisional figures.

N.B.

For years not shown, see Tenth General Report.

# TABLE 16

# Intra-Community Trade in Iron-Ore

. ('000 metric tons)

Country of supply	Countries of destination	1952	1955	1958	1960	1962	1964	1965	1965 (9 months)	1965 1966 months) (9 months)
Germany (Fed. Rep.) <sup>1</sup> )	Belgium/Luxembourg France <sup>2</sup> ) Italy Netherlands	51.6 1.2 0.0	0.42 0.2 0.5 0.5 0.5	1.6 36.8 1.6 0.4	1:21	99900 8894	1.8 10.7 0.4 3.7	2.4 1.9.4 1.9.9.4	4.0 4.0 6.0 6.0 6.0 6.0	3.1 4.2 0.1 1.0
	Total	52.8	30.2	40.4	7.6	9.8	16.6	10.9	8-1	8.4
Belgium/ Luxembourg	Germany (Fed. Rep.) <sup>1</sup> ) France <sup>2</sup> ) Netherlands	434·4 10·8	386.1	17.4	0.2 128·2	0.0 235.3 1.3	18·1 207·2 0·0	0·0 67·3	65.4	0.8 13.6 0.3
	Total	445.2	422.5	111-4	128.4	. 236-6	225.4	67.3	65.4	4.7
France <sup>2</sup> )	Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg Italy Netherlands	379-2 8,395-2 —	353·8 12,537·7 141·2	1,110·1 13,616·5 — 51·6	9,779-6 9,070-4 6,410-4 16,828-9 16,265-0 15,447-6 -0-2 0-0 1-5	9,070.4 16,265.0 0.2	6,410.4 15,447.6 0.0 1.5		5,984·0 4,580·8 14,672·2 11,120·7 	3,694·9 9,943·4 —
	Total	8,906.4	13,032.7	14,778.2	26,614.7	25,335.6	21,859.5	20,656.5	15,701.9	13,638.3
Italy	France		36.0	4.3	6.5	0.0	0.0	37.0	23.0	18.0
	Total	9,404.4	13,521.8	14,941.6	26,764.2	25,591.7	22,110.3	20,777-8	15,802.6	9,404.4 13,521.8 14,941.6 26,764.2 25,591.7 22,110.3 20,777.8 15,802.9 13,671.8
	of which:)) Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg France <sup>2</sup> ) Italy	813.6 8,395.2 62.4 1.2	776·2 12,538·6 60·6 2·0	1,1 13,6 1	9,793.0 16,831.7 130.6 1.2	9,081·1 16,267·6 238·0 0·4	6,431·2 15,449·4 224·0 0·4	5,987·2 14,677·2 108·4 0·3	4,583.4 11,124.0 91.6	3,698·0 9,946·5 25·8 0·2
	Netherlands	132.0	144.4	52.0						
1) Including the Saar as from July 6, 1969 2) Including the Saar up to July 5, 1959 8) Including some small tonnages delivered	) Including the Saar as from July 6, 1968. Including the Saar up to July 5, 1959. Including some small tonnages delivered by Italy and the Netherlands.	ie Netherlan	ds.	*) Estimate N.B. For the yea	bestimate based on deliveries.  N.B.  For the years not shown, see previous General Reports.	liveries.	us General R	eports.		

TABLE 17

# Community Iron-Ore Imports from Third Countries

('000 metric tons)	1966 (9 months)	12, 178.8 256.2 3386.2 3386.2 217.2 8, 112.5 1, 403.7 1, 403.7 2, 021.5 3, 935.4 682.4 753.2 753.2	
(,(	1965 (9 months)	12,769.8 342.6 342.6 342.6 1,101.9 7,573.0 3,383.3 1,308.3 1,267.4 1,575.0 2,287.8 4,568.7 4,568.7 4,568.7 4,568.7 4,568.7	
	1965	16, 819.0 16, 819.0 745.0 746.3 1, 622.7 1, 622.7 1, 638.1 1, 736.2 2, 105.3 2, 105.3 2, 811.0 6, 062.4 6, 062.4 1, 371.0 1, 371.0	
	1964	895.7 16,739.7 1,033.6 1,139.8 1,139.8 1,039.0 1,029.0 1,029.0 1,029.0 1,029.0 1,029.0 1,029.0 1,396.4 1,396.4 1,396.4	
	1962	13, 757.8 13, 757.5 228.8 363.8 363.8 363.8 137.3 11.9 1, 391.6 1, 322.1 1, 322.1 1, 322.1 1, 322.1 1, 322.1 1, 322.1 2, 405.5 559.6	
	1960	13, 183.0 1, 646.2 800.6 1, 289.7 1, 635.1 1, 635.1 1, 524.7 1, 524.7 1, 524.7 1, 778.7 1, 778.7 1, 778.7 1, 778.7 1, 778.7 1, 267.6 8, 053.3 1, 267.6	
	1955	9, 444.3 1, 250.6 1, 250.6 1, 307.6 278.2 498.2 418.1 1, 176.5 98.3 280.5 483.9 1, 418.1 1, 176.5 98.3 280.5 483.9 1, 44.1 1, 312.0	
	1954	7,689.1 554.5 200.5 653.5 278.1 245.0 19.1 724.3 724.3 38.8 758.1 391.0	
	Country of origin	Norway Sweden Spain U.S.S.R.  Morocco <sup>1</sup> ) Algeria Tunisia Liberia Mauritania Sierra Leone Portuguese African territories Canada Peru Venezuela Brazil Chile India and Portuguese possessions in Asia Other countries	

1) Moroccan territory: from 1954 to 1958, the former French and Spanish zones; as from January 1, 1959, the area bounded by the present frontiers.

For the years 1955-1957 and 1959-1961, see previous General Reports.

 $TABLE\ 18$  Community Balance-Sheet for Pig-Iron

	1954	1963	1964	1965	1965 (9 months)	1966 (9 months)
Availabilities (total)	33,069	54,030	61,205	63,636	47,663	46,907
1. Net Community production	33,129	53,206	60,783	63,202	47,353	46,408
(a) Phosphorous steelmaking pig-iron	25,322	37,229	41,186	39,590	29,854	28,126
(b) Hematite steelmaking pig- iron	4,036	11,786	15,123	19,012	13,889	15,191
<ul> <li>(c) Phosphorous foundry pigiron</li> <li>(d) Hematite foundry pigiron</li> <li>(e) Spiegel</li> <li>(f) High-carbon ferro-manga-</li> </ul>	1,652 1,013 256	1,268 1,702 212	1,103 2,107 166	1,054 2,272 165	785 1,750 124	544 1,669 85
nese	258	548	643	643	484	484
(g) Others (alloyed and special pig-irons)	502	462	454	466	468	308
<ul> <li>2. Net imports from third countries</li> <li>(a) imports</li> <li>of which: foundry pig-iron</li> <li>(b) exports</li> <li>of which: foundry pig-iron</li> </ul>	60 300 360	824 1,259 813 435 200	422 758 463 336 165	434 783 370 349 177	310 563 279 253 132	499 782 263 283 153
Consumption (total)	(33,184)	54,058	61,289	63,488	-	
<ol> <li>by steelworks         <ul> <li>(a) Basic Bessemer</li> <li>(b) Open-hearth</li> <li>(c) Electric furnace</li> <li>(d) Others</li> </ul> </li> <li>by pig-iron foundries</li> <li>by independent steel foundries</li> </ol>	30,089 25,044 4,878 166 1 3,095	50,080 35,348 9,376 404 4,952 3,946 32	57,196 36,514 10,804 378 9,501 4,052 41	59,498 33,406 10,833 407 14,852 3,955 35	44,468 25,191 8,202 304 10,771 — 25	44,385 23,440 7,386 312 13,247 ————————————————————————————————————
Stock changes of which: foundry pig-iron	_	— 160 0	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c } + & 30 \\ + & 59 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	+ 144 73
Stock changes at pig-iron foun- dries and independent steel foundries	<u> </u>	_			_	_

N.B.

For the years 1955-1962, see previous General Reports.

TABLE 19
Intra-Community Trade in Scrap¹)

Country	1954	1955	1958	1960	1964	1965	1965 (9 months	1966 (9 months)
Deliveries to other Com- munity countries by: Germany (Fed. Rep.) <sup>2</sup> ) Belgium/Luxembourg France <sup>3</sup> ) Italy Netherlands	676 142 916 0 118	560 121 848 0 190	859 136 559 0 172	1,227 436 1,318 2 342	1,204 607 1,356 3 410	1,973 697 1,824 1 450	1,399 545 1,361 1 370	1,390 514 1,284 1 304
Community	1,852	1,721	1,726	3,324	3,580	4,945	3,677	3,493
Purchases from other Community countries by: Germany (Fed. Rep.) <sup>2</sup> ) Belgium/Luxembourg France <sup>3</sup> ) Italy	287 136 65 1,342	285 197 107 1,120	87 198 360 1,063	467 173 337 2,264	673 130 361	707 131 371	587 89 295	428 116 338
Netherlands	22	1,120	1,003	2,204 84	2,380 36	3,642 94	2,667 38	$\begin{bmatrix} 2,517\\ 93 \end{bmatrix}$
Community	1,852	1,721	1,726	3,324	3,580	4,945	3,677	3,493

<sup>1)</sup> Customs figures; deliveries calculated from import statistics.

N.B.

For years not shown, see previous General Reports.

<sup>2)</sup> Including the Saar as from July 6, 1959.

<sup>3)</sup> Including the Saar up to July 5, 1959.

TABLE 20

External Trade in Pig-Iron with Third Countries

		1954	1955	1958	1963	1964	1965 .	1965 (9 months)	1966 (9 months)
Imports Exports		300 360	567 498	648 204	1,259 435	758 336	783 349	563 253	782 283
	Net imports	<b>—</b> 60	69	444	824	422	434	<b>3</b> 10	499

 $\begin{tabular}{ll} $TABLE$ & 21 \\ \hline \end{tabular} \begin{tabular}{ll} Intra-Community & Trade in Pig-Iron^1) \\ \hline \end{tabular}$ 

('000 metric tons)

	1954	1955	1958	1963	1964	1965	1965 (9 months)	1966 (9 months)
Deliveries to other Community countries by: Germany (Fed. Rep.) <sup>2</sup> ) Belgium/Luxembourg France <sup>3</sup> ) Italy Netherlands	178 50 122 —	220 50 287 — 103	224 43 131 0 75	541 166 250 — 117	470 91 237 0 81	323 97 230 0 68	241 69 177 0 49	262 74 132 0 50
Community	451	640	473	1,073	880	719	537	518
Purchases from other Community countries by: Germany (Fed. Rep.) <sup>2</sup> ) Belgium/Luxembourg France <sup>3</sup> ) Italy Netherlands	76 162 105 97 10	95 308 143 85 9	55 204 148 62 4	124 270 185 483 10	163 249 159 243 67	172 196 82 239 29	134 146 61 171 25	97 123 85 157
Community	451	640	473	1,073	880	719	537	518

<sup>1)</sup> Customs statistics: deliveries calculated from import statistics.

<sup>2)</sup> Including the Saar as from July 6, 1959.

<sup>3)</sup> Including the Saar up to July 5, 1959.

N.B.

For years not shown, see previous General Reports.

Year	Germany (Fed. Rep.)	r Belgium	France	Italy	Luxem- bourg	Nether- lands	Com- munity
1952 1953 1960 1961 1962 1963 1964 1965	12,877   2,5 11,654   2,3 25,739 25,431 24,251 22,909 27,182 26,990 25,400		9,772 8,664 14,005 14,395 13,952 14,297 15,840 15,766 15,584	1,143 1,254 2,715 3,092 3,584 3,770 3,513 5,501 6,275	3,076 2,719 3,713 3,775 3,585 3,563 4,178 4,145 3,961	539 591 1,347 1,456 1,571 1,708 1,948 2,364 2,207	34,73 31,49 54,03 54,60 53,71 53,20 60,78 63,20 61,72

<sup>1)</sup> Provisional figures.

TABLE 23

Trend in New Orders for Rolled Products, by Provenance
(Treaty products)

('000 metric tons)

1954 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965

<sup>1)</sup> The Saar included with France up to and including 1958, with W. Germany from 1959 onwards.

<sup>2)</sup> Provisional figures.

### TABLE 24

# New Orders for Rolled Products, Deliveries by Works and Orders in Hand

(Treaty products)

('000 metric tons)

Year	New orders	Deliveries by works	Orders in hand (at end of period
1954	37,419	31,813	11,716
1955	39,729	37,980	13,688
1956	42,012	41,124	15.244
1957	40.219	42,923	12.842
1958	37,506	41,945	8,651
1959	50,448	46 053	13,334
	52,689	52,753	13,152
1960		53,752	10,225
1961	50,608		9,086
1962	52,014	53,421	9,997
1963	54,168	53,701	
1964	61,486	61,309	10,886
1965	60,765	63,149	9,636
$1966^{1}$ )	62,733	62,365	9,942

<sup>1)</sup> Provisional figures.

TABLE 25 Rate of Utilization of Steelmaking Capacity

(in %)

	1956	1958	1,961	1962	1963	1964	1965	19661)
Germany (Fed. Rep.) Saar Belgium France Italy Luxembourg Netherlands Community	97·7 98·5 93·8 95·0 92·6 98·5 97·3	82·1\ 96·4\ 80·8 93·4 80·1 93·6 92·5	90·7 84·8 94·7 93·0 97·7 90·2	85·6 87·9 88·1· 91·4 93·7 82·2	79·5 85·1 84·0 92·5 90·3 79·7	91·2 88·6 91·6 83·7 94·2 84·4	80·9 87·5 86·5 84·6 93·5 88·8	73.5 80.3 83.5 78.3 85.1 94.5

<sup>1)</sup> Provisional figures.

Since the steel plants in any one country cannot in practice all work at the same time for a whole year at full capacity, the practical maximum varies from country to country, as can be seen from the Table. For years not shown see previous General Reports.

TABLE 26

# Community and World Production of Crude-Steel

(1952 - 1966)

and array of			ni	in '000 metric tons	tons				ii	% of worl	in % of world production	ion	
A TIMOO	1952	1961	1963	1964	1965	19661)	1966/1965	1952	1961	1963	1964	1965	1966')
Germany (Fed. Rep.) (without the Saar)	15,806 2,823	33,458	31,597	37,339	36,821	35,316	— 4·I	7.4	9.7	4.8	× ×	× ×	7.7
Saar Belgium	5,170 10,867	7,002	7,525	8,725	9,162	8,916	2.1	. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	2.0	2.0	2.0	2.1	6.1
France Italy Luxembourg	3,635 3,002	9,383	10,157 4,032	9,793 4,559	12,680 4,585	13,635 4,390	+ 7.4	1.6 1.4		2.7 1.1	4.6 2.3 1.1	4 % C	4 w -
Netherlands	693	1,978	2,354	2,659	3,145	3,309	+ 5.2	0.3	9.0	9.0	9.0	0.7	0.7
Community	41,996	73,511	73,218	82,856	85,991	85,157	- 1.0	9.61	21.4	19.4	19.4	19.3	18.6
United Kingdom United States	16,681 87,766	22,439 90,453	22,880 101,477	26,650	27,438	24,704	- 10.0	7.8	9.9	6.1	6.5	6.5	5.4
U.S.S.R. Eastern Europc <sup>2</sup> )	34, 492 11, 225	70,751	80,226	85,034 97,131	91,000	96,900		16.1	20.6 20.6	20.8	19.9	20.4	$27.1 \\ 21.1$
Japan Other countries	6,988 14,602	28, 268 35, 391	31,501 43,474	39,799 47,237	41,161 49,266	23, 500 47, 769 50, 770	$+ + \frac{16.1}{3.1}$		6.6 10.3	6.6 8.3 11.5	6.4 9.3 11.1	6.4 9.2 11.0	6.4 10.4 11.0
World <sup>3</sup> )	213,750	343,500	378,000 426,700 446,000	426,700	446,000	459,500	+ 3.0	100	100	100	100	100	100

Provisional figures.
 Bast Germany, Bulgaria, Poland, Romania, Czechoslovakia, Hungary.
 Estimated, without China (People's Republic).

Corrections made to figures in previous General Reports. For years not shown, see previous General Reports.

TABLE 27

Crude-Steel Production, by Manufacturing Processes
(Community)

Year	Basic Bessemer	Acid Bessemer	Open- hearth	Electric- furnace	Other processes	Total
1953	20,886	231	15,387	3,210	48	39,7
1954	22,633	214	17,387	3,713	14	43,9
1955	27,520	246	20,478	4,523	10	52,7'
1956	29.387	252	22,104	5,203	15	56,90
1957	30,156	245	23,597	5,926	71	59,99
1958	29,282	237	22,121	5,893	642	58,1
1959	32,218	171	23,419	6,536	1,010	63, 38
1960	35,920	185	27,538	7,813	1,612	73,00
1961	35,411	189	27,070	8,432	2,401	73,50
1962	34.125	160	26,446	8,760	3,511	73,0
1963	33,348	147	25,249	8,962	5,501	73,29
1964	34,717	149	27,939	9,610	10,442	82,8
1965	32,141	122	26,874	10,334	16,521	85,9
1966 <sup>1</sup> )	30,096	94	24,633	10,528	19,771	85,13

<sup>1)</sup> Provisional figures.

TABLE 28

Production of High-Grade and Special Steels
(Community)

('000 metric tons)

Year	Germany (Fed. Rep.)	Benelux	France	Italy	Community
1954	1,447	106	936	630	3,119
1955	1,908	168	1,143	690	3,909
1956	2,215	202	1,233	719	4,369
1957	2,068	183	1,331	820	4,402
1958	1,977	110	1,298	873	4,258
1959	2,234	133	1,155	974	4,496
1960	2,969	. 199	1,470	. 1,337	5,975
1961	2,855	216	1,544	1,567	6,182
1962	2,527	202	1,485	1,337	5,551
1963	2,481	194	1,483	1,192	5,363
1964	3,047	252	1,601	1,070	5,970
1965	3,108	216	1,765	1,321	6,409
1966¹)	3,032	225	1,889	1,600	6,747

<sup>1)</sup> Provisional figures.

TABLE 29

Production of Finished Products, by Types of Products<sup>1</sup>)

(Community)

('000 metric tons)	19661)	2 968 4 4,833 6 15,311 6,624 3 1,940 6 5,304 9 14,192 2,322 7 60,578	
	1965	1,122 15,644 15,644 6,784 6,787 2,003 5,156 9,010 13,539 1,839	
	1964	1,127 15,012 15,393 6,379 1,994 5,245 8,687 13,507 1,209	
	1963	1, 175 4, 343 14, 349 16, 409 5, 480 1, 772 4, 557 7, 331 11, 953 954	
	1960	1,405 4,010 14,533 5,381 1,953 4,650 7,817 10,355 687 50,792	
	1959	1,392 3,475 12,655 4,827 1,603 3,992 6,833 8,536 448	_
	1958	1, 611 3, 258 11, 409 4, 067 1, 482 3, 227 6, 976 7, 635 229	
	1953	1,497 2,549 8,8549 8,859 2,491 1,848 1,547 3,789 50	
	1952	1,432 2,723 10,033 2,844 973 2,273 4,288 3,947 2,948	_
	Type of product	Permanent-way material Heavy sections Merchant bars Wire rod Tube semis Hoop and strip Universals and plate 3 mm. and over Sheet under 3 mm. Coils (finished products)	

Provisional figures.

N.B.

For years not shown, see previous General Reports.

TABLE 30 Intra-Community Trade in Iron and Steel (Treaty products)

Country of supply	Country of destination	1963	1964	1964 (first nine months)	1965 (first nine months)	Char in 1965/ (first mon	% 1964 nine
Germany (Fed. Rep.) <sup>1</sup> )	Belgium/Luxembourg France <sup>2</sup> ) Italy Netherlands	366·7 1,937·8 576·5 835·2	362·6 1,743·1 481·0 809·2	259·0 1,293·7 294·2 608·9	323·3 1,331·0 539·6 648·6	+ + + +	24·8 2·9 83·4 6·5
	Total	3,716.3	3,395.8	2,455.8	2,842.8	+	15.8
Belgium/ Luxembourg	Germany (Fed. Rep.) <sup>1</sup> ) France <sup>2</sup> ) Italy Netherlands	1,970·3 1,630·4 242·1 892·0	2,076·8 1,489·0 247·8 811·0	1,564·3 1,064·7 166·5 603·8	1,572·8 1,288·9 225·0 644·5	+	$0.5 \\ 21.1 \\ 35.1 \\ 6.7$
_	Total	4,734.7	4,625.2	3,399.4	3,731.1	+	9.8
France <sup>2</sup> )	Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg Italy Netherlands	1,537·4 433·9 580·3 121·7	1,597·7 394·2 486·8 125·9	288·1 328·7	313·6 397·6	++	6·3 8·9 21·0 0·8
	Total	2,673.2	2,604.6	1,957.3	1,974.1	+	0.9
Italy .	Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg France <sup>2</sup> ) Netherlands	222·9 2·6 133·6 16·8	$\begin{array}{c} 277.6 \\ 9.1 \\ 192.0 \\ 22.2 \end{array}$	5.5 143.8	7.0 166.9	1 +	
	Total	375-8	501.0	387.7	447.1	+	15.3
Netherlands	Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg France <sup>2</sup> ) Italy	289·5 227·3 91·1 202·3	201.€ 71.4	149·6 56·1	3 235·3 86·4	3 + 4 +	$57.3 \\ 54.0$
	Total	819-2	707-2	511-2	820-	3 +	60.5
	Grand total of which <sup>3</sup> ): Germany (Fed. Rep.) <sup>1</sup> ) Belgium/Luxembourg France <sup>2</sup> )	12,319·3 4,029·1 1,030·4 3,793·0 1,601·1	4,285·4 967·4 3,496·	3,270·3 5 702·3 1 2,558·3	9 3,391· 2 879· 3 2,873·	$\begin{vmatrix} 4 & + \\ 2 & + \\ 2 & + \end{vmatrix}$	3.7 $25.2$ $12.3$
	Italy Netherlands	1,865.7				. 1	

Including the Saar as from July 6, 1959.
 Including the Saar up to July 5, 1959.
 Estimates based on deliveries.

For years not shown see Twelfth General Report.
For definition of "Treaty products" and "non-Treaty products," see the series of bulletins Sidérurgie issued by the Statistical Office of the European Communities.

TABLE 31

Volume of Intra-Community Trade in Steel

 $(Treaty\ and\ non-Treaty\ products^l))$ 

('000 metric tons)	Non- Treaty products	210 443 532 532 573 623 701 988 1,080 790	+ 16.6
000.)	Total Treaty products	3,615 6,656 9,027 9,097 9,712 10,631 11,834 8,711 9,815	+ 12.7
	Sheet	453 1, 478 1, 740 2, 179 2, 721 2, 721 2, 031 2, 031	- 0.4
	Plate	348 688 688 11,156 1,390 1,599 1,714 1,714 1,235	+ 15.8
	Hoop and strip	286 498 609 609 643 745 749 749 749	+ 1:6
	Merchant bars and other sections	1,059 1,484 1,849 1,983 2,020 2,124 2,392 2,392 1,713 1,713	+ 13.4
	Beams, joists and sections over 80 mm.	337 648 648 783 784 784 784 784 884 875 875 875 875 875 875 875	+ 24.3
	Wire-rod	315 556 663 700 750 850 985 896 814	+ 17.0
	Perma- nent-way material	47.88.88.77.00.00.00.00.00.00.00.00.00.00.00.00.	5.6
	Coils	192 552 766 631 624 945 1,159 987 700 1,009	+ 44.1
	Ingots and semis	550 869 1,439 1,383 1,172 1,734 1,734 1,400 1,058	+ 8.7
9	Period	1954 1959 1960 1961 1963 1964 1965 1966 1966 first nine months	Change in % 1966/1965 (first nine months)

1) Figures based on deliveries.

N.B. For years not shown, see previous  ${\it General~Reports.}$  See also note to Table 30.

TABLE 32

Ì

## Community Steel Exports to Third Countries

(Treaty and non-Treaty products)

('000 metric tons)

Non- Treaty products	1,338 2,458 2,774 2,734 2,734 2,734 2,736 1,898	9.1
Total Treaty products	6,079 10,580 10,758 10,472 9,354 9,063 10,490 14,290 10,674 9,133	14.4
Sheet	1,105 2,396 2,596 2,341 2,220 2,377 2,914 3,433 2,609 2,272	-12.9
Plate	1, 287 1, 354 1, 354 1, 113 925 870 870 1, 746 1, 266 1, 266	-14.0
Hoop and strip	233 341 402 387 438 348 443 453 453 327 301	0.8 —
Merchant bars and other sections	2,187 3,542 3,487 3,522 3,122 3,148 2,960 2,030 3,030 2,032 2,093	-21.7
Beams, joists and sections over 80 mm.	592 911 778 774 794 828 1,239 983 1,239 850	- 1.0
Wire-rod	287 655 620 651 651 623 622 851 1,170 877	- 18.8
Perma- nent-way material	278 287 365 334 334 222 168 194 194	24.7
Coils	10 128 220 220 156 157 165 282 703 530 543	+ 2.5
Ingots and semis	631 1,033 1,134 710 680 844 1,236 835 835	4.2
Product or group of products Period	1954 1959 1960 1961 1962 1963 1964 1965 1966 (first nine months)	Change in % 1966/1965 (first nine months)

For years not shown, see previous General Reports. See also note to Table 30.

TABLE 33

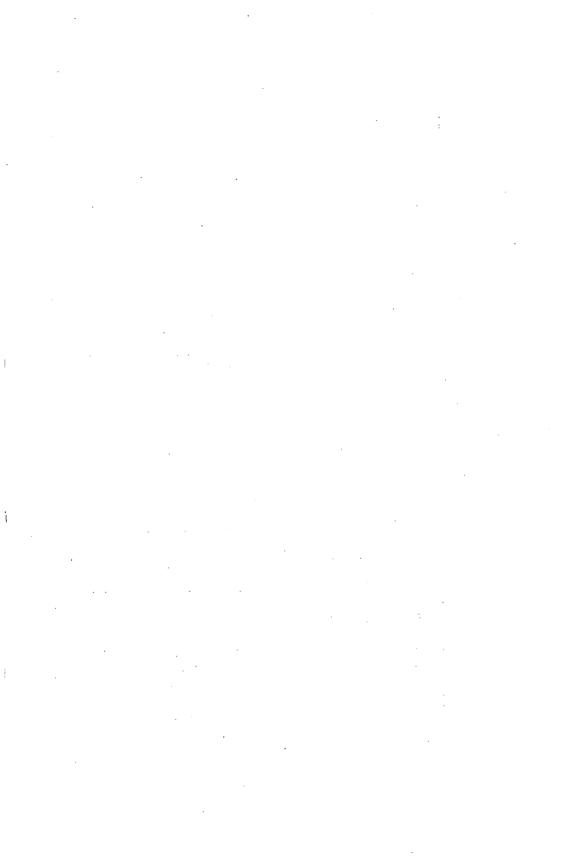
Community Steel Imports from Third Countries

(Treaty and non-Treaty products)

('000 metric tons)	Non- Treaty products	93 93 134 135 135 197 197 207 287 287 205 205	es.3   +
0000	Total Treaty products	647 898 989 11,083 11,069 11,909 11,909 12,461 11,909 11,905 11,905 11,905	+ 14.7
	Sheet	281 281 251 250 287 287 287 287 287 280 280 284 291 291	+ 42.0
	Plate	. 112 112 1129 1138 1138 1138 1159 1157 201 201 202 202 202 203 203 203 203 203 203 203	+ 32.6
	Hoop and strip	22 22 22 22 22 22 22 22 22 22 22 22 22	+ 29.4
	Merchant bars and other sections	53 84 94 94 95 118 155 208 229 220 210 161 161	6.6 +
	Beams, joists and sections over 80 mm.	8 6 6 8 8 6 6 8 8 9 8 9 8 9 8 9 8 9 8 9	+ 85.0
İ	Wire-rod	29 29 29 15 17 17 21 26 63 63 76 117 110 83	+ 12.0
	Perma- nent-way material	O	十 0
	Coils	150 164 188 264 310 310 312 401 434 1,267 1,267 1,267 1,567 1,567	- 6.2
	Ingots and semis	58 211 310 304 250 772 772 706 314 314 325 111 111	+ 31.5
	Product or group of products	1954 1955 1956 1957 1958 1959 1960 1961 1963 1964 1965 1965 (first nine months) 1966 (first nine months)	Change in % 1966/1965 (first nine months)

N.B.

For years not shown, see previous General Reports. See also note to Table 30.



 $TABLE \ 34$  Community Steel Imports from Third Countries  $\cdot \ (\text{Treaty products})$ 

('000 metric tons)	-	Total		-	248	282	1,040	1,144	2/5	789	+10.2		61	114	219	173	147	114	err	6.0 +		34	976	147	66	7.7	88	-
	Other	third		d	N 1	17	17	50.0	100	101	+ 1.0			• -	ō	4	01	<b>~</b> ?	e7	•	,	17.6	36	11	59	=======================================	33	
		Japan		•	4 -	106	600	# 06 77 6	25.	10	0.09 —		c	0	65	40	51	m 6	<b>#</b> 0	8.1	(	<b>-</b>	8	<b>(</b> 01	7	4,	4	
	Eastern Europe	Other countries		ä	7	1001	198	071	46	98	+ 87.0		က	11	32	18	7	<b>⊅</b> ₹	Ħ	-33.3		-	4	11	-	<b></b> 1	a	
	Eastern	U.S.S.R.			=	54	64	57	41	78	+ 90.2		0	7	32	41	$\frac{50}{100}$	<b>%</b>	11	98.9		=	62	12	0	00	>	
	U.S.A.	and dependencies		76	94			3.5	14	9	- 57.2		30	<b>∞</b>	12	17	24	2 r2	2	- 16.7	91	20	· ∞	7	4	eo	<b>-</b>	
		Sweden		30	8 6	12	138	135	101	91	6:6		13	7	12	14	77 -	21	•	+ 13.3	o	, 0	18	16	82	775	61	9
		U.K.		7	56	153	213	85	65	99	4 I·5		ō	18	35	77.	14	10		- 9:1	c	13	127	84	37	600	7	6
		Austria		123	283	454	447	462	324	353	0.6 +		6.	62	82 9	<b>2</b>	x0 92	o [~		+ 16.7	a	19	9	40	m (	N 69	•	0.02
	Country of	Country of destination	Germany (Fed Ren 11)	1955	1961	1963	1964	1965	1965 (9 months)	1966 (9 months)	1966/1965 (9 months)	Belgium/Luxembourg	1955	1961	1963	1904	1900 1065 (0 months)	1966 (9 months)	Change in %	1966/1965 (9 months)	France <sup>2</sup> )	1961	1963	1964	CORT	1966 (9 months)	Change in %	1084/1085 (9 months)

279 787 1,398 980 536 411	+ 27.7	22 276 237 232 152 113 25	+ 10.6	898 1,909 3,316 2,676 1,905	1,431 1,641	+ 14.7
37 211 273 110 37 27 58	+ 114.8	31 65 67 47 88	- 7.3	454 4447 4470 340	180 248	+ 37.8
351 212 46 44 119	+ 170.5	_ 100100000	0 +	5 478 280 134	112	+ 50.9
155 230 230 87 119 84	+ 51.2	71 8 4 5 4 5 1 1 2 3 1 2 3 1 3 1 3 1 3 1 3 1 3 1 3 1	+ 61.5	27 257 449 285 211	151 242	+ 39.7
63 172 103 116 93	85.0	142	ı	0 462 232 193	152 103	- 32.2
78 65 40 107 63 56	23.3	170 29 5 16 4 3	33-3	370 169 120 186 110	94 68	-27.7
26 63 22 22 32 32 32	+ 433.3	2 5 11 34 18 26	44.4	58 136 210 202 228	163 186	+ 14·1
15 62 166 270 96 72	6.9 +	53 69 61 59 31 25	-24.0	81 219 539 648 263	206 193	6.9
142 204 103 69 49 54	+ 86.2	4 0 0 0 0 1 0 1 0 1 0 1 0 0 1 0 1 0 1 0	+ 33.3	285 577 611 560 536	372 433	+ 16.4
Italy 1955 1961 1963 1964 1964 1965 (9 months) 1966 (9 months)	Change in % 1966/1965 (9 months)	Netherlands 1955 1961 1963 1964 1964 1965 (9 months) 1966 (9 months)	Change in % 1966/1965 (9 months)	Community 1955 1961 1963 1964	1965 (9 months) 1966 (9 months)	Change in % 1966/1965 (9 months)

1) Including the Saar as from July 6, 1959.
2) Including the Saar up to July 5, 1959.

N.B. For years not shown, see previous General Reports.

# Community Steel Exports (Treaty Products) to Third Countries

TABLE 35

(by countries of destination)

															-	
('000 metric tons)		Total	1,323	3,304 2,781 3.081	4,512 3,275 2,995	9.8		2,805 3,406	3,339	3,24, 3,213 2,806	-18.9	2,747	2,226	3,213 2,213	2,200	7.7
0000		Oceania and others	4	200	Ö 0 81	8.77.		87.	1 65 6	25	- 72.0	44	13	88 E	6	<b>—71</b> ·0
	Asia	Other countries	238	515 362 330	495 335 338	6:0 +		414 631 447	370	353	-13.9	384 367	260 246	324	249	+ 27.7
	As	Japan	0	11 62		0 H		7 [ 6			0 #	0	00	11	0	+
	Africa	Other	50	80 106 99	176 120 93	- 22.5	9	160 143	141	156	-17.9	509	247	319	204	- 10.9
	Afr	Overseas territories associated with member States	1	ଷଠର	11177	+ 157.1	,	25 25 46	58 48	34	+ 38.2	164	176	149	101	- 2.9
		Eastern Europe and U.S.S.R.	52	250 151 143	133 95 123	+ 29.5	ž.	187	44 82	21	+ 28.6	154 267	119 91	æ æ	41	+ 24.2
	9.	Other countries	547	1,275	1,821 1,312 1,174	- 10.5	i G	814 751	854 1.035	785	-10.3	707	731 1,002	1,071	826	+ 5.0
	Western Europe	Sweden	142	156 162 191	313 235 197	-16.2	с л	210 156	188 203	162 126	- 22.2	85 86	93 129	155	95	- 20.0
	M	U.K.	62	36 193	37.	+ 29.7	ç	161	176	40 72	0·08 +	159 14	114	16	2.5	+ 131.3
	America	Latin	199	233 233 233 233 233 233 233 233 233 233	202 205 180	- 12.2	736	532 232 222	325 414	299 228	- 23.7	369	153 224	218	cel	- 6.1
	Ame	North	27	424 610	919 821 821	- 10.7	964	773	1,149	1,337	-28.0	173	319 424	976	495	31.2
	Country of destination	Country of origin	Germany (Fed. Rep.) <sup>1</sup> )	1963 1964 1964	1965 (9 m.) 1966 (9 m.) 1966 (9 m.)	1966/65 (9 m.)	Belgium/ Luxembourg	1961 1963	1964 1965	1965 (9 m.) 1966 (9 m.)	Change in % 1966/65 (9 m.)	France <sup>2</sup> ) 1955 1961	1964	1965 1965 (9 m.)	Change in %	1966/65 (9 m.)

	— 34·5	210 535 651 666 1,013 738 633	-14.2	7,225 10,472 9,063 10,490 14,290 10,674 9,133	-14.4
	0.03 +	000000	0	137 46 43 86 89 70	- 65.7
	+ 7.4	02 04 04 07 04 04 07 07	—41·3	1,062 1,613 1,108 1,110 1,599 1,091	+ 0.2
000	100 <u>:0</u>	111350	0 +1	00 00 00 00 00 00 00 00 00 00 00 00 00	0 +
35 35 35 80 222 222 59	<b>—</b> 73·4	2 16 27 41 33 19	- 42.3	662 617 545 632 1,023 761	33.9
010100000	- 20.0	000000	0 +	417 259 235 255 215 150 169	+ 12.7
182 121 125 125 176 145 102	- 29.7	109 109 12 22 2	+ 150.0	272 964 575 415 379 296	+ 0.3
75 170 201 288 310 240 196	- 18.3	230 230 262 471 329	+ 5.5	2,122 3,187 3,215 3,667 4,708 3,248	6.9
80	+ 100 0	888 886 886 847 77	+ 11.9	510 498 471 577 766 579	-15.2
8000000	0 #	71 142 186 201 142 108	+ 5.6	519 218 496 679 300 202 273	+ 35.1
22 124 7 26 36 39 39	+ 39.3	2 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	+ 18.2	1,056 1,715 632 845 845 993 720 629	-12.6
0 1 280 244 108	- 55.7	0 1 0 161 129 189	86.1	464 1,327 1,737 2,218 4,216 3,349 2,405	-28.5
Italy 1955 1961 1963 1964 1965 1966 1966 9 m.) Change in %	1966/65 (9 m.)	Netherlands 1955 1961 1963 1964 1965 1965 (9 m.)	Change in % 1966/65 (9 m.)	Community 1955 1961 1963 1964 1965 1965 1965 (9 m.)	Change in % 1966/65 (9 m.)

t) Including the Saar as from July 6, 1959.

P) Including the Saar up to July 5, 1969.

N.B. For years not shown, see previous General Reports.

TABLE 36

Development of Internal and Export Prices for Rolled Products1)

		-		:			(\$ per metric ton)
Product		Germany (	Germany (Fed. Rep.)	Belg	Belgium	Fra	France
	:	January 1966	January 1967	January 1966	January 1967	January 1966	January 1967
Reinforcing bars		101.30	.	80-94	81-94	96.60	
Merchant bars	b.B. o/h	$100.55^2$ ) $114.50$	104.15	90-98 $107-108$	92-98 108-109	96.60 107.30	11 11
Beams and joists	b.B. o/h	$98.15^{2}$ ) $108.50^{2}$ )	$101.75\\112.10$	90-99 108-109	93-99 109-110	97.75 108.70	11 11
Wire rod	b.B. o/h	106.10 116.40		89-110 106-125	96-110	99.20 106.25	11 11
Hoop and strip	b.B. o/h	113.05 123.60		109 119-127	== 119-120	101.70 114.15	
Sheet (hot-rolled)	b.B. o/h	111.85 125.75	1	89-122 94-138	99-122 100-138	109.65 120,85	
Plate	b.B. o/h	133.20 145.20		108-136 $148$	115-136	124.75 136.85	
Sheet (cold-rolled) (1 mm.)	b.B. o/h	154.30 166.30		150.30	I	142.30	4
Basing points:		Oberhausen For plate: Essen	Į,	Seraing and others	ers	Thionville For plate and sheet : Montmédv	eet: Montmédy
		ror sneet : Sieg	en				

		Italy	ly	Luxembourg	bourg	Nethe	Netherlands	Brussels export price	port price
Product	1	January 1966	January 1967	Jan. 1966	Jan. 1967	Jan. 1966	Jan. 1967	Jan. 1966	Jan. 1967
Reinforcing bars	<u> </u>	93.60-96.80		103		87.15	. 1	74-78	73-76
Merchant bars b	b.B. o/h	102.40-110.40 102.40-113.60	102.40-113.60	001		111.05	11 11	81-86	81-84
Beams and joists b	b.B. o/h	108.80	113.60	104	11	11	11	74-77	79-85
Wire rod b	b.B. o/h	116.80	!	103	1.1	117.30 $121.25$	104.95 108.90	78-83	78-82
Hoop and strip b.	b.B.	108.80	1 /	107		114.15 119,95	11 11	80-84	84-88
Plate b.		123.20-124.80		118		101.05		84-86	86-91
Sheet (hot-rolled) b.	ь.В. o/h	139.20		138.60		132.85 143.55		100-102	104-108
Sheet (cold-rolled) (1 mm.) b.	b.B. o/h	153.60	158.40	150.30		147.65 164.90		103-106	109-112
Basing points:		Novi Ligure		Esch/Belval For plate and sheet: Dudclange	al and sheet:	For merchant b Utrecht For wire rod hoop and str. Alblasserdam/ Zwijndrecht For plate and sl Velsen/Bever For reinforcing	For merchant bars: Utrecht For wire rod and hoop and strip: Alblasserdam/ Zwijndrecht For plate and sheet: Velsen/Beverwijk For reinforcing bars:	F.o.b. Antwerp	twerp
1) Internal price = schedule price; export price = market price.	xport p	rice = market price							

) fintering price – solutions price, capara price – manner price – specific educated.

=: figure unchanged.

—; see Notes following and Table 41 in last year's Report.

### Notes to table 36

### Community

Following a long decline, which reached its lowest point at the end of 1965, Community steel prices at the beginning of the period under review showed signs of moving up again towards the general level of schedule prices; the revival, however, was not sustained. Market prices suffered increasingly from the supply/demand imbalance.

## Germany (Federal Republic)

The temporary rebates of \$7.50 per ton (= about 7%) allowed from October 1, 1965, by the German plants outside the Saar on merchant bars and sections were halved on December 1 and abolished altogether in 1966, for merchant bars on February 1 and for sections on May 1.

### Belgium

The upturn early in 1966 is better reflected in the movements of Belgian schedule prices, always a clearer indicator of the state of the market, than in the practically static schedules of the bigger producer countries. At the end of 1965 the Belgian plants had in some cases reduced their schedule prices to the lowest level yet, far below the general Community average: with the incipient market recovery shortly afterwards most of their ultralow prices were put up again, once or more, according to product and quality, by 2-8% for sections and 6-11% for flats.

The new Belgian prices did not, however, become general, as some Belgian enterprises retained their ultra-low ones or increased them only slightly. Belgium's are still far and away the lowest schedule prices in the Community.

### France

There were no changes to speak of in schedule prices.

## Italy

Italian prices became mostly rather firmer. Following increases in the schedule prices of reinforcing rods and merchant steels under 80mm., the prices of merchant steels over 80mm., sections, cold-reduced sheet and coils were also put up during the year by 3-4%.

## Luxembourg and Netherlands

Schedule prices remained practically unchanged. In the Netherlands, only that of wire rod, which had been the same for years, was adjusted in line with the state of the market.

TABLE 37

## Trend in Overall Volume of Traffic (within the Community and with Third Countries), by Nine Groups of Treaty Products, in 1964 and 19651)

	196	34	19	65	Change	in %*)
	'000,000 metric tons	%	'000,000 metric tons	%	1964/19634)	1965/1964*)
1. Hard coal and hard-						
coal briquettes	177.3	35.9	163.2	33.7	10.8	<b>—</b> 8·0
2. Brown coal and brown-		00 0			1 200	"
coal briquettes	22.3	4.5	19-1	4.0	11.9	14.5
3. Coke	48.5	9.8	46.6	9.6	- 5.0	<b>— 4</b> ·0
4. Iron ore	$135 \cdot 1$	. 27.4	142.3	$29 \cdot 3$	+ 18.3	+ 5.4
5. Manganese ore	$2.9^{3}$ )	0.6	3.0	0.6	$+ \cdot 0.5^{3}$	+6.2
6. Scrap	$24 \cdot 1$	4.9	23.4	4.8	+13.0	<b>— 2.6</b>
7. Pig-iron and crude steel	12.1	2.5	11.8	2.4	+13.3	_ 2.0
8. Semi-finished products	20.3	4.1	20.7	4.3	+12.0	+ 1.8
9. Rolled products	$50.7^{3}$ )	10.3	55.0	11.3	+ 13.6	+ 8.3
Total volume of traffic	493.23)	100-0	485-1	100	+ 1.3	1.6
of which:						
A. by rail	303.0	61.4	291.9	60.2	- 2.5	_ 3.7
by inland waterway	86.1	17.5	81.7	16.8	+ 9.7	_ 5·i
by sea	$104 \cdot 2$	21.1	111.5	23.0	+ 6.8	+ 7.0
B. Intra-Community			ļ			
traffic	377-9	76.6	361.8	74.6	+ 1.0	<b>—</b> 4·3
Traffic with third					' - "	-
countries	. 115.4	$23 \cdot 4$	123.4	$25 \cdot 4$	+ 2.3	+ 6.9
Deliveries to third			1		1	'
countries	23.0	4.7	26.3	5.4	12-2	+ 14.3
Procurements from					1	· .
third countries	92.4	18.7	97.1	20.0	+ 6.7	+ 5.1

<sup>1)</sup> Exclusive of goods hauled by road.

<sup>2)</sup> For 1963, see Statistical Annex to Fourteenth General Report, Table No. 42.

a) Corrected figure.

<sup>4)</sup> Based on rounding to nearest '000 tons.

Solid fuels

Ores and scrap
Iron and steel products

 $TABLE \ \ \, 38$  Trend in Intra-Community Carriage of Treaty Products

1958

87

97

97

91

Total

 (1956 = 100)

 1963
 1964
 1965

 90
 83
 76

 99
 111
 110

128

96

	TABL	E	39			
Trend in Community	Traffic 1	to	and	from	Third	Countries

110

95

(1956 = 100)

131

92

	· · · · · · · ·	,		<del> </del>
	1958	1963	1964	1965
To third countries				
Solid fuels <sup>1</sup> ) Ores and scrap Iron and steel products <sup>2</sup> )	67 88 114	76 65 118	51 94 126	50 112 160
From third countries			,	
Solid fuels Ores and scrap Iron and steel products	86 99 88	91 142 208	78 187 192	74 211 176

<sup>1)</sup> Hard coal, brown coal, coke.

<sup>&</sup>lt;sup>2</sup>) Pig-iron, crude-steel, semis, rolled products.

## TABLE 40

Net Increase in Production Potential (based on compulsory declarations of investment projects)

$\overline{}$
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					Declarat	Declarations received during	during	
Sector	Production	Production potential 1965	Annual average 1956-1961	1962	1963	1964	1965	1966
		-						
Coalmining industry Pits	Hard coal	238.1	3.4	0.3		6:0   	            	
Coking-plants (mine-owned)	Coke	51·4	 	0.5	1 1		0.1	18
Coking-plants (independent) Pithead power-stations Hard-coal briduetting plants	Loke Installed capacity Hard-coal briquettes	$\frac{9.7^{1}}{19.0}$	9.6	0.5	0-3 0-6	00 I	0.4	0 0 0
Iron ore mines	Crude ore	90.5	1.1	ļ			ı	1
Iron and steel industry								
Coking-plants (steelworks-	Coke	23.1	6.0	0.1	1	9.0	8.0	800
Burden preparation plant	Sinter Pig-iron	79.8	& 80 4-0	4.9 9.2	- 0.5	9.0	1.9	6.0
Steelworks: .		(0.7.0)	(6.0)	(2(1:1-)	$(-1.1)^2$	(0·1)	$(-0.3)^2$	$(-1.0)^2$ )
(a) Basic Bessemer	Basic Bessemer steel L/D and similar steel	(19-5)	2.0°	(8:3)	(0.0)	(2·9) (1·5)	(0.4) (0.6)	(1:4) (1:4) (1:4)
(c) Open-hearth	Open-hearth steel Electric-furnace steel	(33.0) (12.5)	(0.4) (0.5)	(-(2:0) —) (0:1)	(6.0)	(0·3)	(e·3)	(0.1)
	Steel, total	102.0	5.1	1.6	- 0.1	4.8	5.5	<b>4</b> ·0
(a) for hot-rolled wide	Coils (semis and nuished   products)	(21.0)	(1.5)	(0.5)	Î	(1.2)	(1.6)	<u> </u>
(b) for sections	Sections (finished products)	38.9	1.0	6.0	- 0.1	6.0	0.5	9.6
(c) for flat products	flat products (finished)	37.7	.25	0.1	0:4	6.6		-

Installed capacity ('000,000 kW) as at beginning of 1965.
 Some works are replacing all or some of their basic Bessemer or open-hearth plant by oxygen steelmaking plant.

 $TABLE \ \, 4I$  Personnel Employed in the E.C.S.C. Industries

							C000 t	('000 persons employed)
Sector and country		as at Septen	as at September 80, 1965	İ		as at Septem	as at September 30, 1966	
	Workers	Apprentices	Salaried employecs	Total	Workers	Apprentices	Salaried employees	Total
Coalmining industry Germany (Fed. Rep.)	315-3	16.6	49.8	381.7	280.9	. 1.8.7	0.17	7776
$_{\rm France^2)}$	152.6	1.41)	9.4	80.0	59.0	$1.6^{1}$	*. 8.5 8.5	344·4 69·1
Italy (	2.6		23:3	180.4	147.1	3.3	23.1	173.5
Netherlands	44.6	5.0	8.0	54.6	39.5	1:3	7.0	1.8
Community	585-3	23.5	6.06	1.669	528.0	21.9	87.5	637.4
Iron and steel industry								
Germany (Fed. Rep.)	203.5	0.6	42.1	254.6	192.0	9.4	43.0	944.4
France	5.I.G	1:	6.3	2.09	48.2	<u> </u>	e e e e	57.7
Italy	126.3	4.1	30.6	161.0	118.6	3.6	29.6	152.1
Luxembourg	1.00	1.00	6.01 6.01	69.1	57.6	0.1	11.2	6.89
Netherlands	12.0	0.5	6.49	18.0	19.7	4.0	2.8	22.9
				0.04	1.71	<b>7.</b> 0	c.o	19.9
Community	471.1	14·1	102.1	587.3	448.2	13.9	102.9	565.0
Iron-ore mines								
Germany (Fed. Kep.)	2.9	0.1	1.2	8.0	5.4	0.1	6-0	6.4
Italy	1.01	77.0		50.0	14.8	0.1	5.8	17.7
Luxembourg	9.1	1	, a	1.7	1.3	1	0.1	1.4
0	4		7.0	8.1	1.5	1	0.5	1.7
Community	26.5	0.3	4.7	31.5	23.0	0.5	4.0	27.2
Community, total	1,089-9	37.9	197.7	1,318.5	999.2	36.0	194.4	1,229.6
1) Chudonto f								
Including non-nationalized mines,	g colleges only.							

## TABLE 42

Personnel Employed in the Coalmining Industry

('000 persons employed)

		ਰ	as at September 30, 1965	ber 30, 1965					as at September 30, 1966	ber 30, 1966		
Country	Under- ground workers	Surface and ancillary workers	Super- visory and technical personnel	Clerical	Total	of which: Appren- tices	Under- ground workers	Surface and ancillary workers	Super- visory and technical personnel	Clerical	Total	of which: Appren- tices
Germany												
(Fed. Rep.)	7.871	03.0	97.0	19.5	311.0	14.0	154.5	85-6	26.9	11.8	278.8	13.1
Kunt	15.8	9.50	, 63 69	0.7	25.0	8.0	14.8	0.9	64 c	0.0	23.8	0·1
Lower Saxony Saar	4.4	10.8	0.5 4·1	0.2	39.0	1.6	3.5	1.4 10·1	င္ ဇာ ဇာ ဇာ	1.5	36.2	1.6
Total	219.5	112.4	34.8	15.0	381.7	9-91	193.5	103.1	33.6	14.2	344.4	15.7
Belgium	29.4	11.1	3.9	1.3	45.7	0.3	25.0	9.7	4.6	1:1	39.2	e.⊖ -
Campine	22.4	9.2	က်	0·1	34.3	. I·I	18.9	7.1	9.0	6.0	0.07	9 1
Total	51.8	18.7	7.2	2.3	0.08	$1.4^{1}$	43.9	16.8	6.4	2.0	69.1	1.61)
France												
Nord/ Pas-de-Calais	65.5	27.8	9.1	3.5	105.9	2.6	65.6	27.0	9.5	4.6	102.5 36.6	2.5
Lorraine Centre-Midi <sup>2</sup> )	19-7 20-1	12.3	3.3	1:3	36.4	9 6	18.8	11:1	3.5	1.3	34.4	0.3
Total	105.3	51.8	17.1	6-2	180.4	3.5	100.3	50-1	17.1	0.9	173.5	3.3
Italy	0.7	1.8	0.3	0.1	3.0	1	6.0	9.0	0.5	0.1	1.8	
Netherlands Limburg	24.4	22.2	5.3	2.7	54.6	2.0	20.3	20.6	5.1	2.6	48.6	1.3
Community, total	401.7	206.9	64.7	26.3	699-7	23.5	358.9	191.2	62.4	24.9	637-4	21.9
		_										

1) Students from technical and mining colleges only.
2) Including the non-nationalized mines.

TABLE 43

Incidence of Short Time

(October 1, 1965-September 30, 1966)

		Rubr			Campine			S. Belgium	
	Pits	Average of wo (underground	Average number of workers (underground and surface)	Dite	Average numb of workers (underground and s	Average number of workers (underground and surface)	i	Average number of workers (underground and surf	Average number of workers (underground and surface)
		Absolute figures	(*%	9	Absolute figures	( <sub>8</sub> %	STL	Absolute figures	(*%
1. Whole coalfield	06	232, 200	100.0	7	29,500	100.0	46	40,700	100.0
2. Pits on short time owing to poor sales of which:	89	151,900	65.4	9	23,600	0.08	56	15,000	36.8
1- 5 days 6-10 days	18	44,600 36,900	19.2	- 1	4,000	13.6	<b>9</b> 10	5,400	13.3
11-15 days 16-20 days	24	47,900	20.6	-	6	1 =	5	500	1.2
21-25 days	: <sub> </sub>		·	·	4,400	14.9	<u>.</u>	9,100	12.2
26-30 days 31-35 days			1		2,200	75.0	1	1	! !
36-40 days	1				4,100	13:0	11	006	5.5
3. Average number of idle shifts per worker on short time Average number of idle shifts		9.1			24.9			12.4	
in coalfield <sup>1</sup> )		8.43			24.37			10.37	

Including pits not on short time.
 Including services.
 Including supervisory personnel.

## TABLE 44

## Personnel Employed in the Iron and Steel Industry1)

('000 persons employed)

		İ				-				
		as at S	as at September 30, 1965	1965			as at S	as at September 30, 1966	1966	
Country	Process workers <sup>1</sup> )	Ancillary workers <sup>1</sup> )	Clerical, technical and managerial staff	Appren- tices	Total	Process workers <sup>1</sup> )	Ancillary workers¹)	Clerical, technical and managerial staff	Appren- tices	Total
Germany (Fed. Rep.)		10.8	5.6	1:1	29.0	11.1	11.2	5.0	1.2	29.4
North Rhine/Westphalia South	8.4	6.3	28.6 3.0	6.5 7.0	174·0 18·4 33·9	84.0 8.6 13.9	444.7 5.4 13.1	29:2 3:0 4:9	4.0 6.0 0.1	164.3 18.0 32.9
Saar Total		94.0	42.1	0.6	254.6	177.6	74.4	43.0	9.4	224.4
Belgium	33.0	18.4	9.3	1	2.09	30.9	17.3	9.5	1	57.7
France North	15.0	11:1	6-9	0.3	33.3	14.0	10.8	8.9	0.0	31.8
East Centre	40·0 7·5	35.1 5.6	17.3	e 5.5 €	95.7 17.0	27.0	4.6.4 4.6.6	3.4	900	15.2
regions		4.4	7.3		0.61	66.1	# 67	90.0	9 8	152.1
Total	u 70·1	2.99	30.6	4.1	0.707	1.00	0.70	6 62		
Italy North Centre and South	23.1	16.8	3.9	0.0	47.0	22.9 9.8	16.1	4.2	0·1 0·0	46·1 22·8
Total	32.5	25.6	10.9	0.1	69.1	32.7	24.9	11.2	9-1	6.89
Luxembourg	10.9	6.8	2.8	0.4	23.0	10.7	0.6	5.8	0.4	22.9
Netherlands	4.2	7.8	6.4	0.5	18.9	5.4	6.7	6.5	0.4	19.0
Community, total	al 260·2	210.9	102.1	14·1	587.3	263-4	184.8	102.9	13.9	565.0
1) Estimated.	-	-								

TABLE 45

Personnel Employed in the Iron-Ore Mines

									('000 perso	('000 persons employed)
		as at	as at September 30, 1965	0, 1965			as at	as at September 30, 1966	), 1966	
Country	Under- ground and opencast- mine workers	Other workers	Clerical, technical and managerial staff	Appren- tices	Total	Under- ground and opencast- mine workers	Other	Clerical, technical and managerial staff	Appren- tices	Total
Germany (Fed. Rep.) North Centre South	2.7 0.6 0.9	1.7 0.4 0.4	0.8 0.3 0.1	0·1 0·0 0·0	5.3 1.4	2·1 0·4 0·9	1.5	0.7 0.1 0.1	0.00	4·4 0·6 4·1
Total	4.2	2.5	1.2	0.1	8.0	3.4	2.0	6.0	0.1	6.4.
France East West Centre and South	11.2	9.0 0.0 0.0	2.8 0.0 0.0	0.5	17.7 2.2 0.1	9.7 1.0 0.1	8.0 0.0 0.0	2.5 0.3 0.0	. 0.0	15.5 2.1 0.1
Total	12.4	4.3	3.1	0.5	20.0	10.8	4.0	8. 8.	0.1	17.7
Italy	0.7	8.0	0.5	1	1.7	9.0	0.7	0.1	1	1.4
Luxembourg	6.0	0.7	0.5	1	1.8	0.7	8.0	0.5		0.7
Community, total	18.2	8.3	4.7	0.3	31.5	15.5	7.5	4.0	0.5	27.2
					-	-	-	-	-	

TABLE 46 Changes in the Personnel Pattern of the E.C.S.C. Industries (Annual average)

(% of total personnel, less apprentices)

·	1955	1960	1963	1964	1965	19661)
Coalmining						•
Underground workers	62.5	60-2	59.2	58.4	58-7	58.8
Surface and ancillary workers	27.5	28.6	28.4	29.2	28.2	27.8
Supervisory and tech- nical personnel Clerical staff	6·6 3·4	7·7 3·5	8·7 3·7	8·8 3·6	9·3 3·8	9·5 3·9
Total	100.0	100.0	100.0	100.0	100.0	100.0
		-				
Iron and steel industry <sup>2</sup> )	,	o			•	
Process workers Ancillary workers	48·9 37·8	$\begin{array}{c} 47.7 \\ 38.2 \end{array}$	45·9 38·1	45·8 37·0	45·9 36·5	$47.3 \\ 34.3$
Clerical, technical and managerial staff	13.3	14.1	16.0	17.2	17.6	18.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Iron-ore mines						
Underground and open- cast-mine workers Other workers	64·3 25·7	$62.5 \\ 25.6$	60:6 25:8	59·0 27·0	58·5 26·8	57·4 27·8
Clerical, technical and managerial staff	10.0	11.9	13.6	14.0	14-7	14.8
Total	100.0	100.0	100-0	100.0	100.0	100.0

<sup>1)</sup> First nine months.
2) Estimated.

TABLE 47

Breakdown by Nationalities of Personnel Employed in the Community Industries at September 30, 1966

('000 persons employed) 3.0 15.5 9.4 1.5  $\frac{29.4}{3.7}$ 31·3 1·3 Total 2.8 8.7 15.5 3.8 0.5 0.1  $63.05 \cdot 1$ 0.4 2.3 0.1 Dutchmen 8 9 0 0 0 0 1.4 0.3 0.0 0.7 0.0 0.0 0.0  $\frac{2.1}{0.4}$ Nationals of other Community countries Luxem-burgers 000 0.0 000 0.2 0.1 0.3 0.1 ı 1 + Italians 2.0 13.8 5.8 22.0 2.8  $\frac{1.9}{8.1}$ 0.5 47·7 3·7 1.1  $\frac{23.7}{0.7}$ 0.50 ł Frenchmen 0.0 0.7 0.0 $\overline{5}$ 2.3 0.1 0.1 Belgians 0.20.8 2.8 4·7 4·4 5.6 0.5 0.0 0.1 <u>:</u> 1 Germans 0.6 3.4 000 0.5 4·5 0·4 0.0 0.5 0.0 0.0 5.0 Nationals 321.2 35.8 139.5 1.8 43.3 541.6 50.937.4 86.5 57.6 15.5 10.7 386·3 20·2 5.3 12.2 1.3 947.8 74.5 1 Community Change Sept. 1965-Sept. 1966 Community Change Sept. 1965-Sept. 1966 Community Change Sept. 1965-Sept. 1966 Community, total Change Sept. 1965-Sept. 1966 Sector and country Coalmining industry<sup>1</sup>)
Germany (Fed. Rep.) Iron and steel industry $^2$ Germany (Fed. Rep.) Germany (Fed. Rep.) Luxembourg Netherlands  $(ron-ore\ mines^2)$ Netherlands Luxembourg Belgium Belgium France France France Italy Italy Italy

TABLE 47 (continued)

ļ

			Nationals of 1	Nationals of non-Community countries	countries			Total number
Sector and country	Greeks	Spaniards Portuguese	North Africans	Poles	Turks	Others	Total	of denizen workers
Coalmining industry <sup>1</sup> ) Germany (Fed. Rep.) Belgium France	1:3 0:0	1.7 2.4 1.6	2.0 4.6 15.1	0.3 1.9 6.9	8.4 5.5 0.0		20-2 17-8 24-6	23·2 33·3 34·0
spu	0.1	0.4	1.6	0.3	0.0	1.4	3.8	5.3
Community Change Sept. 1965-Sept. 1966	3:6	1.1	- 1·1	1.3	2.3	+ 0.1	7.5	- 11.2
Iron and steel industry?) Germany (Fed. Rep.) Belgium France	4.00 4.00	2.9 0.6 5.5	0.1 0.1 7.7	0.1 0.6 4.4	800 000 000 1	0.4 0.6 0.0 0.0	10.6 2.1 16.6 0.0	13.4 $10.8$ $32.1$ $0.0$
Italy Luxembourg Netherlands	0.0	0.0	000	0·1 0·0	0.1	0.0	0.9	1.4
Community Change Sept. 1965-Sept. 1966	2.7	9.7	7.9	3.2	3.9	3.2	30.6	61.9
Iron-ore mines <sup>2</sup> ) Germany (Fed. Rep.) France Italy Luxembourg	1111	0 0	0	0.0	1 1 1 1	0.0	0.0	0.1 2.6 0.4
Change Sept. 1965-Sept. 1966	11	0.1	+ 0·1	0.5	11	+ 6-1	0.8	3.1
Change Sept. 1965-Sept. 1966	6.3 2.5	15.9	31.3 — 1.6	$\frac{13\cdot 1}{-1\cdot 8}$	$\frac{17.8}{-1.8}$	13.4	$\begin{vmatrix} 97.8 \\ -10.4 \end{vmatrix}$	160.8 — 15.5

1) Workers, apprentices and clerical, technical and managerial staff.
2) Workers , exclusive of apprentices. Breakdown is estimated.

TABLE 48

Breakdown by Nationalities of Underground Personnel
Employed in the Community Coalmining Industry at September 30, 1966

('000 persons employed)

	Worl (incl. app	cers¹) prentices)	Clerical, and manag	technical erial staff¹)	То	tal
	Nationals	Others1)	Nationals	Others1)	Nationals	Others <sup>1</sup> )
Germany (Fed. Rep.) Belgium France Italy Netherlands	173·9 15·0 70·8 0·9 16·8	$ \begin{array}{r} 19.6 \\ 28.9 \\ 29.5 \\ \hline 3.5 \end{array} $	15·0 3·4 7·9 0·1 1·7	0·0 1·5 0·2 —	188·9 18·4 78·7 1·0 18·5	19·6 30·4 29·7 3·5
Community	277-4	81.5	28.1	1.7	305.5	83.2

<sup>1)</sup> Estimated.

## Nationals of Other Community Countries and of Non-Community Countries

('000 persons employed)

	Germany (Fed. Rep.)	Belgium	France	Italy	Nether- lands	Com- munity
Germans		0.6	2.6		0.2	0.4
Belgians	0.0	_	0.1		0.2	3·4 0·2
Frenchmen	0.1	0.3			0.0	0.2
Italians	1.6	12.1	4.7		0.3	18.7
Luxemburgers	0.0	0.0	0.0			0.0
Dutchmen	0.5	0.6	0.0	_		1.1
Nationals of other Community countries	2.2	13.6	7.4		0.6	23.8
Greeks	0.9	2.1	0.0			
Spaniards and Portugese	1.3	$\tilde{2}\cdot\tilde{2}$	1.3	_	0·0 0·2	3.0
North Africans	1.8	$\frac{\overline{4}\cdot\overline{5}}{4}$	14.7		1.3	$\begin{array}{c} 5.0 \\ 22.3 \end{array}$
Poles	0.3	1.6	5.5	_	0.3	7.7
Turks	7.4	5.4	0.0	_	0.0	12.8
Others	5.7	1.0	0.8		1.1	8.6
Nationals of non- Community countries	17.4	16.8	22.3	_	2.9	59.4
Total	19.6	30.4	29.7		3.5	83.2

TABLE 49

Changes in the Number of Apprentices and in the Proportion of Apprentices to Total Personnel in the E.C.S.C. Industries

·	Septembe	r 1965	Septembe	r 1966
Industry and country	appren	tices	appren	tices
	'000	%	'000	%
Coalmining industry		1		
Germany (Fed. Rep.) Belgium <sup>1</sup> ) France	16·6 1·4 3·5	4·3 1·8 1·9 3·7	15·7 1·6 3·3 1·3	$egin{array}{c} 4 \cdot 5 \ 2 \cdot 3 \ 1 \cdot 9 \ 2 \cdot 8 \ \end{array}$
Netherlands Community	$\begin{array}{c} 2 \cdot 0 \\ \hline 23 \cdot 5 \end{array}$	3.3	21.9	3.4
Iron and steel industry  Germany (Fed. Rep.)	9.0	3.5	9.4	3.8
France Italy Luxembourg Netherlands	$\begin{array}{c c} 4 \cdot 1 \\ 0 \cdot 1 \\ 0 \cdot 4 \\ 0 \cdot 5 \end{array}$	$2.5 \\ 0.1 \\ 1.7 \\ 2.6$	3·6 0·1 0·4 0·4	$2 \cdot 3$ $0 \cdot 1$ $1 \cdot 7$ $2 \cdot 1$
Community	14-1	2.4	13.9	2.5
Iron-ore mines <sup>2</sup> )				
Germany (Fed. Rep.) France	$\begin{array}{c} 0\!\cdot\!1 \\ 0\!\cdot\!2 \end{array}$	1·3 1·5	0·1 0·1	1·5 0·5
Community	0.3	1.2	0.2	0.7
Total Community	37.9	2.9	36.0	2.9

<sup>1)</sup> Students from technical and mining colleges only.

a) Only the German and French iron-ore mines provide systematic training for apprentices.

TABLE 50

High Authority Readaptation Assistance Approved Under Article 56,2 of the Treaty

(March 29, 1960-January 31, 1967)

	Coalminin	Coalmining industry	Iron-or	Iron-ore mines	Iron and st	Iron and steel industry	Total per	Total per country
	No. of workers	Amount (\$ '000)	No. of workers	Amount (\$'000)	No. of workers	Amount (\$ '000)	No. of workers	Amount (\$ '000)
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	82,242 28,376 4,527 861 12,200	17,367 7,190 2,878 672 	8,606 37 4,546 1,201 150	1,342 5 1,814 851 100	6, 151 1, 812 3, 178 4, 068	727 757 1,278 3,696	100,999 30,226 12,251 6,130 150 12,200	19,436 7,952 5,970 5,119 4,171
Community	132,206	32,278	14,540	4,112	15,209	6,358	161,955	42,748

TABLE 51

High Authority Readaptation Assistance Approved Under Section 23 of the Convention and Article 56 of the Treaty

(March 18, 1954-January 31, 1967)

	Coalmining industry	g industry	Iron-ore mines	mines	Iron and steel industry	el industry	Total per country	country
	No. of workers	Amount (\$ '000)	No. of workers	Amount (\$ '000)	No. of workers	Amount (\$ '000)	No. of workers	Amount (\$ '000)
Germany (Fed. Rep.) Belgium France Italy Luxembourg Netherlands	140,442 57,276 11,182 6,391 12,200	33, 548 17, 750 4, 428 3, 036 4, 171	8,856 37 4,796 1,201 150	1,404 5 1,862 851 100	6,801 1,812 8,178 17,718	961 757 2,192 10,069	156,099 59,125 24,156 25,310 12,200	35,913 18,512 8,482 13,956 4,171
Community	227,491	62,933	15,040	4,222	34,509	13,979	277,040	81,134

TABLE 52
Total Hourly Wage Costs in 19651)

(Belgian francs)

					. ,,
Germany (Fed. Rep.)	Belgium	France	Italy	Luxem- bourg	Nether- lands
98.10	91.74	98.39	75.63		103.02
$81.67^2)$	_	123.30³)	86.07	118.45	
90.44	91.28	73.86	80.44	97.34	97.81
	98.10 81.67 <sup>2</sup> )	98.10 91.74 81.67 <sup>2</sup> ) —	98.10 91.74 98.39 81.672) — 123.303)	98.10 91.74 98.39 75.63  81.67 <sup>2</sup> ) — 123.30 <sup>3</sup> ) 86.07	98.10 91.74 98.39 75.63

<sup>1)</sup> Total hourly wage costs are made up of all the labour costs borne by the employer, viz., in addition to the direct hourly wages, the portion, per hour, of performance or productivity bonuses, gratuities, pay for days not worked (public holidays, annual holidays), benefits in kind and employer's social-security contributions, together with expenses in connection with labour recruitment and occupational training. To enable comparisons to be made as among the different countries, total hourly wage costs must be expressed in a single common currency.

TABLE 53

Average Net Annual Incomes in 1965
(Workers in attendance, not living in company-owned houses, married, with two dependent children)

(Fed.	many Rep.) M	Belgium BF	France FF	Italy Lire	Luxembourg LF	Netherlands Fl.
Cm.u. S. Om.u. <sup>1</sup> ) Cm.s. Om.s. <sup>1</sup> )	10,575 10,024 9,345 8,147 7,835	S. 149,677 Cm.u. 145,336 Cm.s. 110,870	Om.u. <sup>2</sup> ) 14,758 Cm.u. 14,125 S. <sup>2</sup> ) 12,268 Om.s. <sup>2</sup> ) 11,856 Cm.s. 11,745	Om.u. 1,557,141 S. 1,522,308 Cm.u.*) 1,300,657 Om.s. 1,284,616 Cm.s.*) 1,087,393	Om.u. 179,094 S. 158,111 Om.s. 147,270	Cm.u. 9,845 S. 8,604 Cm.s. 7,098

Cm.u. = coalminer, underground; Cm.s. = coalminer, surface; Om.u. = ore miner, underground; Om.s. = ore miner, surface; S. = steelworker.

<sup>2)</sup> Lower Saxony.

<sup>3)</sup> Eastern orefield.

This table illustrates the comparative income position of workers employed in the E.C.S.C. industries. It shows the place of colliery workers, ore miners and iron and steel workers respectively in their country's income scale in 1965.

<sup>1)</sup> Lower Saxony.

s) Eastern region.

<sup>8)</sup> Sulcis.

 $TABLE \ \ 54$  Movement of Cost of Living in the Community Countries  $^{1}$ )

(General consumer-price index)

(1958 = 100)

	Germany (Fed. Rep.) <sup>2</sup> )	Belgium³)	France <sup>4</sup> }	Italy	Luxembourg <sup>3</sup> )	Netherlands <sup>5</sup> )
1958 1959 1960 1961 1962 1963 1964 1965 Oct. 1965	100 101 102 105 108 111 114 118	100 101 102 103 104 106 111 115	100 106 110 114 119 125 129 132	100 100 102 104 109 117 124 129	100 100 101 101 102 105 108 112	100 102 103 105 108 113 119 126

<sup>1)</sup> Source : Bulletin Général de Statistique of the Statistical Office of the European Communities.

TABLE 55

Financial Operations in Connection with Loan-Aided Workers' Housing Scheme VI (February 1, 1966-January 31, 1967)

		Date of	Loans a	granted by	High Authority	
Country	Industry	High Authority Decision	From Special Reserve	In- terest	From borrowings	In- terest
Germany (Fed. Rep.)	Steel Coal	16.3.66 16.3.66	DM 11,590,000 DM 6,400,000	1% 1%	<u> </u>	_
France	Steel Coal	20.7.66 20.7.66	FF 16,000,000 FF 3,660,000	1% 1%		=

<sup>2)</sup> Exclusive of the Saar up to and including 1959.

<sup>\*)</sup> Exclusive of rent.

<sup>4)</sup> Including Paris up to 1962; new index for the whole of France from January 1963.

<sup>5)</sup> New index from 1963.

TABLE 56
Special Scheme

Country <sup>1</sup> )	Locality	Company benefiting	Housing association	Dwellings
Germany (Fed. Rep.)	Salzgitter Freudenberg Wulfen	Hüttenwerke Salzgitter AG Steinkohlenbergwerke Mathias Stinnes AG	Wohnungs AG, Salzgitter Entwicklungsgesell- schaft Wulfen mbH	400 350
Belgium	Genk	Several collieries + the steel firm Allegheny-Longdoz	Société nationale du logement	400
France	Le Creusot	Société des forges et ateliers du Creusot, Usines Schneider	Office public des H.L.M. <sup>2</sup> ) du départe- ment de Saône-et-Loire	400
Italy	Piombino	Italsider	Istituto Case per lavo- ratori dell'industria siderurgica	400
Nether- lands	Heemskerk	Koninklijke Neder- landse Hoogovens en Staalfabrieken N.V.	N.V. Huizenbezit Breesaap	400

<sup>1)</sup> No model "neighbourhood" is being built in Luxembourg, owing to financing and technical difficulties.

TABLE 57
Serious-Accident Rate in Community Collieries, 1960-65

Year	Fatalities¹) per '000,000 man-hours	Serious injuries³) per '000,000 man-hours
1960	0.507	12.986
1961	0.548	13.227
1962	$0.932^{2}$ )	13.781
1963	0.547	13.761
1964	0.493	13.860
1965	0.523	13.500

Source: E.C.S.C. Mines Safety Commission.

<sup>2)</sup> Low-rent housing (habitations à loyer modéré).

<sup>1)</sup> Casualty died within eight weeks.

<sup>2)</sup> Year of the Luisenthal disaster (death-roll 229).

<sup>&</sup>lt;sup>3</sup>) Casualty was unable to resume work below ground for eight weeks or more.

TABLE 58 Fatalities (Underground and Surface) at Community Iron-Ore Mines, 1960-651)

· Year	Germany (Fed. Rep.)2)	France <sup>4</sup> )	Luxembourg <sup>5</sup> )
1960 1961 1962 1963 1964 1965	59 22 17 43 <sup>3</sup> ) 5 9	21 24 16 14 17	2 3 1 1 3 1

- 1) Out of the following total labour forces:
  1960, Germany (Fed. Rep.) 16,758, France 23,215, Luxembourg 2,058;
  1961, Germany (Fed. Rep.) 15,616, France 22,605, Luxembourg 2,005;
  1962, Germany (Fed. Rep.) 11,933, France 21,572, Luxembourg 1,824;
  1963, Germany (Fed. Rep.) 9,131, France 19,274, Luxembourg 1,821;
  1964, Germany (Fed. Rep.) 7,893, France 17,775, Luxembourg 1,821;
  1965, Germany (Fed. Rep.) 6,543, France 17,775, Luxembourg 1,713;
  1965, Germany (Fed. Rep.) 6,543, France 16,317, Luxembourg 1,600.

  3) Source: Statistische Mitteilungen der Bergbehörden der Bundesrepublik Deutschland, 1960, 1961, 1962, 1963, 1964 and 1965.

  3) Year of the Lengede disaster (death-roll 20)

and 1905.

3) Year of the Lengede disaster (death-roll 29).

4) Source: Annales des Mines, July-August 1965 and 1966.

5) Source: 1960, 1961, 1962, 1963, 1964 and 1965 annual reports of the Association d'Assurances contre les Accidents, industrial section.

TABLE 59 Fatality Rates1) (Underground and Surface) in the French Iron-Ore Mines and Collieries, 1960-65

	1960	1961	1962	1963	1964	1965
Iron-ore mines	8·5	10·1	7·2	7·4	9·9	8·9
Collieries	6·7	7·4	6·3	5·9	6·9	7·7

Source: Annales des Mines, July-August 1965 and 1966.

1) Per 3,000,000 shifts.

TABLE 60 Fatality Rates1) (Underground and Surface) in the German Iron-Ore Mines and Collieries, 1962-65

	1962	1963	1964	1965
Iron-ore mines	0.62	2·13³)	0·30	0·28
Collieries		0·37	0·43	0·42

<sup>1)</sup> Per million man-hours.
2) Year of the Lengede disaster.

TABLE 61

Accidents and Accident Rate in the Community
Iron and Steel Industry, 1960-65

	1960	1961	1962	1963	1964	1965
Fatal accidents Fatal-accident rate <sup>1</sup> ) Non-fatal accidents <sup>2</sup> ) Non-fatal-accident rate <sup>1</sup> )	198	168	192	148	151	167
	0·19	0·16	0·20	0·16	0·16	0·18
	102,686	100,656	88,142	84,496	88,395	83,479
	98	96	92	89	93	90

<sup>&#</sup>x27;) Per million-man-hours.

TABLE 62

Accident Rate<sup>1</sup>) in the Different Sectors of the Community Iron and Steel Industry, 1960-65

Sector	Fatal accidents	Non-fatal accidents <sup>8</sup> )
Steelworks-owned coking-plants Blast-furnaces Steelworks Rolling-mills and tinning, galvanizing and lead- coating plants Separate ancillary services	0·20 0·29 0·30 · 0·12 0·15	63 90 135 116 68
Industry, total	0.17	93

Per million man-hours; calculated from total number of accidents and hours worked in 1960-65, as recorded and published annually by the Statistical Office of the European Communities.
 Casualty was off work for at least one full calendar day over and above day of actual accident.

<sup>3)</sup> Casualty was off work for at least one full calendar day over and above day of actual accident.

Source: Statistical Office of the European Communities (annual survey of accidents on the job in the iron and steel

GERMANY (FED. REP.)

TABLE 63 Incidence of Occupational Disease, 1961-64

		Number of cases of sick	ness pension, ref	ers disbursed either und of funeral expe o compensation	first instalment enses,
Insurance fund		New cases		Disease leading to	
		arising during business year	Death	Total disablement	Partial disablement
Bergbau BG	1961 1962 1963 1964	4,876 4,832 4,442 3,968	139 100 137 116	129 128 108 94	4,608 4,604 4,197 3,758
Hütten- und Walzwerks-BG. Nordw. Eisen- und Stahl-BG. Südd. Eisen- und Stahl-BG.	1961 1962 1963 1964	259 269 243 238	14 28 15 25	10 15 9 9	235 226 219 204

Source: Bundesministerium für Arbeit und Sozialordnung, Die Gesetzliche Unfallversicherung im Jahr 1961, 1962, 1963, 1964.

See Notes on p. 393.

BELGIUM

TABLE 64 Incidence of Occupational Disease,1) 1964

	Temporary disability*)	Permanent disability <sup>2</sup> )	Death <sup>2</sup> )	Total
Production and processing of ferrous and non-ferrous metals     Production of coal, ore and other minerals	33	318	100	451 24

Source: Fonds des Maladies Professionnelles.

1) Lead poisoning, dermatosis and pneumoconiosis only.

See Notes on p. 393.

<sup>3)</sup> Total number of persons recorded by the Fonds des Maladies Professionnelles during the year concerned and previous years as unfit for work, and still partially or totally unfit in the year concerned.

<sup>1)</sup> Total number of persons in respect of whose death from occupational disease survivors' pensions were paid during the year concerned.

FRANCE

TABLE~65  $\circ$  Incidence of Occupational Disease, 1961-64

	1961	1962	1963	1964
Deaths resulting from silicosis in respect of which a survivor's pension was granted during the year <sup>1</sup> ) Mineworkers' scheme	710	858	820	823
New silicosis cases officially recorded during the year among workers in attendance <sup>2</sup> ) Coalmines Iron-ore mines	2,095 62	2,047	2,028	2,206 26
Sufferers from occupational disease first granted compensation during the year <sup>3</sup> ) Special mines section	5,127	5,117	5,195	5, <b>473</b>

<sup>1)</sup> Source : Annual report of the Caisse Autonome Nationale de Sécurité Sociale dans les Mines.

See Notes on p. 393.

ITALY

TABLE 66
Incidence of Silicosis Rating Compensation, 1)
1961-63

Year			Ind	ustry		
in which silicosis developed	Iron a	nd steel	Iro	n ore	Solid fo	essil fuels
	Deaths	Permanent disabilities	Deaths	Permanent disabilities	Deaths	Permanent disabilities
1961	2	748	_	157		141
1962	2	627	_	210	_	206
1963	1	723	<u> </u>	232	1	212

Source: Instituto Nazionale Assicurazioni contro gli Infortuni sul Lavoro, actuarial statistics department.

1) Silicosis diagnosed in the year concerned and compensation granted not later than December 31 of the year after. See Notes on p. 393.

<sup>3)</sup> Source: Annual survey of the Service des Mines.

<sup>3)</sup> Source : Annual report of the Caisse Nationale de Sécurité Sociale.

NETHERLANDS

## TABLE 67 Incidence of Silicosis (Coalmining Industry) 1961-63

	1961	1962	1963
Cases of silicosis	188	91	140

Source: Ministerie van Sociale Zaken en Volksgezondheid. See Notes following.

### Notes to Tables 63-67

Owing to the substantial differences in the member countries' laws, regulations, administrative practice and methods of coverage and evaluation, the national statistics for occupational disease in the E.C.S.C. industries are not homogeneous as to the units, definitions and classifications used, and so are not, for practical purposes, intercomparable. They are compiled by different agencies and authorities, usually as a by-product of a particular administrative activity, with the result that they reflect to a great extent the legal set-up of the country concerned.

For Germany (Fed. Rep.) the figures are taken from an annual publication of the Federal Ministry of Labour and Social Affairs entitled Statutory Accident Insurance in ... (the year concerned). The above table shows the number of cases in the E.C.S.C. sectors which were first rated during the particular year by the respective insurers as entitled to compensation (sickness pension, refund of funeral expenses or a single lump payment).

For Belgium the figures were supplied by the Fonds des Maladies Professionnelles, an official agency under the Ministry of Social Insurance; they are for 1964 only.

For France the sources are the Board of Mines, the separate mineworkers' social-security scheme (C.A.N.) and the national scheme: the Board's figures are for silicosis sufferers still working, C.A.N.'s for all silicotics, whether or not actively employed, except those who although recognized as having silicosis are not entitled to a pension therefor, and the national organizations for cases recorded during the year concerned, *i.e.* those for which compensation was paid for the first time. All three sets are undoubtedly of value, but tricky to evaluate as the trend they indicate is the result of a whole combination of factors.

The Italian figures were provided by the National Industrial Accident Insurance Institute, which covers risks of occupational disease in workers in the E.C.S.C. sectors.

The figures for the Netherlands were obtained from the Ministry of Social Affairs and National Health, and show the cases which developed in each of the years concerned.

TABLE 68

Research Programmes on Industrial Medicine, Health and Safety (as at December 31, 1966)

			iono e an emì	correct 61, 1000)			5															
Field and title of programme	Approved	Financial (dollar units rounded	Financial assistance (dollar units of account, rounded figures)								*	ears	Years covered	g g			}	İ		1		1
		Total amount allocated	Committed	55	56	57	- 82	29 (	- 09	19	62	63	64	929	66 67		89	69	7 07		72 7	7.8
A. Industrial medicine and health (a) Physiopathology and clinical medicine												·	ļ			·	·	·	ļ <u>.</u>		-	1
Ist programme (Industrial medicine)	5-10-55	5-10-55 1,200,000 1,200,000	1,200,000			ij	寸	T														
(Industrial medicine)	7-04-60	7-04-60 2,800,000 2,700,000	2,700,000		-				+	$\dashv$	<del>-</del> ¦-	<del>-                                    </del>		<del></del> -								
pathology and clinical medicine) (b) Traumatology and	28-04-64	28-04-64 3,000,000 2,275,000	2,275,000							<del></del>				_+								
rehabilitation Ist programme (Rehabilitation) <sup>1</sup> )	5-12-57	500,000	500,000							-+												
(Traumatology and rehabilitation) 3rd programme (Burns)	19-06-64 18-05-66	1,800,000 1,500,000	990,000							T.,	···	<del></del>		+   +	<del>   </del>	+ + !+  +	+		<u>.</u>			
B. Industrial physiology and psychology (a) Human factors and safety lst programme (Human factors and safety))	5-12-57	5-12-57 1,000,000 1,000,000	1,000,000						<del></del>	<u></u>		<del></del>						·				
factors and safety) <sup>2</sup> ) (b) Fromomics	4-11-64	4-11-64 1,200,000	321,348											_	_ļ.							
1st programme (Industrial physiology, psychology and job organisation) <sup>2</sup> )	4-11-64	4-11-64 2.000,000	859,552						<del></del>							!						

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900,000 900,000		1,825,000 1,050,000	116,000 116,00	5,441,000 16,753,48	
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12-57 900,000 900,000 12-64 6,000,000 3,613,300		06-64   1,825,000   1,050,000	116,000	25,441,000 16,753,48	
ຄົ	18-07-61 1,000,000 800,000	19-06-64 1,825,000 1,050,000		25,441,000 16,753,48	
5-12-57 900,000 21-12-64 6,000,000 3, 5-12-57 600,000	18-07-61 1,000,000		16- 3-66 116,000	25,441,000 16,753,48	
and  Dust Sup- 1, 2-12-57 Sup- Dust Sup- Sup- Sup- Sup- Sup- Sup- and Dust Sup- Sup- Sup- Sup- Sup- Sup- Sup- Sup-	18-07-61 1,000,000		16- 3-66 116,000	25,441,000 16,753,48	
and  Dust Sup- 1, 2-12-57 Sup- Dust Sup- Sup- Sup- Sup- Sup- Sup- and Dust Sup- Sup- Sup- Sup- Sup- Sup- Sup- Sup-	18-07-61 1,000,000		16- 3-66 116,000	25,441,000 16,753,48	
ntion and mines  mines  me (Dust and Supmines)  mines)  mines)  mines)  mines)  point and Supmines)  mines)  mines)  mines)  point and Supmines iron  nother iron	18-07-61 1,000,000		16- 3-66 116,000	25,441,000 16,753,48	
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5-12-57 900,000 21-12-64 6,000,000 3, 5-12-57 600,000	18-07-61 1,000,000		16- 3-66 116,000	25,441,000 16,753,48	

1) Part of a single financial aid programme under the general heading of "Safety," comprising four smaller programmes.

1) Part of a single financial aid programme under the general heading of "Human Factors and Ergonomics," comprising two smaller programmes.

Legend:

Programmes completed or in progress. Programmes in preparation.

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