EUROPEAN COAL AND STEEL COMMUNITY

THE HIGH AUTHORITY

Tenth

GENERAL REPORT

on the

Activities of the Community

(February 1, 1961 - January 31, 1962)

LUXEMBOURG, 1962

EUROPEAN COAL AND STEEL COMMUNITY

THE HIGH AUTHORITY

THE PRESIDENT

Luxembourg, February 15, 1962.

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 Tenth 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.

Piero Malvestiti

The President
of the European Parliament,

15, rue Beaumont,
Luxembourg

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INTRODUCTION

I

This year, the political introduction with which the High Authority customarily prefaces its General Report reflects the changing situation within which Community affairs are at present evolving. The change is a double one — a turnround in relations with the other European countries, and a transition towards different market conditions. And, as the background to these changes there is the process of reinforcing of the Community fabric, with the adoption of a corpus of common measures on agriculture and the entry upon the second stage of the European Economic Community — developments which must naturally cause the greatest satisfaction to the sister Communities.

II

Barely ten years after the institution of the first of the European Communities of the Six, applications to join E.E.C. have been received from a number of other European countries, including the United Kingdom. This event, coming sooner than had been thought possible by some, and long eagerly looked for by others, is bound, whatever the ultimate outcome of the negotiations, to mark 1961 as a turning-point in Community history. For the European Coal and Steel Community this would be for the time being a development without immediate bearing on its own affairs, were it not for the fact that in the statements both of the British Government and of the Governments of the Six the principle has been officially accepted of entry into all three Communities — a further demonstration of the latter's fundamental unity. It

should be emphasized in this connection that useful links were established as long ago as 1954, when the Agreement of Association was concluded between E.C.S.C. and the United Kingdom Government. These have already led to the adjustment of steel tariffs closer to a common level, and have enabled both sides to gain a fuller knowledge of the state of the coal and steel markets in the other area.

It is not yet the moment to go in detail into the problems raised by the possibility of Britain's or other countries' entry; nevertheless, the High Authority feels obliged in introducing its Tenth General Report to note one or two points with regard to various aspects of that possibility.

III

In the first place, it should be pointed out that the whole face of E.C.S.C. would be radically altered by the entry of Great Britain. Coal production would be practically doubled, leaping to over 400 million metric tons and thus exceeding the present production of either the United States or the Soviet Union. Similarly, iron and steel production would reach close on 100 million metric tons — about the same as that of the United States and considerably more than that of the Soviet Union. E.C.S.C. thus augmented would be easily the biggest unit in the world steel market, and would be in a position, as an exporter area, of comparable responsibility to that of E.E.C. as a raw-materials importer.

Moreover, should a State such as Denmark become a member, the Community would include a country which was almost exclusively a consumer of E.C.S.C. products. It should be recalled in this connection that the Treaty was framed with the object of ensuring a balance between the interests of the producer and the consumer sides: some of the present member countries are very minor producers if that, in one or other of the two sectors governed by the Treaty of Paris.

As regards the energy field, Britain's entry would bring the Community a new member with a major interest both

in coal and oil, and hence on the face of it well placed to assist in the difficult debates on the co-ordination of energy policies. It may further be noted that the proportion of total energy requirements covered by coal, which has currently shrunk to less than one-half in the six countries taken together would increase again to 60% should Britain join the Common Market.

IV

The position is changing for the Common Market in yet another respect. Up to now, the iron and steel industry has been undergoing an unprecedented expansion which has lasted practically without intermission since the end of the war. The fact that production has risen in nine years from 42 to 73 million metric tons speaks for itself. As will be seen from the latest General Objectives for steel, in Chapter Four of this Report, there is no reason to suppose that the expansion itself will not continue: on the contrary, it may well proceed on a substantial scale. Nevertheless, a point now seems to have been reached where demand will no longer consistently outpace supply, and producers will need to make greater efforts with regard to quality, costs, specialization and marketing. The position may vary from one product to another, as the General Objectives indicate, but the overall climate in the steel market is likely to be somewhat different from what it has been for the past ten years.

At the same time, the scrap market would appear to be easing into a more settled state, notwithstanding the high level of steel production. Again, larger tonnages of higher-grade iron ores from outside are being used, with a consequent drop in the share of the Community ores with their lower ferrous content, while a further major change is the rapid increase in the use of the oxygen-blown processes in steel-making, which is enabling considerably better-quality metal to be produced but does at the same time affect the investment policy of the enterprises.

V

The High Authority's new list of General Objectives for the iron and steel industry are thus issued at a time when new developments are visibly in train in a number of fields. It is obviously impossible to make provision concerning all the aspects and implications of these for five, or even three years ahead.

Accordingly, the High Authority has decided that its various studies and publications relating to probable trends in the iron and steel sector should henceforth be issued regularly. Following the official publication of the General Objectives for steel in the *Journal Officiel des Communautés*, which will take place after the Consultative Committee has stated his opinions, in conformity with Article 46 of the Treaty, in February 1962, supplements will be issued periodically containing elucidations, fuller details and more recent information on major developments of note.

As regards its opinions concerning investment projects, the High Authority intends in future, in line with its more detailed General Objectives, to adopt a more selective method, bringing out the special features of the markets for individual steel products or qualities. It will also endeavour to work out more specific criteria for its assistance with the financing of investment projects.

VI

The High Authority has pleasure in recording the successful continuance of its financial operations, which have included the raising of loans in the Netherlands and in the Grand Duchy of Luxembourg. The total amount relent by it from its borrowings to date now stands at 313 million dollar units of account. The two operations just referred to were the first public loans floated by the High Authority in Community member countries. The funds relent went not only to projects in the traditional categories of industrial investment and

workers' housing, but also to schemes in connection with redevelopment programmes.

VII

In view of the new stage now reached in the development of the iron and steel industry, and of the present situation in the coalmining industry, technical research has assumed greater importance than ever. The High Authority rejects the contention sometimes voiced that it should limit its activities in this field. It furnishes assistance to supplement the efforts of those immediately concerned: its work is conducted in close co-operation with the research centres in the individual countries, and there cannot be the smallest question of its competing against worth-while new ventures developed in other quarters. Too little is often done for research in the Western world, and the High Authority for its part is fully determined to make available such funds as may be necessary to carry out all relevant research programmes which cannot be financed without Community assistance.

VIII

The High Authority plans in 1962 to submit a draft of its General Objectives for coal. In this it will be necessary to take into account the energy outlook in the six countries. The coal position in Europe is governed not by an equilibrium as among the different forces in play in the market, but by a congeries of official measures, varying from country to country, both in the coal and in the oil sector. As matters now stand, there is no prospect of coal's being simply left to cope on its own, nor, of course, of its being afforded full protection against solid fuels from third countries and against the newer sources of energy. The truth of the matter lies, and will continue to lie, between these two extremes.

Since it is not known what long-term energy policy will be adopted, it is obviously difficult to give figures as to the

likely consumption of Community coal in the future, although a fairly accurate idea can be obtained of future total energy consumption. As regards, for instance, policy concerning imports of third-country coal in the next few years, for which a system of co-ordination has been proposed by the High Authority to the Special Council of Ministers, no definite indication can be given at present. Still greater uncertainty prevails as to the measures which might be taken with regard to the oil market — which must in any event be progressively converted into a common market, with the freedom of action which that affords — and to the rules of competition which might be introduced for liquid fuels. This Report, in accordance with previous practice, contains an account of the measures adopted in this connection in the different countries, most of them designed (as also in the United Kingdom) to slow down the advance of fuel oil: it is, however, impossible to tell what further action may still be taken, or what the quantitative incidence of such action is likely to be in the future.

To give an idea of the scale on which shifts in the pattern of the energy market can occur, we need only recall that when E.C.S.C. was first established coal still accounted for three-quarters of total energy consumption, whereas during the year which has just elapsed the proportion fell as low as 50%; the share of Community coal (though the actual tonnage has dropped only slightly, and though it still represents the Community's principal source of primary energy) is today only 46%.

IX

A comparison between the coal position at the beginning of 1958, the first year of the coal crisis, and the position today at the beginning of 1962 shows production down by just on 7%, to 230 million metric tons; nearly 100 collieries closed; the number of underground workers lower by 22%, or 136,300 men; and output per man/shift up by an average of 500 kg., or close on 30%. It is further illustrative of the scale of the reorganization drive that during these years readaptation

assistance has been made available by the Community for a total of 97,000 mineworkers. Even so, the situation has not basically improved.

In the Federal Republic of Germany, where output per man/shift has risen to 2·25 metric tons — the highest figure in the Community — a coal surplus of several million tons is expected for 1962. Indeed the Community as a whole might find itself with quite a substantial surplus should the 5·6% increase in industrial production at present forecast for 1962 not materialize.

Imports from third countries, which were slashed from the exceptionally high level of 44 million metric tons some years ago to 17 million in 1960 (the same figure as in the years 1952-54), are climbing again, still enjoying highly advantageous conditions with regard to price. Petroleum products are also making great strides in competition, particularly as in a number of countries practically unlimited freedom of operation is allowed them. Moreover, it would be unrealistic to bank on the indefinite continuance of the very high rates of growth in gross national product and industrial production which prevailed in the last few years, and which to some extent offset the loss of sales outlets for the Community coalmining industry and enabled it to count on a certain stability in its total sales volume. In short, the position is anything but reassuring.

In its introduction to last year's General Report, the High Authority emphasized that the comparatively balanced position which had been restored in the coal market could not be regarded as securely established: today, despite the reorganization in progress, it is only by taking the most optimistic possible view that we can describe it as balanced at all. As we shall see in the examination of trends in the coal sector in Chapter Three, it is open to question whether the fact that no serious imbalance is at present discernible does not itself mask certain perilous developments.

The process of rationalization must therefore be pursued unremittingly, and the High Authority must make use of every means open to it, on the one hand to draw attention

to the prospects now looming, and on the other to ensure so far as lies within its power that the tremendous changes now taking place in the energy market do not produce untoward economic and social repercussions. This it strove to do in 1961, in some cases successfully, in others as yet without avail.

X

Thus the High Authority has continued to work for an industrial-redevelopment policy which will make it possible to absorb the workers laid off as a result of pit closures, particularly in areas whose whole economy has hitherto been geared to the now rapidly-contracting coal industry.

After the Redevelopment Conference, dealt with in last year's Report,[1]) it drew up a comprehensive summary of the proceedings and findings and submitted its conclusions to the Special Council of Ministers. At the same time, in close co-operation with the E.E.C. Commission and the European Investment Bank, it worked out a procedure for the joint examination of redevelopment projects.

In the course of the year it requested the approval of the Council of Ministers for contributions to the financing of two redevelopment operations in Belgium, where the re-organization programme involving the forfeiture of a capacity of 9·5 million metric tons of coal is going ahead under its supervision and with the protection of the safeguards introduced in accordance with Article 37 of the Treaty. One of these projects is located in the Liège coalfield, and the other in the Borinage. The Council gave its consent in respect of the Liège operation at its meeting on December 5, 1961, and of the Borinage scheme at a subsequent meeting on January 23, 1962.

Readaptation in the accepted sense has continued actively: by and large actual expenditure under this head has been less than was expected, as flourishing business conditions

[1]) See *Ninth General Report*, No. 442 ff.

made it comparatively easy to find the men alternative employment.

In its various activities with regard to redevelopment and readaptation the High Authority has been able to avail itself of the new provisions which came into force in March 1960, following the European Parliament's endorsement of the "minor revision" of Article 56 of the Treaty.

XI

The radical changes in the coal market which had caused the High Authority to propose the amendment of the Treaty's provisions on social questions also impelled it, in conjunction with the Council of Ministers, to seek certain changes in its economic powers. In accordance with a resolution of the European Parliament of July 1960, it referred the problems in connection with the possible amendment of the Treaty to a joint High Authority / Council of Ministers Commission set up in November 1960.[1]) The two Institutions drafted amendments to the Treaty which would make for more effective action in regard to the reorganization process. A draft "minor revision," permitting producers to enter into "adjustment agreements" with one another, and in conjunction with their adjustment operations to set up, under High Authority supervision, temporary selling agencies not tied to the requirements of Article 65, was submitted to the Court of Justice in July 1961. In December, after the Council and the High Authority had replied to a series of questions put by the Court, the latter, though allowing that a "profound change in economic conditions" within the meaning of Article 95,3 of the Treaty had in fact occurred, nevertheless found that, in view of the considerations set forth in Chapter Three, Section 3 of this Report, the amendments suggested went beyond what the article could be taken as permitting. At the Council's meeting on January 23, 1962, a first discussion was held on the situation resulting from the Court's ruling. No

[1]) See *Ninth General Report*, No. 23.

indication was as yet forthcoming at the time of going to press as to the conclusions likely to be reached by the two Institutions.

XII

Such, then, have been the High Authority's activities and endeavours in the coal sector during the year under review to meet the structural problems which have arisen.

It is clear, however, that, even though the adjustment of coal production to the changed conditions in the market must necessarily be a major element in any energy policy pursued, these problems will not and cannot be resolved by action confined to the coal sector alone.

A solution fully in line with the objectives laid down in the first fundamental articles of the Treaty of Paris — and also embodied in the corresponding articles of the Treaties of Rome — is beyond the scope of the powers vested in the High Authority and the means afforded by the 1957 Protocol on co-ordination of energy policies: it can be achieved only by combined recourse to the three Communities' powers and to the powers retained by the member Governments, to be exercised by common agreement for a Community purpose.

Were it not for the fact of the European Institutions' existence, the meagre progress so far recorded might suggest that it is downright impossible ever to arrive at satisfactory results. But with the General Common Market introduced, and common policies being progressively worked out on agriculture, transport, external trade and other fields, it is unthinkable that the six countries should not ultimately arrive, despite clashes of short-term interests, at a common denominator on energy policy. The institutional machinery of the European Communities has already shown itself capable of producing Community solutions for exceedingly difficult problems, and there is no reason to think that this cannot be done in the case of energy. It is in this spirit that

the High Authority will continue to apply itself to what it regards as the most important of all its tasks. It relies, as it has always done, on co-operation with the European Parliament to give the indispensable political impetus to its endeavours in this vital field, where more speed is esential if work is to go forward smoothly on the building of Europe.

PIERO MALVESTITI
President

DIRK SPIERENBURG
First Vice-President

ALBERT COPPÉ
Second Vice-President

ALBERT WEHRER

PAUL FINET

HEINZ POTTHOFF

ROGER REYNAUD

PIERRE-OLIVIER LAPIE

FRITZ HELLWIG

CHAPTER ONE

THE INSTITUTIONS; EXTERNAL RELATIONS

Section 1: The Activities of the Institutions; Inter-Community Co-operation

THE INSTITUTIONS

The High Authority

1. The representatives of the Governments of the member States, meeting in Brussels, and the Members of the High Authority of the European Coal and Steel Community, meeting in Strasbourg, on December 20, 1961, carried out the renewal of one-third of the High Authority's membership, in accordance with Article 10 of the Treaty. This first *partial renewal*, necessitated by the expiry on September 14 of the terms of office of three Members designated by lot,[1]) was timed to coincide with renewals of the membership of the other two Executives of the European Community. The requisite decisions were taken on the same day concerning the President and Vice-Presidents of the High Authority for the next two years.

The representatives of the Governments first re-appointed M. Albert Coppé. The Members of the High Authority then unanimously co-opted M. Albert Wehrer.

[1]) See *Eighth General Report*, No. 1,a.

Finally, the representatives of the Governments reappointed M. Pierre-Olivier Lapie. In conformity with the Treaty, these three mandates are for a period of six years, and are therefore due to expire on December 19, 1967.

Next, after consulting the High Authority, in accordance with Article 11 of the Treaty, the representatives of the Governments appointed Prof. Piero Malvestiti to be President of the High Authority, Mr. Dirk Spierenburg First Vice-President and Mr. Albert Coppé Second Vice-President from December 20, 1961, to December 19, 1963.

On January 17, 1962, the Court of Justice, meeting in formal session, heard the following ceremonial declaration by MM. Coppé, Wehrer and Lapie, as newly-reappointed Members:

> "I hereby solemnly declare that I will exercise my office in full independence in the general interest of the Community. In carrying out my duties, I will neither ask nor accept instructions from any Government or organization. I will not act in any way incompatible with the supranational character of my office."

2. The *internal organization* of the High Authority underwent no changes of note during the year under review. The allocation of duties among the Members continues to be based on a system of seven Working Parties, together with an Examination Party and an Administrative Committee. These are made up as follows:

(1) Working Party on rules of competition (including transport rules): M. Coppé, M. Lapie;

(2) Working Party on external relations and information: M. Wehrer, M. Reynaud;

(3) Working Party on social problems: M. Finet, Herr Potthoff;

(4) Working Party on finance and investment: Herr Potthoff, M. Wehrer;

(5) Working Party on economic policy and industrial redevelopment: M. Reynaud, M. Finet;

(6) Working Party on co-ordination of energy policies: M. Lapie, Dr. Hellwig;

(7) Working Party on the coal and steel markets: Dr. Hellwig, M. Reynaud;

Examination Party: M. Lapie, M. Wehrer, Herr Potthoff;

Administrative Committee: M. Wehrer, M. Coppé, Herr Potthoff, M. Reynaud.

3. In January 1961, the High Authority paid an official visit to the Italian Government in Rome.[1]) Completing the round of journeys to the capitals of the member countries by the High Authority as reconstituted at the end of 1959, it visited the Netherlands on February 15 and 16, 1961. A working session was held between the High Authority and the Netherlands Minister of Economic Affairs, at which points of common interest were examined, including in particular the subject of the co-ordination of the Community countries' energy policies. Transport problems were discussed with the Secretary of State responsible for transport matters. The High Authority was received by H. M. the Queen of the Netherlands.

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On November 28, 1961, the Crown Princess of the Netherlands visited the European Institutions in Luxembourg and the European School. Her Royal Highness attended a meeting of the High Authority and a session of the Court of Justice of the European Communities.

The Consultative Committee

4. The Consultative Committee attached to the High Authority under Article 18 of the Treaty met six times during

[1]) See *Ninth General Report*, No. 5.

the official year 1961-62 (68th-73rd meetings).[1]) The Chairman was Sig. Domenico Taccone, of the consumers' and dealers' group.

On January 12, 1962, at its constituent meeting for the official year 1962-63, the Committee elected a new Bureau, with M. Eric Conrot, of the producers' group, as Chairman.

5. Once a quarter the High Authority consults the Committee concerning developments in the Common Market for coal and steel, and submits "*programmes with forecasts, for guidance*" for the quarter immediately ahead. On these occasions it is able to give an account of various aspects of its recent activities. This was done at the 68th, 69th, 70th, 71st and 72nd meetings.

6. The *coal balance-sheet* of the Community for 1961 was twice discussed by the Committee: the High Authority first laid its estimated figures before the 68th meeting of the Committee, and then, after taking due account of the points made in the ensuing discussion, submitted the final balance-sheet at the 69th meeting.

7. The Committee had already emphasized the previous year that it was anxious to be closely associated with the work of drawing up proposals for a *co-ordinated energy policy.* The High Authority in submitting its quarterly statement at the 65th meeting reported to the Committee on progress to date in this connection, and at the 69th meeting was able to give the Committee an account of the first measures taken.[2])

At its next meeting, in Turin, the Committee engaged in a comprehensive discussion on matters of energy policy, in the course of which individual members were able to

[1]) 68th meeting, February 21, 1961; 69th meeting, April 11, 1961; 70th meeting, July 4-5, 1961 (in Turin); 71st meeting, October 3, 1961; 72nd meeting, January 11, 1962; 73rd meeting, January 12, 1962.

[2]) For further details see *Ninth General Report*, Nos. 147 ff., and Chapter Two, Section 1 of this Report.

express their views on aspects they felt to be of particular moment.

At its 72nd meeting the Committee debated and adopted a resolution on the co-ordination of energy policies, in which it adopted a definite position regarding the main problems of the energy market.

8. The Committee had already, in October 1960, heard an account of the proceedings of the Intergovernmental Conference on the *industrial redevelopment* of coalfields affected by pit closures. At its 68th meeting, in February 1961, redevelopment problems were discussed in detail.

9. Questions in connection with technical research were dealt with at the 70th and 71st meetings.

In accordance with Article 55,2 of the Treaty, the High Authority consulted the Committee as to the desirability of setting aside funds from the levy for the financing of ten technical-research projects (described in a later Chapter).[1] The Committee expressed approval of all ten.

The Committee also discussed a proposal to set aside the sum of five million dollar units of account to aid a phased general programme for the introduction of automation in the iron and steel industry.

The European Parliament

10. The European Parliament was extremely active during 1961 in a number of fields of importance to European policy in general. The Parliament (whose control is, of course, exercised in respect of all three Communities) found itself called upon during this year to include in its debates the subject of the political unification of Europe.

It is proposed in this Report to record the Parliament's activities in connection with matters of common interest to

[1]) See Nos. 92 ff. below.

all three Executives as well as with those bearing exclusively on E.C.S.C.

Under the first head come

(a) the draft of a Treaty establishing a "union of European States";

(b) the renewal of the Agreement of Association with the overseas countries;

(c) the scheme for the institution of a Council of the European Communities and a High Commission;

(d) the foundation of a European University;

(e) transport and social problems at European level;

(f) the drafting of a single set of staff rules and regulations for the three Communities.

11. In March 1961, the Parliament held its constituent session for the year, at which Prof. Hans Furler was re-elected President and MM. Fohrmann, Janssens, Rubinacci, Battaglia, Vanrullen, Kalbitzer, Vendroux and Blaisse were elected Vice-Presidents.

The Parliament at the same time appointed the members of its thirteen Committees.[1]) Subsequently, at the November session, it decided, upon proposal by MM. Poher and Pleven, the chairmen of two of the political groups of the Parliament, to transfer responsibility for questions of coal production and consumption from the Internal Market Committee to the Energy Committee, and to increase the latter's membership to 29.

12. The Parliament assembled during the official year 1961-62 for the following occasions:

March 7-9: Ordinary Session;

May 8-10: Ordinary Session;

[1]) See *Journal Officiel des Communautés Européennes*, April 6, 1961 (fourth year, No. 24).

June 19-24: Conference with Parliamentarians of African States and Madagascar;

June 26-29: Ordinary Session;

September 18-19: Extraordinary Session (association with Greece);

September 19-20: Joint Session of the Parliament and the Consultative Assembly of the Council of Europe;

October 16-21: Ordinary Session;

November 20-24: Ordinary Session, including a "colloquy", or exchange, with the Council of Ministers and the Executives of the Communities;

December 19-21: Ordinary Session;

January 22-26: Ordinary Session.

13. The outstanding event of the March session was the debate which followed a statement by M. Pierre Wigny, President in office of the E.E.C. and Euratom Councils of Ministers, on the results of the meeting of the six heads of Government or heads of State in Paris on February 10 and 11, 1961. The House also discussed preparations for the forthcoming Conference with Parliamentarians of the associated overseas countries.

14. In May, preparations for the Conference continued. Prof. Malvestiti, President of the High Authority, submitted the latter's Ninth General Report, and a resolution was carried concerning problems in connection with the association of the overseas countries with the Community.[1])

15. The *Conference* of June 1961, in which the three Executives also took part, was organized by the Assembly to enable the two sides to discuss together the new procedural arrangements which would become necessary upon the expiry on

[1]) See *Journal Officiel des Communautés Européennes*, June 2, 1961 (fourth year, No. 37).

December 31, 1962, of the present agreement incorporated in the E.E.C. Treaty.

The Conference was attended by 108 representatives of the African States and Madagascar and by the members of the European Parliament itself. M. Laminé Guéyé, President of the Parliament of the Republic of Senegal, and Prof. Hans Furler, President of the European Parliament, sat alternately as Chairmen.

At the conclusion of the proceedings, the Conference unanimously passed four recommandations,[1]) concerning respectively

(1) the political and institutional questions examined by the Conference;

(2) the economic and trade problems examined by the Conference;

(3) the problems relating to technical co-operation and cultural exchanges examined by the Conference;

(4) the Development Fund.

16. At the *June* Ordinary Session which immediately followed the Conference, the House passed a number of resolutions relating to general European policy,[2]) *viz.*

(1) resolution concerning the recommendations adopted by the European Parliament's Conference with the Parliaments of African States and Madagascar;

(2) resolution concerning accelerated implementation of the E.E.C. Treaty;

(3) resolution concerning political co-operation among the member States of the European Communities;

(4) resolution concerning the foundation of a European University.

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[1]) See *Journal Officiel des Communautés Européennes,* July 22, 1961 (fourth year, No. 50).

[2]) See *Journal Officiel des Communautés Européennes,* July 22, 1961 (fourth year, No. 50).

At the same session the House also debated the Ninth General Report of E.C.S.C., and passed

(1) a resolution concerning certain important questions in connection with the Common Market for coal and steel;

(2) a resolution concerning developments in matters of safety in coalmines and the activities of the High Authority and the Mines Safety Commission with regard to industrial health, medicine and safety;

(3) a resolution concerning matters connected with the budget and finances of the European Coal and Steel Community.

A resolution was also passed on the introduction of a European Miners' Code.

17. The Extraordinary Session in September was called to debate the Agreement of Association between E.E.C. and Greece. In accordance with Article 238 of the E.E.C. Treaty, the House was seized of a request for consultation from the Council of Ministers. It passed two resolutions,[1]) one concerning the procedure adopted in concluding the agreement, the other asking that it (the Parliament) be consulted with regard to the agreement.[1])

Having regard to the communiqué issued by the Community heads of State and heads of Government following their meeting in Bonn on July 18, 1961, the House also passed a resolution[1]) concerning political co-operation among the member States of the European Communities. It thus acted promptly on the request expressed in the communiqué that it extend its deliberations to the subject of political co-operation.

18. The *joint session* of the Consultative Assembly of the Council of Europe and the European Parliament followed immediately upon the Extraordinary Session. Reports on the respective activities of the two bodies were submitted, and

[1]) See *Journal Officiel des Communautés Européennes*, October 13, 1961 (fourth year, No. 67).

the Presidents of the Executives made statements on matters of topical interest, including in particular the applications for membership received from Great Britain, Denmark and Ireland.

19. At the October session, the House passed three resolutions in response to three requests for consultation from the Councils of Ministers,[1]) concerning respectively

(1) a draft convention submitted by the Netherlands Government, providing for the institution of a Council of the European Communities and a European High Commission;

(2) a draft set of staff rules and regulations for the personnel of the three Communities;

(3) a draft of regulations concerning Community taxes to be payable by the personnel of the Communities.

It also passed a resolution concerning equal pay for men and women in E.E.C., and another concerning the procedure to be followed in concluding agreements of entry into the Communities.

Finally, it declared its solidarity with the people of Berlin, thereby following the lead given in statements by the chairmen of the political groups of the Parliament and by the President of the E.E.C. Commission on behalf of the three Executives.

20. The main item at the November session was the exchange between the House and the Council regarding the passage from the first to the second stage of the Common Market and the association of the overseas countries with the Community. Two resolutions were thereupon passed on the two questions.[2])

[1]) See *Journal Officiel des Communautés Européennes*, November 15, 1961 (fourth year, No. 73).

[2]) See *Journal Officiel des Communautés Européennes*, December 15, 1961 (fourth year, No. 81).

In addition, the House adopted resolutions and stated opinions with regard,

(1) on the political side, to instructions to the President of the European Parliament and the Chairman of the Political Committee, to discuss with the Governments of the Community countries the procedure by which the Parliament should state its views on the draft Treaty establishing a union of European States;

(2) to matters connected more particularly with the budgetary, social and economic problems of E.E.C.

21. The debates at the December, 1961 session dealt with four main subjects. First, the House again discussed the draft Treaty establishing a union of European States in the light of a report submitted by the Political Committee, finally passing a recommendation on the draft. Next, a resolution was passed concerning the foundation of a European University in Florence.

The House then examined a report by the Internal Market Committee on the High Authority's investigations into the origin of scrap tonnages admitted for price-compensation by the Compensation Office for Imported Scrap. In a special annex to its Ninth Report, the High Authority had given an account of the position resulting from the discovery of irregularities in the operations of the compensation scheme, and submitted to the judgment of the House the whole of the action taken by it in this connection. The House thereupon passed a resolution on the subject.[1])

Finally, the House debated various Committee reports concerning common transport policy in E.E.C.

22. At the January 1962 session, the main topic debated which directly affected E.C.S.C. was the co-ordination of energy policies.

[1]) See *Journal Officiel des Communautés Européennes*, February 15, 1962 (fifth year, No. 11).

As well as dealing with various points more particularly relating to E.E.C. and Euratom, the House discussed the political and institutional aspects of association with the Community, the economic and commercial-policy aspects of the United Kingdom's application for membership, and certain problems of agricultural policy arising out of applications for membership. At the conclusion of its proceedings the House adopted a number of resolutions.[1])

The Special Council of Ministers

23. As in previous Reports, we include an outline of the work of the Council of Ministers during the past year. The Council's activities in its own particular field were closely linked with those of the High Authority, and are further referred to in the various Chapters following.

Between February 1961 and January 1962 the Council met seven times (73rd-79th meetings).[2])

The three main problems before the Council during the period under review were energy policy, the amendment of certain provisions in the Treaty, and the state of the Community coal market in general and of the Belgian coal market in particular.

24. Proposals as to the initial measures to be adopted for the co-ordination of *energy policy* were submitted on January 10, 1961, by the High Authority on behalf of itself and of the E.E.C. and Euratom Commissions. These had been drawn up by the Inter-Executive Working Party on Energy. The Council deliberated the matter for the first time at its 73rd meeting, on March 7, when it took a number of decisions concerning the further study of these questions, namely, that

[1]) See *Journal Officiel des Communautés Européennes*, January 17, 1962 (fifth year, No. 3).

[2]) 73rd meeting, March 7, 1961; 74th meeting, May 16, 1961; 75th meeting, June 20, 1961; 76th meeting, July 18, 1961; 77th meeting, October 26, 1961; 78th meeting, December 5, 1961; 79th meeting, January 23, 1962.

(1) the Inter-Executive Working Party on Energy should start bilateral negotiations with the Government authorities responsible for energy matters in the six countries;

(2) the Council/High Authority Joint Committee should further examine the Working Party's proposals;

(3) it would itself periodically discuss the basic structure and current state of the energy market, in order to draw all relevant conclusions for the better co-ordination of national energy policies.

Accordingly, at its meeting on May 16, the Council held the first of its periodic discussions, basing itself on a report prepared by the High Authority on the energy position of the Community in 1961.[1]) A further discussion took place on October 26 concerning the consumption and supply position to be expected by the end of the year in the light of the figures available in the early autumn. On January 23, 1962, the Council examined the High Authority's energy forecasts for the coming year.

The Council also studied proposals for initial measures in connection with, *inter alia*, imports of coal from third countries. These proposals, which were submitted by the High Authority after consultation with the two Brussels Executives at meetings of the Working Party, were forwarded to the Council for its meeting on October 26. The Council received them with interest, but failed to reach agreement in the matter. It was decided that the Joint Committee should examine the measures in detail, and after completing a round of bilateral talks the Committee duly met for this purpose at the end of January 1962.

25. The Council was much exercised in the course of the year by the question of the possible *amendment* of Article 65 of the Treaty, concerning cartels. At its meeting on March 7

[1]) *Rapport sur la Situation Énergétique de la Communauté et Perspectives d'Approvisionnement et de Consommation d'Énergie dans la Communauté en 1961* (Doc. No. 7664/61, Publications Departments of the European Communities, Luxembourg).

it took cognizance of the progress report of the Joint Study Committee which had been set up, with its approval, at the suggestion of the High Authority to examine the subject of such an amendment.[1])

At a second discussion on May 16, the Council examined practical proposals from the German Government for the amendment of the provisions in question under Article 95,3-4 of the Treaty. The Council offered a number of observations: some changes were accordingly made, and the altered version was re-submitted for consideration at the Council's meeting on June 20, at which the Council adopted a definite position regarding the procedure to be followed for the purpose of amending Article 65 of the Treaty: with a majority of five affirmative votes and one abstention the Council decided in favour of a "minor revision." The final draft prepared by the Joint Study Commission was examined by the Council on July 18, and adopted by the same majority.

On July 27, the proposals for the amendment of Article 65, drawn up in accordance with the procedure prescribed in Article 95,3-4, were submitted to the Court of Justice for its opinion. Before giving its ruling, the Court[2]) required the High Authority and the Council to answer a number of questions. After several meetings of the Study Committee, the two Institutions jointly forwarded to the Court their replies to the 21 questions listed.

26. The *coal situation*, and more particularly the state of the Belgian coal market, were discussed by the Council at its meeting on December 5, 1961. After hearing the views of the High Authority and of the Belgian representative, the Council gave its opinion with regard to the continuation of the measures introduced under Article 37 of the Treaty.

27. With regard to *industrial redevelopment*, a Memorandum summarizing the findings of the Intergovernmental Conference convened on the subject by the High Authority in the

[1]) See *Ninth General Report*, No. 23.

[2]) For further details see Nos. 265 ff. below.

autumn of 1960 was laid before the Council at its meeting on March 7, 1961.

On December 5, 1961, the Council also examined certain "guiding principles for dealing with problems in connection with the industrial redevelopmens of areas affected by pit closures" submitted by the High Authority.

On the practical side, following its deliberations on October 26 and December 5 the Council gave its approval in respect of two proposed grants of financial assistance, *viz.*

(1) a credit of Bfr.11,400,000, for the installation of three enterprises in the Belgian Communes of Hervé and Battice, to form part of

(2) a credit of Bfr.115,000,000 to be placed at the disposal of the Liège Société Provinciale d'Industrialisation.

On January 23, 1962, it further approved

(1) a High Authority guarantee in respect of one-half of a loan of 6,000,000N.F. granted to a company by the Syndicat Intercommunal pour le Développement des Zones Industrielles de la Région de Béthune;

(2) a High Authority loan granted to a company (subject to the requirements of compatibility with the E.E.C. Treaty) to help to finance an investment programme in the Borinage.

28. The Council approved a second schedule of trades entitling the workers exercising them to free movement for employment purposes within the Community; Scheme IV for the building of workers' housing (at its 74th meeting); a number of technical-research projects (at its 76th and 77th meetings); and a new set of regulations governing the export of used rails (at its 77th meeting). It also discussed the GATT tariff negotiations with the United States, and the new draft staff rules and regulations for the personnel of the Communities[1]) (at its 78th meeting). It nominated four new

[1]) See No. 59 below.

members of the Consultative Committee, who assumed their duties at the beginning of the official year 1962-63.

The Court of Justice of the European Communities

29. The representatives of the member Governments, meeting on September 26, 1961, reappointed Dr. L. Delvaux and Dr. C. L. Hammes as Judges and Dr. K. J. Roemer as Court Advocate for the period October 7, 1961-October 6, 1967. On October 5 Dr. N. Catalano was also reappointed Judge for the same period. On October 1 the Court re-elected Dr. A. M. Donner President for the period October 8, 1961-October 7, 1967.

30. The Court was then made up as follows:

President, A. M. Donner;

Presidents of the two Chambers, O. Riese, J. Rueff;

Judges, L. Delvaux, C. L. Hammes, R. Rossi, N. Catalano;

Court Advocates, K. J. Roemer, M. Lagrange;

Clerk to the Court, A. Van Houtte.

As from October 7, 1961, the two Chambers were made up as follows:

1st Chamber, O. Riese, *President;*
L. Delvaux, N. Catalano, *Judges;*
M. Lagrange, *Court Advocate.*

2nd Chamber, J. Rueff, *President;*
C. L. Hammes, R. Rossi, *Judges;*
K. J. Roemer, *Court Advocate.*

On February 6, 1962, the representatives of the six Governments, meeting in Brussels, appointed Dr. A. Trabucchi to succeed Dr. Catalano, who had resigned.

31. In 1961, a total of 26 appeals were lodged with the Court: of these 20 were against the High Authority, 2 against the E.E.C. and Euratom Council of Ministers, 3 were brought by the E.E.C. Commission against a member State, and 1 was a request from the Hague Court of Appeal for an interlocutory ruling concerning the E.E.C. Treaty. Two third-party objections were brought — one by a member State, the other by an enterprise — against two Court judgments relating to E.C.S.C.

The Court delivered 11 judgments, in respect of 24 High Authority cases, 1 Court case, 1 E.E.C. case ans 1 case brought by a staff member against the E.E.C. and Euratom Council of Ministers. 6 actions were withdrawn, of which 5 concerned the High Authority.

The backlog of pending E.C.S.C. cases on December 31, 1961, was 20 appeals and two third-party objections. Of the appeals, 2 had been lodged by member States, 17 by enterprises, and 1 by a staff member. 14 of them related to the scrap-price compensation scheme, 2 to transport questions, and the remaining 4 respectively to the implementation of Article 65 concerning cartels, to problems of competition regarding gas coke, to fines imposed by the High Authority, and to personnel matters. The two third-party objections relate respectively to the Court's rulings of March 22, 1961[1]) and of July 13, 1961[1]).

Also placed before the Court, over and above these various items of litigation, was a request under Article 95,4 of the E.C.S.C. Treaty for a ruling on a proposal to amend the provisions of Article 65 of the same Treaty. In its Ruling No. 1/61, of December 13, 1961, the Court found that the proposal failed to fulfil the requirements of Article 95,3.

32. In its judgment delivered on February 23, 1961, concerning Appeal No. 30/59 (Gezamenlijke Steenkolenmijnen in Limburg *v.* High Authority), the Court found that the financing of a shift bonus (*Bergmannsprämie*) to underground

[1]) See No. 33 below.

[2]) See No. 34 below.

mineworkers out of the Budget of the Federal Republic of Germany constituted a subsidy or aid to the German coal-mining industry falling under the prohibition contained in Article 4,c of the Treaty.

The High Authority had forborne to invoke Article 88, in consideration of the fact that the Government of the Federal Republic had abolished a previous arrangement, of equal or greater financial benefit to the enterprises, whereby it (the Government) paid part of the employers' contribution to the miners' old-age pension scheme, and had thus caused the enterprises to be liable for larger payments then before.

The Court nevertheless held that the circumstance of such a measure's having been taken did not alter the fact that the shift bonus was a subsidy or State aid prohibited by Article 4,c.

The Government of the Federal Republic intervened in support of the High Authority's case.

33. On March 22, 1961, the Court delivered judgment in the consolidated Appeals Nos. 42 and 49/59 (Société Nouvelle des Usines de Pont-Lieue *v.* High Authority, with the Netherlands company Hoogovens and the italian company Breda Siderurgica intervening in support of the High Authority).

The Court disallowed Appeal No. 42/59 for the reversal of the High Authority decision alleged to have been constituted by a letter of August 7, 1959, in which the High Authority declined to admit the appellants' claim to damages for an alleged irregularity committed by the High Authority in exempting certain enterprises from paying contributions under the scrap compensation scheme.

The Court did, however, reverse the High Authority's implied decision to refuse, firstly, to revoke all "exceptions" granted or tolerated by it in the matter of scrap compensation, and secondly, to establish a new compensation rate (Appeal No. 49/59).

In this judgment the Court laid it down as a principle that the High Authority may grant exemption from compensa-

tion contributions only in respect of exchanges of scrap within a single enterprise.

A third-party objection to the judgment was lodged by Breedband N.V., on the grounds that special links existed between this company and Hoogovens N.V.

34. By a judgment of July 13, 1961, the Court disallowed Appeals Nos. 2 and 3/61 (Niederrheinische Bergwerks-Aktiengesellschaft, Düsseldorf, and the association of enterprises Aachener Steinkohlenbergbau, Aachen, *v.* High Authority) for the reversal of Articles 1, 3 and 5 of the High Authority's Decision No. 46/59, of December 23, 1959, as amended by Decision No. 1/60 of January 18, 1960.

The High Authority had taken these Decisions at the request of the Belgian Government, in accordance with Article 37 of the Treaty, in view of the special difficulties being experienced by the Belgian coalmining industry.

The Court pointed out that the object of Article 37 was to reconcile the interests of any member State faced by "fundamental and persistent disturbances" in its economy with the general interests of the Community, the High Authority being required to take the latter into account in exercising the "exceptional" powers afforded it in such a contingency. By virtue of this principle, the Court declared inadmissible an appeal lodged by an enterprise under Article 37, since the Article entitled only member States to invoke the aid of the Court.

The Court also disallowed an appeal lodged by these enterprises under Article 33, since its examination would have necessitated an analysis of the conditions laid down in Article 37.

35. By a judgment of July 13, 1961, the Court dismissed Appeals Nos. 14, 16, 17, 20, 24, 26 and 27/60 (Meroni Company and others *v.* High Authority) seeking damages under Article 40 of the Treaty in respect of adverse effects suffered by the appellants in consequence of alleged negligence on the part of the High Authority. It was claimed that as a

result of the High Authority's failure to notify them in time of the amount of the scrap-compensation contribution payable by them over the period April 1, 1954-March 31, 1959, the appellants had been unable in publishing their price schedules and conditions of sale to make due allowance for the rate subsequently charged them.

The Court, however, did not consider this fact to constitute an injury calling for damages. It found that the appellant enterprises had been in a position to allow for the compensation charges in fixing the selling prices for their products, even though it was not known exactly what the rate payable to the Compensation Office would be. Selling prices were at all times governed largely by the state of the market, and not simply by the level of production costs. Moreover, subsequent adjustments of the rate of compensation, though many and various, had a certain offsetting effect: some of them had brought increases and some decreases. Consequently the appellants' contention that while the scheme had been in operation they had been liable to underestimate the costs of their products was untenable. The facts here complained of could fairly be put down as the ordinary inconveniences attaching to the compensation scheme, and did not constitute an injury entitling to damages under Article 40. "Negligence" within the meaning of the Article could be said to have been committed only if proof were adduced of genuine injury sustained owing to a lapse on the part of the Community which could have been avoided by the exercise of normal care and attention ("inexcusable errors").

36. By a judgment of July 14, 1961, the Court dismissed Appeals Nos. 9 and 12/60, lodged by the Société Vloeberghs, Antwerp, the first with the object of securing damages under Article 40 of the Treaty for adverse effects suffered as a result of the High Authority's failure to take the necessary steps to compel the French Government to recognize the principle of free movement of third-country products within the Community (Appeal No. 9/60 for damages), and the second with the object of obtaining a ruling under Article 35 that the High Authority must take the steps referred to (Appeal No. 12/60 on grounds of failure to act).

The Court dismissed the second appeal inasmuch as it found that the appellant company was not "engaged in production" within the meaning of Article 80 of the Treaty.

The first appeal was dismissed for want of sufficient grounds. In the first place, the Court, interpreting Article 4,a with reference to Articles 2 and 3,b, found that the rule concerning free movement within the Community of products regularly imported from third countries had been instituted not in the interests of those producing or trading in such products, but in order to ensure that the free movements of Community products was not reduced or impeded. The Court's conclusion was that, as dealers in products imported from third countries, the appellants were not entitled to claim damages in respect of any adverse effects suffered by them owing to non-compliance with the rule concerning the free movement of such products within the Community. In the second place, the Court found that in this particular case there had been only a show of importing the products into Belgium, the real intention being to import direct to France. Under Article 73 of the Treaty, therefore, the decision whether or not an import licence should be granted lay entirely with the French Government.

The Belgian Government lodged a third-party objection to this judgment, seeking to establish that the products in question had been genuinly imported into Belgium, and not merely routed via that country as a device.

37. On December 15, the Court delivered judgment on the consolidated Appeals Nos. *19/60*, *20/60*, *2/61* and *3/61*, lodged by the Société Fives Lille Cail and others with respect to the price-compensation scheme for imported scrap (and shipbreaking scrap, which ranked as such) and internal scrap.

The appellants who had bought Community shipbreaking scrap rather than scrap imported from third countries, claimed that they had done so only because they had been assured that they would be refunded the additional transport costs so incurred.

The Court disallowed the enterprises' appeals for reversal. In particular, it found that neither the Treaty nor any decision implementing it required the High Authority to refund additional transport costs incurred as a result of the purchase of shipbreaking scrap, and that the High Authority was therefore under no obligation to take action under Article 35 of the Treaty.

The Court also, while noting that the High Authority had in fact been negligent in its supervision of the operation of the compensation scheme, dismissed the enterprises' appeals for damages, inasmuch as the appellants had not produced evidence of injury sustained by them.

On this latter point the appellants lodged an application for "correction of a manifest inaccuracy" under Article 66 of the Rules of Procedure.

38. The Court during the period under review delivered two judgments on actions brought by E.C.S.C. staff members, the first (which was upheld) concerning entitlement to the separation allowance payable under Article 47,3 of the Staff Rules and Regulations (judgment of June 1, 1961, on Case No. 15/60), and the second (which was dismissed) concerning the grading of the staff member in question (judgment of July 13, 1961, on Cases Nos. 22 and 23/60).

39. On December 13, 1961, the Court gave its Ruling No. 1/61 on the joint draft submitted by the High Authority and the Council of Ministers on July 20, 1961, for the amendment of Article 65 of the Treaty. The draft was ruled to be incompatible with Article 95,3-4 of the Treaty.[1])

INTER-COMMUNITY CO-OPERATION

Joint Services

40. Last year's Report listed the general administrative and organizational rules laid down by the Presidents of the

[1]) See Nos. 265 ff. below.

three Executives in 1960 for the joint services common to all three, namely the Legal Department, the Statistical Office and the Press and Information Service.[1])

The Legal Department

41. The Board of the Legal Department met twice in 1961, on February 17 and May 18. It consists of Mr. Sassen, Member of the Euratom Commission (Chairman), Mr. Wehrer, Member of the High Authority, and Mr. Rey, Member of the E.E.C. Commission. It took a number of decisions on matters coming within its jurisdiction, including in particular budgeting and personal questions.

As regards the functioning of the Department, the practice was continued and extended of holding consultations among its three branches on matters likely to affect more than one Community; on other occasions, such matters were handled by a legal adviser appointed to represent the Department as a whole. Several members of the Department's staff were assigned to regular documentation and study work of importance to all three branches.

The Statistical Office

42. The organization and operation of the Statistical Office of the European Communities are described in recent General Reports.

During the year just completed the Board of the Office met three times, on March 23, September 22 and December 7, when it dealt with administrative questions and with the planning of the Office's activities, including relations with the national and private statistical offices and institutes, various projected surveys, and publications.

The Chairman of the Board is Mr. Coppé, Vice-President of the High Authority, with Mr. Lévi Sandri representing the E.E.C. Commission and Mr. De Groote the Euratom Commission.

[1]) See *Ninth General Report*, No. 45.

As a joint service, the Statistical Office is responsible for supplying to the three Communities basic data and analyses on a constantly-increasing number of subjects. We here record only its non-routine activities conducted in 1961 in respect of E.C.S.C. matters.

43. With regard to energy statistics, the Office carried out the essential preliminary work for the drawing-up of energy balance-sheets. This consisted mainly of checking the national and international data available for comparability and completeness, prior to their use as a basis in working out intercomparable energy balance-sheets for the six Community countries from 1950 onwards.

In addition, various studies were conducted in co-operation with national and international organizations with the object of ensuring better harmonization of energy statistics. Investigations were carried out in particular into the peak power-station loads having due regard to the necessary margins of reserve and to availabilities of hydro-electric and thermal generating capacity at peak periods, into the movement of electricity consumption and of the load curve, and into the utilization of the generating plant, in the different types of power-station.

44. The Steel Statistics Division worked during the period under review to supply basic data for the Community's General Objectives. It was mainly concerned to compile statistics for steel consumption broken down by sectors of industry, for steel production broken down by production processes, for the pattern of crude-steel production, for consumption of raw materials, and for external trade.

The Division also co-operated in econometric studies on the ratio between the overall steel consumption of each country (in ingot tons) and a general explanatory variable for gross national product, and also on the long-term trend in labour productivity in the iron and steel industries in the light of numerous economic and technical factors closely affecting it.

45. In the second half of the year, work was concentrated largely on the production of the new edition of the Office's *Bulletin Statistique: Charbon et Acier*. By a decision of the Board, the Bulletin will from 1962 onwards appear in two separate parts, *Charbon et Autres Produits Énergétiques* (Coal and other Energy Products) and *Fer et Acier* (Iron and Steel), containing in addition to the usual information all kinds of further data, *e. g.* on energy products other than coal, on steel consumption per head of population, on trade in scrap, on the Community levy, and so on.

46. The Social Statistics Directorate published in *Statistiques Sociales* No. 3/1960 the results of the survey on wages in the E.C.S.C. countries in 1959. In the same number, it published for the first time a country-by-country comparison between wage costs and incomes, obtained by a thorough analysis of all available documents on wages in the coalmining and iron and steel industries from 1954 to 1959. The wage figures were evaluated from two angles, as cost elements for the enterprises and as incomes for the workers.

The Directorate also undertook studies on the housing conditions of workers in the E.C.S.C. industries, and on social-security charges under the general systems in force and under the special miners' insurance schemes. A number of meetings were held on the accident rate in the metallurgical industries.

The Information Service; Co-operation between it and the Spokesman's and General Reports Office of the High Authority

47. The joint Press and Information Service, which was set up in 1960, introduced certain additional organizational facilities and extended its activities in the course of 1961, under the supervision of its Board. The Chairman of the Board is Mr. Caron, Vice-President of the E.E.C. Commission, and the other members are Mr. Wehrer, Member of the High Authority and Mr. Sassen, Member of the Euratom Commission. The Board met five times during the year.

48. As was mentioned in last year's General Report, the Spokesman's Offices were attached directly to the Executives from January 1, 1961, onwards. The High Authority's Spokesman's and General Reports Office, which forms part of the General Secretariat, is responsible for keeping the Press regularly informed concerning the High Authority's activities and for preparing the annual reports and periodical E.C.S.C. publications; in addition, it co-operates in planning and carrying out the programme of activities of the Press and Information-Service of the European Communities dealing with the work of all three Communities. At practical level, this ensures constant co-operation, with the Spokesman's and General Reports Office making known to the joint Service the High Authority's requirements regarding medium and long-term information work and immediate assignments for the Service's specialized sections dealing with publications, study visits and conferences, radio and television broadcasts, film work, and fairs and exhibitions.

The Office's actual Press work includes the holding of a weekly Press conference on decisions and positions adopted by the High Authority, and the issuing, direct and through its bureaux in certain major cities, of various types of Press release, on which the joint Service has a priority claim.

The past year saw a considerable extension of the Office's public-relations activities, by means of conferences, specialized publications on E.C.S.C., and Press tours and visits, such as a trip to the Ruhr organized for French journalists and a tour of the Italian iron and steel industry arranged for journalists from the six countries and Great Britain.

49. Among the more outstanding activities of the joint Press and Information Service during 1961 we may note the following events.

50. Fairs and exhibitions. — At the invitation of the Italian Government, the Communities were represented at the Turin International Exhibition of Labour "Italia 61," held from

May 6 to October 31; the subject chosen for their stand was "The European Community and Sources of Energy."

The three Executives were also represented at ten other fairs and exhibitions of varying importance, the Berlin Grüne Woche at the end of January and beginning of February, the Strasbourg Didacta in March, the Zurich Europe Week in April, the Liége International Fair in late May and early June, the Béthune Fair, the Frankfurt Achema and the Calais Fair in June, the Douai Fair and the Marseilles Fair in September, and the International Inland Waterways Exhibition in Paris in October. E.C.S.C.'s participation concerned particularly the Béthune, Calais, Liége and Douai Fairs.

Travelling exhibitions are on tour in Germany, the Netherlands, Britain and the United States. That touring the Netherlands proved such a success that the Belgian Minister of National Education asked the Communities for two similar exhibitions to go to Belgium.

51. Publications. — Regular bulletins are published in six separate editions in Bonn, The Hague, Paris, Rome, London and Washington; their monthly circulation now totals 138,000. Considerable improvements were made in the presentation and contents of practically all these bulletins.

Sixty brochures, folders and other publications were issued in the four Community languages, in a total of something like five million copies.

52. Radio, television, cinema. — The Service provided technical, and in some cases financial, assistance for a large number of radio and television broadcasts. Co-operation with the big national radio and television corporations was continued and extended in most of the member countries, including more especially Germany, Belgium, Italy and Luxembourg, and also in the United Kingdom and the United States. The scheme for a regular high-class television commentary on European events, to be prepared and put on jointly by the corporations in the six countries, has, however, been held up by a great many difficulties.

On the cinema side, a short documentary on atomic problems, *Europa 235*, was produced, and an English-language version was made of an existing film, *Europe without Frontiers*.

53. Study visits, seminars and conferences. — Over and above the work of the Service's specialized divisions in planning and organizing study visits, discussions and seminars, the joint Service and the Executives receive in Brussels and Luxembourg in the course of each year numerous parties of visitors of all kinds — journalists, students, heads of enterprises, managerial personnel from industry, Civil Servants, Members of Parliament, and many others.

329 such parties in all, comprising a total of some 12,000 people, were received in 1961, more than three-quarters of them in Luxembourg. The invitation system was reorganized to enable the groups invited to be chosen with a more careful eye to the particular occasion concerned, and to ensure as far as possible that they included leading figures from the field in question.

54. Information activities with special reference to workers and trade unionists. — Activities under this head are of two kinds. Firstly, trade union leaders are invited to attend information sessions in Brussels and Luxembourg: 37 such sessions, attended by over a thousand persons in all, were held in 1961, including one for British trade unionists. Secondly, the Service is equally active in promoting the provision of information on European developments in the individual countries, more particularly in trade-union colleges and information centres. Under a special scheme for the training and dispatch of 28 trade-union lecturers, over a thousand regional-level lectures were organized in France and Italy.

All these activities are planned and conducted in close co-operation with the major union organizations represented in the European Institutions, including in particular the International Confederation of Free Trade Unions and the International Confederation of Christian Trade Unions. Documentary material on European questions is supplied on request to all union organizations without exception.

55. *Overseas information activities.* — A special section of the Service works to make known the various aspects and first results of European integration in the overseas countries.

56. *Information activities at University level, among youth and in connection with adult education.* — In the field of higher education, information activities have mainly taken the form of incentives for individual study work and of discussions and seminars held for lecturers and advanced students. As regards encouragement of individual studies, the European Communities Prize instituted in 1959 proved a particularly happy inspiration: the number of theses submitted, all dealing with European problems, rose from 16 in 1959 to 25 in 1960 and 59 in 1961.

Very close co-operation was developed with the main students' associations.

Activities in connection with the special programme introduced, in implementation of a resolution of the European Parliament, for the encouragement of European-mindedness in the younger generation took three principal forms. In the schools and colleges, the work of information was concentrated chiefly on the teaching personnel, either by direct contact with school authorities and professional bodies and unions, or through the European Association of Teaching Staffs. Among youth organizations — and also in the field of adult education — a highly-diversified "campaign in depth" was carried on the six countries, in co-operation with the international and national associations considered best qualified for the purpose.

Finally, a range of audio-visual information material on aspects of European integration was assembled and distributed to youth organizations and adult-education establishments.

Organizational Link-Ups between the Institutions of the Three Communities

57. The Inter-Executive Working Parties set up in accordance with the procedures described in previous General

Reports continued their studies in the particular spheres assigned them.

The Inter-Executive Working Party on Co-ordination of *Energy Policy* consists of Mr. P.-O. Lapie, Member of the High Authority, as Chairman, and seven other members, Mr. A. Coppé and Dr. F. Hellwig of the High Authority, Mr. R. Marjolin, Mr. G. Caron and Dr. H. von der Groeben of the E.E.C. Commission, and Mr. E. M. J. A. Sassen and Mr. P. De Groote of the Euratom Commission. It met four times during the period under review.

The Inter-Executive Working Party on Transport, which met three times, consists of Mr. Coppé for the High Authority and Herr L. Schaus for the E.E.C. Commission, either of whom may act as Chairman according to the subject under discussion.

58. Close relations were maintained between the High Authority and the Councils of Ministers of E.E.C. and Euratom in a number of important matters. High Authority representatives attended meetings of the Brussels Councils on

(a) the association of the overseas countries and territories;

(b) the association of Greece and Turkey;

(c) the European University;

(d) the Netherlands proposal for a merger of the Executives;

(e) free movement of workers;

(f) various social problems, including for instance equal pay for men and women;

(g) budgetary matters in connection with the operation of the joint services.

Conversely, representatives of the Brussels Executives attended meetings of the E.C.S.C. Council of Ministers on the co-ordination of energy policy, problems arising with regard to the amendment of Article 65 of the E.C.S.C. Treaty, and certain problems in the field of industrial redevelopment.

59. When the *staff rules and regulations* for the E.E.C. and Euratom Institutions were finalized at the beginning of 1961, the E.E.C. and Euratom Councils of Ministers expressed the hope that ultimately a single set of staff rules and regulations would be introduced for the personnel of all three Communities.

On receiving notification of the Councils' view, which coincided with its own, the Committee of Presidents, which has jurisdiction for E.C.S.C. in this matter under Article 78 of the Treaty, informed them in reply that it was prepared to co-operate in drawing up a single code of rules, provided the rights and safeguards already enjoyed by E.C.S.C.personnel were duly preserved.

With this end in view, the Committee of Presidents instructed the Committee on the Staff Rules (provided for by Article 46 of the E.C.S.C. Staff Rules and Regulations) to revise the existing staff rules and general regulations of the Community. The revision was duly completed in July 1961, the representatives of the Institutions and the personnel having made it their constant endeavour throughout to preserve the basic principles of the E.C.S.C. code and to see that the existing staff retained their essential established rights and a material and social position commensurate with their qualifications and responsibilities, while at the same time working out the basis for a common three-Community code.

Having noted the views and proposals of the Rules Committee and the opinions voiced by the staff representatives Committees, the Committee of Presidents, at the beginning of November, opened negotiations with the E.E.C. and Euratom Councils of Ministers.

It quickly became apparent that the only serious problems arising were those directly concerning the level of salaries. The High Authority pointed out, firstly, that there had been a relative decline in the real value of its staff's salaries, and secondly, that in consequence — or at any rate largely in consequence — there had been a notable increase in the numbers of persons leaving its service (25% so leaving in the past thirty months), which had involved the

Institution in considerable expense and quite obviously affected its working. The increase in the residence allowance from 5% to 15% in June 1958 had only partly offset the drop in real value, and had not touched the level of pensions at all. The High Authority accordingly felt that a certain increase in salaries was essential, in view both of recruitment needs and of the movement of the cost of living. Also, it considered that pensions to surviving dependants definetely needed to be raised.

The Councils, however, felt they could not accept these points; they fixed for E.E.C. and Euratom personnel a salary scale offering lower average net rates than those paid to E.C.S.C. personnel since 1958, and rejected the proposals concerning surviving dependants' pensions.

The High Authority disagreed with their view: nevertheless, in the Committee of Presidents, wishing to safeguard as far as possible the principle of unified administrative arrangements for the personnel of the Communities, it did, while again emphasizing its conviction that the level of salaries needed to be revised, agree to adopt (having regard, among other considerations, to the advantages represented for staff members and, in particular, pensioners by the other changes made in the text of the rules) a salary scale maintaining the existing net rates of pay, apart from certain adjustments for one of two grades.

Accordingly, the amendments introduced by the Committee of the Presidents into the text of the rules, in accordance with Article 46 and 62, bring these into line for the most part with those adopted for E.E.C. and Euratom, the only differences being with regard to the scale of salaries (about 3%) and to surviving dependants' pensions. At the same time, the Committee of Presidents agreed to make a "compensatory adjustment" to the salaries of E.C.S.C. staff members, the amount of the adjustment to be that of the Community tax which the Treaties of Rome provide is to be payable on the salaries of officials of the other two Communities.

With the object of ensuring that the staff rules now so largely identical for the three Communities were applied as far as possible in harmony, the Committee of Presidents further suggested that the body which all three codes require to be set up to frame and revise the rules and regulations should be for practical purposes unified.

The High Authority for its part is determined to continue working for the lining-up of arrangements respecting the European Civil Service corps, and in the first instance for a fully unified code of staff rules and regulations for the three Communities.

Section 2: External Relations and Commercial Policy

60. In the sections of its Eighth and Ninth General Reports dealing with external relations and commercial policy, the High Authority dwelt at some length on its approach to these and on the problems, both permanent and isolated, facing it at a time when the political and economic background is in a state of flux. Since then the background has changed even more markedly by the receipt of applications for membership of or association with E.E.C. from several third countries, and in particular from Great Britain.

The High Authority would emphasize with what keen interest it is following the negotiations in connection with these applications, and also the matter of the renewal of the overseas States' and territories' agreement of association with the Community, since it is obliged to make preparation for the responsibilities which will naturally fall to its share if the scope of the negotiations is widened to include coal and steel.

The following pages contain some observations on these new problems, and with regard to the aspects regularly reported on in this Section, an account of measures taken or under study and of the outlook as it appears to the High Authority.

COMMERCIAL POLICY

Coal

Co-ordination of imports

61. The High Authority continued its work, both in the Inter-Executive Working Party on Energy and in co-operation with the Community business circles concerned, to secure the progressive co-ordination of the member States' energy policies, which it considers to be absolutely indispensable. In this connection it submitted to the E.C.S.C. Council of Ministers proposals for initial measures in respect of imports of coal from non-member countries.

Its proposals are examined in detail in the Chapter on energy problems.[1])

Germany

62. From its examination of the coal situation in the Federal Republic of Germany, the High Authority came to the conclusion that the reasons which had led it in 1959 and 1960 to recommend the temporary imposition of duties on third-country coal entering the Federal Republic in excess of a stated duty-free quota still held good. In particular, it considered that the employment and sales position of the German collieries was unlikely in 1962 to show an improvement over 1961.

It therefore recommended the Federal Government to fix the duty-free import quota[2]) for 1962 at the same level as that indicated in its recommendation of November 3, 1960, namely six million metric tons.

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[1]) See Chapter Two.

[2]) See No. 215 below.

Belgium

63. In Belgium also, the reasons which had impelled the High Authority in the two proceding years to take steps to safeguard the coal economy were found to be still valid. The High Authority was therefore obliged to continue the course of action adopted under Article 37; it was decided to fix the ceiling for imports of third-country coal[1]) in 1962 at 640,000 metric tons, instead of at 620,000 as in 1961.

64. The arrangements for 1962 with regard to coal imports into Germany and Belgium are therefore much the same as those for 1961. Official consultations in the Council of Association were not required, as the British side in this case waived discussion of the matter.

Steel

Six-monthly tariff and quota changes

65. The six-monthly tariff measures for Treaty iron and steel products not obtainable in sufficient quantities within the Community (see last year's Report) were renewed, the duty-free or low-duty quotas being retained with slight modifications.[2])

Imported pig-iron

66. The deleterious effects of low-priced imports of pig-iron from third countries continued, the principal sufferers being independent (non-steelworks-integrated) pig-iron producers in France and Germany.

The High Authority went into the matter further in consultation with Government experts. A number of possible steps are being studied by the Committees of the Special Council of Ministers.[3])

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[1]) See Nos. 206 ff. below.

[2]) For further details, see *Statistical Annex*, Table No. 48.

[3]) See No. 258 below.

Implementation of Article 75

67. The High Authority continued to examine carefully drafts of trade agreements and similar arrangements containing provisions having a bearing on its own exercise of its powers. Such drafts are regularly passed to it by the member States in accordance with Article 75 of the Treaty.

The E.E.C. Council's Decision of July 25, 1961, concerning a procedure for consultation on the negotiation of trade agreements (including, of course, agreements regarding imports of energy products), was received with interest, as representing a further positive contribution to the establishment of a co-ordinated policy on energy imports.

Dillon tariff negotiations

68. As was noted in last year's Report, the member States (which retain sovereignty in the fixing of external tariffs) decided to include steel among the products to be discussed in the Dillon tariff negotiations.

The E.E.C. Commission was empowered by the member States to negotiate a 20% linear reduction in the E.E.C. common external tariff; this was not, however, allowed in the case of E.C.S.C. products, inasmuch as the present harmonized tariff is already below the E.E.C. common level even minus 20%.

The member States addressed applications concerning reductions in steel duties to 17 third countries; four of these countries, which are steel producers and exporters, submitted applications in respect of E.C.S.C. products. In the case of most of the countries *vis-à-vis* which E.C.S.C. is an applicant, however, the products within its jurisdiction afford only very limited possibilities for counter-concessions. Success in this connection therefore depends on the prospects for negotiation in respect of E.E.C. and E.C.S.C. products together; for this reason the Dillon talks are being conducted in close co-operation with the E.E.C. Institutions.

One important point is that the High Authority has to see to it that the system of harmonized external E.C.S.C.

steel duties is maintained. Barring unexpected developments, the negotiations should be completed in the early months of 1962.

THIRD COUNTRIES

69. Thanks to the links earlier established with third countries through the various official delegations accredited to the High Authority, 1961 saw, over and above the normal contacts on current matters, many useful exchanges of information and opinions regarding the problems likely to be raised by the possible entry or association of certain European third countries. The High Authority's own delegation in London again did excellent liaison work, of particular value at the present juncture in relations with the United Kingdom. Mention should also be made of the organizational links established through the different sections of the Council of Association, which likewise assist liaison between the Community and Britain.

Emergent countries

70. Reference was made in last year's Report to the opportunities offered by Article 55 of the Treaty for aid to the emergent countries. Substantial assistance has already been made available for the implementation of a five-year programme of prospecting for iron and manganese ore in Africa south of the Sahara.

The High Authority is anxious, however, that its development activities should not be confined to this particular arrangement, and it was therefore most happy to accept the invitation to take part in the European Parliament's Conference with the Parliaments of the E.E.C.-associated African States and Madagascar, which met in Strasbourg from June 19 to 24 to discuss, *inter alia*, matters in connection with the renewal of the association on January 1, 1963.

At the conclusion of the Conference, the European Parliament adopted a recommandation to the effect that

provision should be made to allow the future association to include all three Communities.[1])

71. This suggestion was very much in line with the High Authority's own view, which is that it would be contravening he spirit of the Common Market to establish an association which Africa excluding the coal and steel sectors. Iron and steel products in particular are a matter of great importance to the emergent countries.

It should also be mentioned that the High Authority is represented on the Working Party on Technical Assistance set up by decision of the E.E.C. Council of Ministers on October 19, 1960, and on the *ad hoc* Working Party set up by the E.E.C. and Euratom Commissions in July 1961 to study the possibility of establishing a European Development Institute.

The Council of Association

72. The Council of Association between the United Kingdom and E.C.S.C. held its eleventh meeting in London on June 15, 1961. The Coal Committee met twice, on April 21 and November 11, and the Steel Committee also met twice, on February 2 and December 6. The Trade Relations Committee did not meet.[2])

A detailed account of the Council's work in 1961 is contained in its sixth annual report, which is also distributed to members of the European Parliament.

73. The position and outlook in the British and Community energy markets were reviewed in accordance with Article 6 of the Agreement of Association.

The problems arising were found to be largely similar, a particular feature being the increased use of energy from sources other than coal, demand for which was continuing

[1]) See *Journal Officiel des Communautés Européennes*, July 22, 1961 (fourth year, No. 50).

[2]) See No. 64 above.

poor. It was accordingly felt that an arrangement for mutual consultation would be of value, and the Council decided to set up a special working party to draw up periodic comparisons between United Kingdom and Community energy forecasts.

The Council also decided to undertake joint studies on ways and means of increasing productivity in the coalmining industry by modern mechanization methods.

The Coal Committee was further instructed to continue its work on the long-term outlook and on the possibilities for expanding the trade in solid fuels between the United Kingdom and the Community.

With regard to steel, the Council decided to carry out a joint study comparing British and E.C.S.C. general production targets.

The Council also requested the Steel Committee to study the consumption of raw materials and the introduction of automation in the iron and steel industry.

INTERNATIONAL ORGANIZATIONS

74. As was emphasized in last year's Report, the High Authority considers it essential to have a full and clear picture of the work being done by the international organizations dealing with matters touching E.C.S.C.'s field of activity, and in its turn to keep these organizations informed concerning the broad outlines of its own work, if only so as to avoid duplications as far as is possible having regard to the particular functions of the different bodies. Accordingly, liaison with the organizations in question was maintained and extended during the year under review.

The Council of Europe

75. In accordance with what is now established practice, the High Authority and the other European Executives took part in the joint session of the Council of Europe's Consultative

Assembly and the European Parliament, which was held in Strasbourg on September 18 and 19, 1961.

The President of the High Authority, in the course of the session, drew attention to the coal situation in the Community and to the need to concentrate operations on the most productive pits.

The High Authority also continued to send representatives to meetings of the Advisory Committee of Secretaries-General and its various sub-committees.

O.E.C.D.

76. Relations with O.E.C.D. have become even closer than they had been with its predecessor O.E.E.C., since Supplementary Protocol No. 1 to the Convention establishing the new Organization contains provision for participation by the three European Executives in the proceedings of such Committees as they may wish to attend.

The High Authority had already worked in with the Committees dealing with energy matters and with the Iron and Steel Committee, and also sent representatives to meetings of the Council and Executive Committee when points coming within its own terms of reference were to be discussed.

The increased flexibility of the liaison procedure *vis-à-vis* O.E.C.D. has already enabled the High Authority to follow to advantage various activities which, while not strictly falling within the field of coal and steel, do nevertheless have certain possible implications for these sectors, such as the work of the Economic Policy Committee.

W.E.U.; N.A.T.O.

77. The High Authority accepted invitations to send representatives to the meetings of the Assembly of Western European Union and the Conference of Members of Parliament of the North Atlantic Treaty Organization countries. It followed with particular interest the debates on political orientations likely to affect the fields of activity with which it is itself concerned.

E.C.E.

78. The High Authority has all along taken great interest in the economic matters dealt with by the U.N. Economic Commission for Europe, and in particular those connected with steel, energy and transport.

Exchanges of information between the Secretariat of E.C.E. and the High Authority's departments were continued and intensified.

I.L.O.

79. Co-operation between the High Authority and the International Labour Office in the social field continued actively.

In addition to the regular and most valuable relations maintained between the different departments of the two organizations, numerous particularly useful contacts took place during the year in the fields of industrial medicine, vocational training and wages.

I.L.O. representatives attended the Seminar on the Pneumoconioses organized by the High Authority, at which they displayed and explained a collection of key X-ray films assembled to illustrate the Geneva international radiological pneumoconiosis classification.

In connection with vocational training, I.L.O. and High Authority officials studied possible modes of co-operation with the International Vocational-Training Information and Research Centre instituted by I.L.O. and the Council of Europe.

An I.L.O. staff member sat on the expert working party convened at the request of the Consultative Committee to draw up a report defining productivity and indicating methods of measuring it.

80. While the High Authority was thus not called upon in 1961 to undertake any entirely new ventures, this brief

outline of its work in connection with commercial policy and external relations makes it clear that it has at any rate sought to make the very most of the means of action open to it in the fields concerned.

CHAPTER TWO

CO-ORDINATION OF ENERGY POLICIES

81. During 1961, the High Authority, with the E.E.C. and Euratom Commissions, submitted to the E.C.S.C. Council of Ministers initial practical proposals for the co-ordination of energy policies.

Work meantime went ahead on the basic studies designed to enable the initial proposals to be supplemented and expanded with the object of establishing a sufficiently solid and comprehensive framework for a fundamental co-ordination of energy policies. This work, which necessitates long and patient study in co-operation with the various bodies and parties concerned, should be completed in the near future.

Also during 1961, the High Authority, working with the representatives of the Governments in the Joint Committee set up by the Protocol of October 8, 1957,[1]) on co-ordination of energy policies, was able to make substantial improvements in the compilation of the regular Community energy balance-sheets, an innovation — at European level at all events — which has proved of inestimable assistance for purposes of short-term policy.

Details of the basic studies will be found in Chapter Four, under "General Objectives".

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[1]) See *Journal Officiel de la C.E.C.A.*, December 7, 1957 (sixth year, No. 35).

Section 1: Initial Practical Proposals for Co-ordination of Energy Policies

82. At the meeting of the E.C.S.C. Council of Ministers on October 26, 1961, the High Authority laid before it proposals drawn up by the Inter-Executive Working Party on Energy[1]) for initial measures to be taken concerning imports of coal from third countries. These were subjected to a preliminary examination by the Council in the course of the meeting, and are now being studied in detail in the individual member countries. In view of the complexity of the subject, the useful procedure was adopted of establishing bilateral contacts between the Executives' staff members assisting in the drafting of the proposals in the Working Party's various *ad hoc* committees and the competent authorities in the individual countries: these enable points to be thrashed out in detail, and should facilitate the Joint Committee's examination of the proposals and the preparation of the implementing procedure to be employed if they are adopted.

83. The proposals submitted concerning coal *imports* are based on the premise that the Governments recognize a common commercial policy to be necessary to the establishment of a co-ordinated energy policy. It is further premised that the legal procedure for their implementation should present no problem, inasmuch as, once laid by the Council of Ministers, it can then be adopted by agreement of the Governments, either in virtue of the sovereign powers which they retain in respect of commercial policy, or under Chapter X of the Treaty of Paris.

Another basic consideration is the fact that the trend in the coal market in recent years has caused restrictive measures in respect of coal imports to be introduced by the Governments and the High Authority within their respective field of jurisdiction.

Since

(a) in all probability the pressure of imported energy on the price of European coal will continue;

[1]) See No. 57 above.

(b) the adjustment of the Community coalmining industry to the new competitive situation will take time;

(c) short-term fluctuations in maritime freight-rates may create temporary situations to which the coalmining industry is by its nature unable to adjust itself, and which are therefore liable seriously to unbalance economic and social conditions;

it is essential that the volume of coal imports for the six countries as a whole should be in line with foreseeable medium-term demand.

84. Action with regard to coal imports is, moreover, the aspect with which the different Governments have themselves been principally concerned, as can be seen from the following catalogue of *national energy measures*, which we here include to bring up to date the lists published in the Eighth and Ninth Reports.[1])

Federal Republic of Germany

85. The duty on imports of hard coal and briquettes was renewed for 1962 as described in Chapter Three following.[2]) Since May 1960, an excise duty of DM25.00 per metric ton has been payable on heavy fuel oil, and of DM10.00 on light fuel oil, and in October 1961 a 4% compensatory tax was imposed on imported crudes.

The Federal Government renewed for 1961 the 8·6% temporary reduction in rail and official inland water-transport rates of coal.

Imports and exports of electric current and gas were liberalized by the abrogation of Section 10 of the Energy Act of 1935.

Belgium

86. The measures taken under Article 37 of the E.C.S.C. Treaty are described in detail in Chapter Three following.

[1]) See *Eighth General Report*, Nos. 31 and 32, and *Ninth General Report*, Nos. 127-133.

[2]) See No. 215 below.

They included restrictions on trade with third countries and with other Community countries.

Turnover tax on coal was reduced from 5% to 1%.

The flat-rate tax on gas oils and fuel oil was raised from 12% to 14%.

France

87. A single Government-controlled buying agency is responsible for carrying out the authorities' import programmes for third-country coal and arranging seaborne transport. There is no duty on imported solid fuels, but "disposal prices" are fixed by the Government at a level limiting the impact of competition on French-mined coal.

Control under the Act of 1928, hitherto applied in respect of oil from third countries, was extended to cover imports of crudes from the franc area. Import licences for oil from the franc zone are, however, unlike those for oil from other sources, granted without restrictions as to time or tonnage.

Italy

88. A 10% duty is payable on coke and a 4% duty on hard-coal and brown-coal briquettes.

The turnover tax (I.G.E.) on petrol was cut in January 1961 from 7·7% to 5·9%.

All tariffs for electric current were amended to allow for the requirements of development schemes in Southern Italy.

Luxembourg

89. Turnover tax on coal and coke was reduced from 3% to 2·5% with effect from July 1, 1961.

Netherlands

90. The Netherlands Government is working to secure the adjustment of imports to market requirements.

The following additional taxes were imposed as from January 1, 1962: Hfl.1.40 per hectolitre on kerosene, Hfl.1.10 per hectolitre on gas oil and diesel oil, Hfl.0.70 per hectolitre on fuel oil.

91. All the Community countries except the Netherlands concluded or extended contracts with Eastern European countries for the importation of oil.

92. The *High Authority's proposals concerning coal imports* are modelled on various measures now in force in the different countries: they undoubtedly represent the essential minimum basis for the introduction of an effective commercial policy calculated to bring the coal sector into a balanced position within the Community energy economy as a whole, the point being that Community co-ordination should be based on the quantitative and qualitative comparison of import programmes in member countries with requirements as emerging from the Community's yearly energy balance-sheet, having due regard to the process of adjustment now having to be carried out in the coalmining industry.

The calculation of coal import requirements involves firstly, the question of tonnages and grades, and secondly, the question of prices. The High Authority's proposals are concerned only with the first aspect; in the draft submitted to the Council only incidental reference was made to price problems. The suggestion was therefore that coal imports should be co-ordinated as to tonnages and grades in line with the yearly energy balance-sheets (having due regard to the process of adjustment) by a restricted expert committee to be set up on a permanent basis.

93. The chairman of the committee would be a Member of the High Authority, and the High Authority would also provide the secretariat; the body of the committee would consist of representatives of the six Governments, and would also include representatives of the other two Executives.

The committee would be required

(a) to assemble all available data concerning contracts, trade agreements and commitments in respect of third-country coal;

(b) to compare short and medium-term import programmes;

(c) to draw up import programmes broken down by areas of origin, types of product and consumer groups, and to compare these with the Community coal position and the adjustment targets;

(d) to keep a watch on the competitive conditions resulting from the relative price levels of Community and third-country products;

(e) to study all Community measures, in particular those of a financial nature, affecting imports from third countries;

(f) to submit proposals to the High Authority concerning target tonnages for the imports of the individual member countries.

On the basis of the committee's findings and proposals, the High Authority would report to the Council at least once a year, and would submit to it import targets in the form of maximum quotas per importer country.

The High Authority accordingly proposed that the Governments should approve the institution of a harmonized duty, of an adequate level, to be imposed on imports in excess of a maximum duty-free quota calculated for each country by the procedure just described. The quotas would serve to maintain a certain pressure of competition as a stimulus to the industry to effect the necessary adjustments.

Should this system be adopted, it would be for each Government to introduce its own regulations for its implementation.

94. Some co-ordination will also be required of member countries' attitudes to coal from States whose trade is

exclusively in the hands of the Government. The High Authority therefore proposed to the Council that the proposed committee should study the principles and procedure for such co-ordination.

This completes the list of the High Authority's practical proposals to the Council concerning imports of coal from third countries.

95. As regards the *prices of imported products*, the High Authority brought to the Council's attention the various problems which it considered to be involved in this connection.

It noted that Community consumers were naturally anxious to obtain their energy supplies at the price most advantageous to themselves, which meant that consumers in certain areas were inclined, on account of their geographical position to give preference to imported coal. This was so in the case of all coastal regions, and in particular of Italy.

To try to deal with the situation purely from the quantitative angle was therefore to risk clashing with the immediate interests of consumers in these areas, unless either.

(a) the quantitative balance established made adequate allowance for those interests by arranging for a sufficient flow of imported coal to go to the consumers in question; or

(b) Community producers so aligned their prices as to be able to supply coal to these consumers on terms approximating to the conditions applying for imported coal.

Within a common market, even one protected against excessive imports, producers were definitely obliged to resort to price alignments. Since the present price disparities as between Community and imported coal in some parts of the Community, such as Italy, were such as to require very substantial downward alignments, there could be not doubt — if it was accepted that it would be economically unsound to leave the producers to shoulder the entire burden — that it

would be in interest of both producers and consumers for assistance to be given for alignment proposes.

Measures adequate to dispose of these problems would have to be so complex and far-reaching that the High Authority did not include in its draft any proposals in this connection, merely informing the Council that it intended to continue studying the subject as might seem necessary, in co-operation with the proposed expert committee.

96. The High Authority is aware that its proposals cover only a part of the intricate problems involved in the co-ordination of energy policies. It is convinced nevertheless that this is one of the key aspects on which it is absolutely essential that there should be agreement in the Community. This view was clearly shared by the European Parliament, and also by the Council of Ministers, since it was at their request that the High Authority rated these proposals as priorities among the initial measures of which it gave an overall outline in the Memorandum which it submitted to the Council on the subject on January 10, 1961.

An account was given in the Ninth General Report of progress to date on the co-ordination of energy policies since the institution of the Inter-Executive Working Party on Energy in accordance with the procedure laid down in the *aide-mémoire* of October 10, 1959.[1]) That progress may be again briefly indicated here, inasmuch as it constitutes the background to the proposals on coal imports just described.

On March 19, 1960, then, an interim memorandum was submitted to the Council of Ministers, containing general directives for a co-ordinated long-term energy policy, and advocating the introduction of a "guide-price" to be the connecting thread in co-ordination.

97. From then on, the High Authority went ahead actively with the basic studies which were necessary before the principles listed in the interim memorandum could be given concrete form.

[1]) See *Eighth General Report*, No. 36.

At the same time, it was important to ensure that the state of the energy market at least did not further deteriorate while the studies were in progress. Accordingly, the Working Party, in conformity with the wish of the Council of Ministers and the European Parliament, set to work up a programme for dealing with the immediate difficulties. Its proposals for initial co-ordinatory measures were set forth in a memorandum submitted to the Council at the latter's meeting on January 10, 1961,[1]) and may be roughly summarized under three heads.

First, it was urged that agreement should be obtained as to initial measures of harmonization concerning commercial policy and rules of competition, special attention to be paid to the reduction of artificial price disparities, to the harmonization of certain obligations with regard to storage, prevention of air pollution and other points which energy products are subject to special regulations, and to the question of granting tax reliefs in view of the unduly heavy social charges now being borne by the collieries as a result of the contraction of the coalmining industry.

Secondly, the Working Party proposed that an undertaking should be obtained from the Governments that they would not in future individually introduce new measures appreciably affecting energy policy without first consulting the other member countries and the three Executives (the suggested arrangement was termed the "consultation agreement").

Thirdly, it was emphasized that safeguards should be agreed on in advance for invocation in case of need.

98. The Council found itself unable to endorse on the spot all the suggestions thus advanced, and asked at its meeting on March 7, 1961, that they should be subjected to further examination and that bilateral contacts should continue on the subject between the members of the *ad hoc* committees and the competent national Civil Servants. At the same time, however, it asked the High Authority to have definite pro-

[1]) See *Ninth General Report*, Nos. 148-153.

posals submitted to it, along the lines indicared in the existing memorandum, with regard to imports, rules of competition and social charges.

The Council agreed to hold periodic discussions on the basic structure and current state of the energy market, in the light of the yearly Community balance-sheets, which were to be checked and brought up to date at frequent intervals for the purposes of the Council's discussions.

The European Parliament had also passed a number of resolutions drawing the High Authority's particular attention to the need to produce practical proposals with regard to imports, rules of competition and the unduly heavy social charges being borne by the Community collieries.[1]) It was in deference to the Council's and Parliament's emphasis on these aspects that the High Authority gave priority among its proposals to action in respect of imports.

99. The studies which it has simultaneously been conducting on *rules of competition and social charges* have not yet been completed.

Annex V to the interim memorandum[2]) made clear that coal is genuinely handicapped in the matter of rules concerning price publication and non-discrimination.

The Community collieries are required by Article 60 of the E.C.S.C. Treaty to publish their price schedules and conditions of sale, the object being to enforce with respect to prices the prohibition of certain practices contrary to Articles 2, 3 and 4, including in particular unfair competition and the application of unequal terms to comparable transactions.

Article 60 permits Community collieries to align their quotations only with those offering the most advantageous terms to the buyer, whether figuring in another Community enterprise's schedule having a different basing point, or

[1]) See *Journal Officiel des Communautés Européennes*, July 27, 1960 (third year, No. 49).

[2]) See *Ninth General Report*, No. 146.

emanating from an enterprise outside the Community altogether.

In the case of fuel oil, on the other hand, the producer companies are not required to publish their prices and conditions of sale, and may grant discounts or vary their terms for different consumers, provided they keep within the provisions of Articles 7, 85 and 86 of the Treaty of Rome. They do indeed issue schedules for their distributors, but the prices actually charged often bear little relation to those indicated in the schedules.

The immediate effect of this difference in the legal position is that the coal producers have at present no means of knowing what terms their competitors in the oil sector are offering, whereas the oil producers can obtain all the information they need concerning coal prices, simply by reading the published schedules. A more fundamental effect is that the competitive relationship between the two industries is distorted.

The technical and economic possibilities for them are admittedly in themselves very different. The major disparty in structural conditions of competition as between the coal, and the oil industry creates basic problems of energy policy: thus with oil prices at the levels ruling today (thanks to the flexibility of the oil industry's pricing system), competition between fuel oil and coal on this basis is more than likely to cause the coal industry economic and social injury out of all proportion to the necessary adjustments, and calling at the very least for economic action to aid the process of adjustment.

However, the fact remains that the rules of competition should not be such as to accentuate the structural disparities.

This is not to say that they should necessarily be the same for both industries — they should be appropriate to the nature of each — but they should in essence be framed sufficiently in parallel for the operation of the rules for one industry should not adversely affect the operation of the rules for the other.

Ways and means have therefore been sought

(a) of rendering the implementation of Article 60 rather more flexible;

(b) of securing the institution of information arrangements with regard to the prices of petroleum products.

The High Authority held a number of discussions with the European coal producers' committee C.E.P.C.E.O., the consumers' and dealers' committee C.E.L.N.U.C.O. and the trade unions of the coal sector. Study work is proceeding, and the subject is to be further examined by the Inter-Executive Working Party on Energy.

100. As regards social charges, which were also mentioned in Annex V to the interim memorandum,[1]) the High Authority embarked as long ago as 1959 on a comparative study of the incidences of these in the coalmining, iron-ore and iron and steel industries. After a long and laborious process of drafting in co-operation with the Ministries concerned, the necessary questionnaires were drawn up, the aim being to have them to some extent uniform in structure and at the same time properly adapted to the different national social-security systems. Some such study was essential before any valid conclusions could be formulated on the subject. The social charges borne by each individual industry depend partly on the nature of the industry and of the production conditions in it *(e. g.* the incidence of accidents and occupational diseases) and partly on the social-security system in force for it, there being a special insurance scheme for the coalmining industry, while the other two come under the general national system; it was therefore necessary to compare and evaluate the costs under the special miners' scheme and those under the general system governing the other two sectors. Is was also essential to know as accurately as possible the financing methods employed and in particular the extent and form of State participation.

It was not until the end of November 1961 that all the data had been secured from the different Governments. When

[1]) See *Ninth General Report*, No. 146.

the analysis of these has been completed, which it should be early in 1962, discussions can proceed: it is intended to organize a meeting with the representatives of the Governments for the purpose some time in February.

Section 2: The State of the Energy Market

SHORT-TERM ENERGY BALANCE-SHEETS

101. To facilitate the Council of Ministers' discussions on energy policy, and supply the data needed for it to assess the situation, the High Authority worked with special concentration on the short-term energy balance-sheets, making improvements in their presentation and completing them more rapidly.

A very detailed balance-sheet was submitted on behalf of the Inter-Executive Working Party on Energy in April 1961, and was discussed at the Council's meeting on May 16; a fresh version with the figures brought up to date was submitted early in October and discussed on October 26, and the balance-sheet for 1962 was submitted in the New Year and discussed on January 23. Improvements were made at the same time in the methods employed, with the assistance of the Council/High Authority Joint Committee.

102. The April 1961 balance-sheet was a much fuller and more systematized document than its predecessors: it was both a report on the Community's energy position to date and a study of the outlook regarding energy supply and energy consumption in the Community in 1961. Special care had been taken to see that it was consistent, *i.e.* that there was both internal consistence among the various figures, through the adoption of standard tables, and external consistence between the forecasts for energy and the forecasts for general economic expansion. The Council at its May meeting was able to hold a practical discussion on immediate problems concerning market transparency in the energy field.

To ensure that the Council was kept fully abreast of the latest developments, the balance-sheet was, as we have seen, brought up to date in the following October. This was the first time that the Communities' departments had worked out a supplementary mid-year picture of the state of the energy market: in point of fact, only camparatively slight changes needed to be made in the previous forecasts.

103. The Council at its May 1961 meeting had expressed the wish that the 1962 balance-sheet should be discussed at as early a date in 1962 as possible. Accordingly, the document was this time submitted in January. Its compilation for such an early deadline inevitably entailed an increase in the margin of uncertainty, for the previous year's figures can never be definitely known beyond the first eight or nine months, and so had to be extrapolated for the full year. Moreover, the outlook regarding the movement of the market is in any event, as will be seen, still somewhat uncertain. These various factors of necessity detract from the reliability of the energy forecasts.

In compiling the balance-sheets the Communities' departments had the active co-operation of the Government experts and the specialists in the energy sector. Before the documents were finalized, they were carefully examined by the Joint Committee, while in addition the methods employed were discussed and overhauled in consultation with the latter's Sub-Committee on Methods. At the same time, notwithstanding the rapid progress made in a few short years with the preparation of the European energy balance-sheets, it should be added that the statistical data obtainable are still not fully adequate, particularly for the purpose of viewing the position at a given moment in anything like a long-term retrospective context.

TRENDS IN DEMAND

104. We are here concerned to draw the relevant practical conclusions from the basic studies on the state of the energy market in 1960 and 1961 and the forecasts for 1962. It is

proposed to analyse the trend in the demand for the different energy products in each of the main consumer sectors.

105. The trends actually recorded in 1961 very largely bore out the forecasts drawn up at the beginning of the year. These had been calculated assuming an increase of 4·7% in gross national product and of 6·5% in industrial production: indications now to hand suggest that in fact the increases were 5·2% and 6% respectively. Production in the iron and steel sector, which accounts for approximately 13% of total Community energy consumption, rose only very slightly.

The expectation that economic activity would continue high but that there would be an appreciable drop in its rate of increase over the peak year 1960 was thus to a great extent fulfilled. A further point was that water-supply conditions were pretty well average, although the outside temperature was below normal during the greater part of the year.

Trend in overall energy consumption

106. On the basis of the statistics at present available, Community overall energy consumption in 1961 may be calculated at 493 million metric tons hard-coal equivalent, as against 475 million in 1960, an increase of 3·9%. It should be noted that these figures represent as far as possible actual consumption, and not deliveries.[1])

This increase was slightly above that originally forecast, which had been about 3%. In absolute figures, however, the discrepancy works out at less than 3 million metric tons hard-coal equivalent, or only something like 0·6% of total consumption; moreover, the 1961 figures are as yet only provisional, with a substantial margin of uncertainty. Though these considerations must be borne in mind, mention may be made of certain special factors which have helped to keep the rate

[1]) The statistical definitions having been changed, in agreement with the experts from the member countries, these figures are not in all respects comparable with those given in previous High Authority Reports.

of growth in energy consumption fairly high in comparison with that in general economic activity. These include

(a) *the rise in consumption of motor spirit:* this exceeded the forecasts, accounting for close on 6 million of the aggregate increase in consumption of 18 million metric tons hard-coal equivalent;

(b) *the rise in consumption of electric current:* the trend in this sector is usually steadier than the movement of total energy consumption, and this was markedly the case in 1961, the rate of growth dropping only from 11·3% to 7·5%, as against a decrease from over 9% to 3·9% in that for overall energy consumption. If we leave aside the special factors affecting certain consumer sectors, it may reasonably be wondered whether the relative stability of the rate of growth in electricity consumption in 1961 may not be to some extent connected with the fact that the slackening in general economic expansion was due much more to the supply situation than to a decline in demand. Given the continuing very high rate of capacity utilization, and also, it would seem, the effect of investment designed to save on manpower in industry, it is only natural that electricity consumption should maintain a fairly steady growth;

(c) *the trend in the household sector:* although mild weather prevailed during most of the year, sales to dealers serving private households increased considerably in all the Community countries except France. However, the statistics available relate only to a few months of the year, and moreover give no indication whether the upturn was due merely to stockbuilding or reflected a more lasting change in a sector in which non-electrical consumption had been stagnant for several years.

107. These various factors do something to expain the movement of energy consumption in 1961; it would be a mistake, however, to jump to the conclusion that the 1961 rate of growth was higher than the average to be expected in the longer term. 1961 was a year of very limited expansion in

iron and steel production: in times of greater activity the influence of this industry on energy consumption is such as easily to offset the possible absence of the minor incidental factors which helped to push up the rate of growth in 1961.

In view of these considerations, it seems possible that the years 1955-59, so frequently used as a reference basis in evaluating the movement of energy consumption, were in fact too much affected by fortuitous factors to serve as a valid standard of comparison. Taken from this angle, the turn-round in energy consumption since 1960 might be regarded as representing not a purely passing phase but a reversion to the earlier trend. However, such a hypothesis could of course only be proved or disproved by reference to the figures for several years in succession, so that it is too soon to draw any conclusions at present.

TABLE 1

Trend in Community Overall Primary-Energy Consumption

('000,000 metric tons H.C.E.)

Country	1960	1961[2])	1962 (forecasts)
Germany (Fed. Rep.)	211·3	218·1	222·6
Belgium	34·77	35·23	35·51
France	125·3	130·4	136·6
Italy	67·4	72·5	78·1
Luxembourg	4·80	4·84	4·60
Netherlands	31·27	32·31	33·67
Community[1])	474·9	493·3	511·1
Change in %		+3·9	+3·6

[1]) Rounded figures, which may therefore differ slightly from the sum of the individual items.
[2]) Estimated on basis of first nine months.

The forecasts for 1962 were calculated assuming an increase of 4.5% in gross national product and of 5·6% in industrial production. The forecast overall increase of 3·6% covers considerable variations in trend between one country and another.

Breakdown of Community primary-energy consumption by countries

108. Minor year-to-year changes are observable in the proportions of total consumption represented by the individual countries. Outstanding among these is the steady increase in the share of Italy, from rather less than 10% in 1950 and 12% in 1955 to close on 15% in 1961.

TABLE 2

Shares of Individual Countries in Community Primary-Energy Consumption

(%)

Country	1950	1955	1960	1961[1])
Germany (Fed. Rep.)	43·6	45·4	44·5	44·2
Belgium	9·7	8·4	7·3	7·1
France	28·7	26·9	26·4	26·4
Italy	9·6	11·6	14·2	14·7
Luxembourg	1·1	1·0	1·0	1·0
Netherlands	7·3	6·7	6·5	6·5
Community	100·0	100·0	100·0	100·0

[1]) Estimated on basis of first nine months.

The gradual changes in pattern are not the result solely of differing rates of general economic growth as between one country and another, but also of differences in savings of energy per unit produced, and at the same time of the disparate trends in certain consumer sectors.

109. These differences are again reflected in the figures for 1961. They are especially apparent if we compare the trend in energy consumption during the year with that in general economic activity.

TABLE 3

Percentage Change in Energy Consumption and in General Economic Activity from 1960 to 1961

(estimated figures)

	Germany (Fed. Rep.)	Belgium	France	Italy	Netherlands	Community
Energy consumption	+3·2	+1·3	+4.1	+7·6	+3·3	+3·9
Gross national product	6·0	3·0	5·0	6·5	2·6	5·2
Industrial production	6·0	4·5	6·0	8·5	2·0	6·0

Sector-by-sector analysis

110. As the trend in consumption in certain sectors departs fairly widely from the average, it is being found more and more that the overall method of analysis is valid only if cross-checked by a sector-by-sector analysis.

TABLE 4

Energy Consumption by Sectors, 1960-62[1]
(Community)

	'000,000 metric tons H.C.E.			%		
	1960	1961	1962	1960	1961	1962
Primary-energy producers' own consumption and conversion and transmission losses	56·3	54·3	53·0	11·9	11·0	10·4
Iron and steel industry	66·4	67·0	65·4	14·0	13·6	12·8
Other industry	160·3	170·3	178·9	33·7	34·5	35·0
Transport	61·4	65·8	70·4	12·9	13·3	13·8
Households	115·7	121·0	126·7	24·4	24·5	24·8
Miscellaneous (not surveyed) and statistical adjustment	14·8	14·9	16·7	3·1	3·1	3·2
Total	474·9	493·3	511·1	100·0	100·0	100·0

[1]) Figures for 1961 estimated on the basis of first nine months; figures for 1962 forecast.

We therefore briefly review the position for the main end consumers, namely the iron and steel industry, other industry, transport, and private households. As electricity consumption frequently corresponds to an energy-utilization rate appreciably different from that of other energy products and in certain sectors more or less follows a trend of its own, we give separate indications for non-electrical and electrical forms of energy. In addition to the trends as estimated for 1961 we note the forecasts for 1962 as arrived at by the Inter-Executive Working Party on Energy.

Iron and steel industry

111. Iron and steel production rose only slightly in 1961: steel production proper totalled 73,400,000 metric tons, representing an increase of only 0·6% over the year 1960 (which was an exceptionally active year), while pig-iron production amounted to 54,600,000 metric tons, an increase of 1·3%.

Consumption of non-electrical energy in this sector remained practically the same as in 1960; consumption of electricity continued to rise, but at a rate of only 5·5%, well below that for the previous year.

However, various factors are still combining to stimulate electricity consumption in the iron and steel industry, including the installation of more and more powerful electrically-driven motors (necessitated, *inter alia*, by the increase in the number of cold-rolling mills and sintering plants), the greater emphasis on special steels, and in particular on electric-furnace steel, and the expansion in the production of oxygen-blown steels. As for the non-electrical forms of energy, the consumption of coke was down 200,000 metric tons to 50,500,000 the production of the input rate at the blast-furnaces representing in itself a decrease of 1,500,000 metric tons in coke consumption.

In spite of the low rate of growth in the industry's production, consumption of petroleum products rose by 2,800,000 metric tons to total 3,200,000: this had to do with the conversion of open-hearth and reheat furnaces (substitution), and to a certain extent — minor as yet — with the

injection of fuel oil into the blast-furnaces. Production of oxygen-blown steels, where in competition with open-hearth, does, however, tend to limit the advance of oil in the iron and steel sector: this effect is already being felt in the Netherlands.

In 1962, owing to the slight contraction forecast in the industry's activity, consumption of non-electrical energy is expected to drop by approximately 4% from its 1961 level. This decrease is likely to be particularly marked in the case of coke consumption, which will probably be more than 3 million metric tons lower than in 1961.

In addition to the slight contraction in pig-iron production and the structural reduction in the coke rate, it is thought that another factor of a more cyclical nature will be operative: with the blast-furnaces running more regularly at a time of less vigorous activity in the industry, with pig-iron production concentrated in the most up-to-date furnaces, and with the sintering-plants working to capacity, it is reasonable to expect a further diminution in the coke rate.

The outlook regarding energy consumption in the iron and steel industry remains, however, rather uncertain, owing to the vagueness as to the probable movement of steel and pig-iron production.

Other industry

112. Consumption of non-electrical energy in the iron and steel sector, including that of the fuels used in steel-works-owned power-stations, increased by about 5·8% over the previous year's figure, and consumption of electricity by 6·9%. Solid fuels now account for only 46% of the non-electrical energy so consumed, and liquid fuels for over 40%.

For the Community as a whole, 1962 is expected to see liquid fuels for the first time overtake solid fuels in this sector, consumption of the latter falling by approximately 2 million metric tons, as against 1,300,000 in 1961.

TABLE 5

Trend in Non-Electrical Energy Consumption in Industries Other than Iron and Steel 1960-62, by Energy products (Community[1])

Product	'000,000 metric tons H.C.E.			%		
	1960	1961	1962	1960	1961	1962
Solid fuels	50·3	48·9	46·8	49·8	45·8	42·1
Liquid fuels	36·7	43·1	48·9	36·4	40·3	44·0
Gas	14·0	14·9	15·5	13·8	13·9	13·9
Total[2])	100·9	106·8	111·1	100·0	100·0	100·0

[1]) Figures for 1961 estimated on basis of first nine months; figures for 1962 forecast.
[2]) Rounded figures, which may therefore differ slightly from the sum of the individual items.

Transport

113. Consumption of coal by the *railways* is continuing to decline as a result of modernization programmes involving electrification and dieselization and of the rationalization of

TABLE 6

Consumption of Motor Fuel in Road Traffic[1])

	'000,000 metric tons			Increase in %	
	1960	1961	1962	1961/1960	1962/1961
Germany (Fed. Rep.)	8·95	10·2	11·5	+13·9%	+12·8%
Belgium	1·49	1·65	1·82	+11·2	+10·3
France	6·37	7·0	7·7	+ 9·9	+10,0
Italy	4·47	5·34	6·25	+19·5	+17·0
Luxembourg	0·08	0·09	0·1	+12·0	+12·0
Netherlands	1·68	1·85	2·0	+10·0	+ 8·1
Community	23·04	26·13	29·37	+13·1%	+12·4%

[1]) Figures for 1961 estimated on basis of first nine months; figures for 1962 forecast.

operations, the diminution working out at between 5% and 10% per annum, according to country.

Apart from the railways, transport has become practically a one-fuel sector. In the case of *road* traffic consumption of motor fuel rose steeply in 1961, the rate of growth reaching 13% for the Community as a whole and nearly 20% for Italy; in 1962 it is expected to show a slightly less substantial but nervertheless steady increase.

114. Taking the main individual products separately, we find that consumption of motor gas oil rose fairly steadily in France and the Benelux countries, and soared in Italy, in line with that country's rate of economic development; in Germany consumption in 1960 deviated from the trend registered in the preceding years, but this seems likely to have been a passing development only, as in 1961 the rate of increase was back to the 1955-59 average.

The movement of gasoline consumption varies considerably from country to country; the most striking expansion is that in Italy, where gasoline deliveries in the home market increased in the first half of 1961 by 30% over the figure for the corresponding period of the previous year.

115. As regards *air* transport, consumption of aviation spirit has levelled off, and is already showing signs of declining as was to be expected in view of the increased use of medium and long-range commercial jet aircraft. This technical development is, on the other hand, resulting in a very rapid increase in consumption of aviation fuel of the petroleum type, which explains the growth in the total consumption of this sector, by something like 300,000 metric tons a year.

As was noted earlier, the rise in consumption of motor spirit accounted in 1961 for approximately 30% of the net increase of total energy consumption in the Community.

Households

116. Statistics so far to hand indicate that household consumption of electricity increased in 1961 by 9·6%, and of

non-electrical energy by 3·3%. The latter development is somewhat surprising in view of the very mild weather conditions which prevailed during most of the year, and will need to be verified as and when fuller statistics become available. It should be added that in this sector the only figures obtainable are those for deliveries, and that in these particular circumstances it seems possible that the affects normally to be expected of mild weather were counteracted by a tendancy on the part of dealers and consumers to augment their stocks.

Turning to the breakdown of non-electrical fuels, we find solid fuels making a noticeably better showing, due evidently not merely to factors of inertia but also, in some countries, to a real increase in consumer interest, as witness the revival in sales of coal-burning stoves and similar room heating appliances and the progressive stabilization in the sub-field of block heating, in which coal-using techniques are now coming to rival their oil-burning counterparts in efficiency. However that may be, it should be observed that solid fuels still account for two-thirds of all non-electrical consumption in the household sector, in contrast to the mere 46% now recorded for industry other than iron and steel.

TABLE 7

Trend in Consumption of Non-Electrical Energy Consumption in Private Households 1960-62, by Energy Products (Community)[1]

	'000,000 metric tons H.C.E.			%		
	1960	1961	1962	1960	1961	1962
Solid fuels	64·0	63·3	62·9	69·2	66·2	63·5
Liquid fuels	21·9	25·4	28·7	23·7	26·6	29·1
Gas	6·6	6·9	7·3	7·1	7·2	7·4
Total[2])	92·5	95·6	98·9	100·0	100·0	100·0

[1]) Figures for 1961 estimated on basis of first nine months; figures for 1962 forecast.
[2]) Rounded figures, which may therefore differ slightly from the sum of the individual items.

The trend in this sector being somewhat uncertain, consumption of non-electrical energy for 1962 has been conservatively forecast assuming a relative increase of 3·4%, similar to that in 1961, with solid fuels accounting for about 64%. As regards electricity consumption, there is little to indicate any slackening in the very marked expansion recorded in recent years.

Return to total energy consumption broken down by forms of primary energy

117. By calculating the end-consumption figures in terms of primary energy, and adding the energy producers' own consumption and conversion and transmission losses, we arrive at total energy consumption broken down by forms of primary energy.

It is thus found that hard-coal consumption taken overall dropped in the Community in 1961 by approximately 4,500,000 metric tons, or 1·8%, coal now accounting for only 50% of total primary-energy consumption. The proportion varies, however, from one country to another, from 68% and 57% in Belgium and Germany respectively to only 15% in Italy, with France and the Netherlands coming in between with 52% and 48%.

Oil consumption rose during the year by about 20 million metric tons hard-coal equivalent, or 15%. This advance is, however, due in considerable part to trends not involving the substitution of oil for coal, *viz.* the increased consumption of motor fuel.

The share of brown coal remained unchanged.

Consumption of natural gas increased by 13%, corresponding with the rate of exploitation of the deposits discovered some years ago.

Consumption of water power remained much the same as in 1960, which had been a year when the overall water level was unusually high: the effects of the expansion in

TABLE 8

Trend in Energy Consumption in the Community Countries[1])

(000,000 metric tons H.C.E.)

Country and Year		Hard-coal	Brown coal	Petro-leum products	Primary gas	Water power[2])	Total con-sumption
Germany (Fed. Rep.)	1960	128·5	33·0	42·1	0·9	6·8	211·3
	1961	124·0	33·7	51·9	1·0	7·5	218·1
	1962	120·0	33·7	60·0	1·2	7·7	222·6
Belgium	1960	24·61	0·06	9·96	0·06	0·08	34·77
	1961	24·12	0·06	11·03	—	0·02	35·23
	1962	23·22	0·06	12·21	—	0·02	25·41
France	1960	67·5	1·4	36·2	4·0	16·2	125·3
	1961	67·8	1·7	39·8	5·6	15·5	130·4
	1962	68·9	1·8	44·2	6·5	15·2	136·6
Italy	1960	10·9	0·4	28·7	8·3	19·1	67·4
	1961	11·1	0·6	32·9	8·5	19·4	72·5
	1962	10,9	0·6	37·3	8·9	20·4	78·1
Luxembourg	1960	4·38	0·09	0·32	—	0·01	4·80
	1961	4·38	0·09	0·36	—	0·01	4·84
	1962	4·08	0·09	0·40	—	0·03	4·64
Netherlands	1960	15·45	0·19	15·22	0·36	0·05	31·27
	1961	15·44	0·19	16·16	0·48	0·04	32·31
	1962	15·40	0·19	17·56	0·48	0·04	33·67
Community	1960	251·3	35·2	132·4	13·7	42·3	474·9
	1961	246·8	36·4	152·2	15·5	42·4	493·3
	1962	242·5	36·4	171·7	17·1	43·4	511·1
Share in %	1960	52·9	7·4	27·9	2·9	8·9	100·0
	1961	50·0	7·4	30·9	3·1	8·6	100·0
	1962	47·5	7·1	33·6	3·3	8·5	100·0

[1]) Figures for 1961 estimated, figures for 1962 forecast.

[2]) Including geothermal and nuclear energy.

hydro-electric capacity were practically cancelled out by the recurrence of more average water-level conditions. In any event, the rate of expansion in hydro-electric capacity is not keeping pace with the increase in total electricity consumption, so that major increases in thermal capacity are needed.

118. 1962 is expected to see coal consumption decrease further, by about the same amount as in 1961, owing in part to the factors which have been operative in this sense for some years, and in part also, in 1962, to the effects of the slight diminution in activity in the iron and steel industry. Oil consumption will continue to increase, though probably not quite as steeply as before, especially in Germany where the increase in 1961 was about 23%. As consumption of motor fuel may be expected to continue rising more or less independently, at approximately the same rate as in 1961, the slackening in the rate of increase will mainly affect black products used for thermal purposes: these now represent a sufficiently large share of energy consumption by industry other than iron and steel to be sensitive to fluctuations in genral economic activity. Consumption of petroleum products is likely in 1962 to account for one-third of total energy consumption in the Community.

TRENDS IN SUPPLY

Trend in costs in the Community coalmining industry

119. During the year under review, the Community coal producers worked to increase productivity at the collieries, with the object of cutting production costs. This they had to some extent succeeded in doing in 1960, notwithstanding certain contrary factors, paticularly in the matter of labour costs.

To judge by the results available at the time of going to press,[1]) however, the stepping-up of output during the first half of 1961 was not sufficient in all coalfields fully to offset the cost increases occurring meantime. In consequence of the present all-round full employment, the measures taken to ensure recruitment of juveniles for the purpose of maintaining the labour force at a proper strength are coming up against increasing difficulties.

120. With a few rare exceptions, production costs in the Community collieries have been going down since 1958, in contrast to the trend up to that year.

Between 1954 and 1958, that is, before the "coal crisis" set in, production costs in the Community coalmining industry as a whole had averaged a steady rise of 5·5% a year, due primarily to the disparity between the movement of wages and the movement of productivity. During this period the amounts paid out by the enterprises in wages and related charges rose by about 10% per annum, while output per man/shift increased by only about 2% per annum: the incidence if this disparity was particularly marked inasmuch as despite the remarkable progress of mechanization labour costs still account for more than one-half of total production costs. In addition, the collieries' drive to expand production in line with the ever-increasing demand for energy certainly involved them in still further expense.

With rising production costs came price increases, which were nevertheless acquiesced in because even so Community coal was on the average cheaper than imported coal.

121. From 1958 on the costs trend underwent a sharp change. Colliery production costs ceased to rise, and indeed actually dropped, for the first time since the war: from 1958 to 1960 they averaged for the Community as a whole a reduction of 2% per annum.

This turnround was mainly the result of the fact that productivity at the collieries increased much more rapidly

[1]) January 31, 1962.

than expenditure on wages and related charges: thus between 1958 and 1960 output per man/shift showed an average Community increase of about 10% per annum, while wage and related costs rose by only about 5% per annum.

Initially, the steep rise in productivity from 1958 onwards was undoubtedly due in part to the rationalization measure introduced earlier with a view to stepping-up production. However, when the prices of imported energy fell below those of Community coal, and demand for the latter consequently declined, the collieries were faced by an entirely changed situation. Rationalization could no longer be focused on increasing production: the object must rather be to scale production down to the smaller demand, and seek to withstand the pressure of competition from the other sources of energy by raising output so as to lower costs.

122. So far as their means allowed, the collieries endeavoured to achieve these two aims. By introducing various improvements in work organization, by rationalizing operations both below ground and at the surface, by intensifying the mechanization of the actual coal-winning, by concentrating production on the most economic collieries and pits, by closing down uneconomic pits and workings, they strove to improve their competitive capacity *vis-à-vis* the other sources of energy and to defend their position in the energy market.

123. Nevertheless, the fact remains that it is not possible to continue raising output by 10% a year over a long period, even by rationalizing to the uttermost. Hence the future movement of coal production costs will be decisively influenced by the wage trend.

The Community collieries' efforts to withstand competition from imported coal and fuel oil have simultaneously sent their revenue down: in the first place, owing to the low prices for imported energy, actual receipts per ton have been falling since 1958 by approximately 1.5% a year, while in the second place the total receipts of the coalfields have dropped in consequence of the shrinkage in sales.

Table 9 following shows

(a) the decrease in production and revenue as a result of the pressure of competition from other sources of energy;

(b) the major influence exerted on production costs by the increase in productivity (expressed as output per man/shift) on the one hand and the increase in labour costs (wages and related charges) on the other.

The figures for the employers' expenditure in hourly wages and related charges show that since 1954 these two items have risen in each year and in all the Community countries more steeply than gross hourly wages. This is a particularly important point, inasmuch as in the coalmining industry wage-related charges form an exceptionally large part of labour costs as a whole. The share of indirect wage costs[1]) in the employers' expenditure on wages and related charges worked out in 1960 as follows:

Germany (Federal Republic)	30·7%
Belgium	20·2%
France	33·0%
Netherlands	26·6%

Table 10 shows the indices for gross hourly wages and for employers' expenditure in wages and related charges from 1954 to 1960.

[1]) The share of indirect wage costs in total labour costs represents an additional expenditure which amounts to 44·3% of total direct wage costs in the Federal Republic, 25·3% in Belgium, 49·3% in France and 36·2% in the Netherlands.

Footnote 1 to Table 9 gives a reference to the definition of the terms "Wage costs" and "Employers related expenses".

TABLE 9

Indices of Production, Underground OM.S., Employers' Hourly Wage Costs and Related Charges, Production Costs and Proceeds of Saleable Production

Community	Production Index		Index of underground o.m.s.		Index of employers' hourly wage costs and related expenses[1])				Index of production costs per ton saleable production				Index of proceeds per ton			
	1958 = 100	year-to-year charge	1958 = 100	year-to-year charge	1958 = 100	year-to-year charge [1])	1958 = 100	year-to-year charge [3])	1958 = 100	year-to-year charge [2])	1958 = 100	year-to-year charge [3])	1958 = 100	year-to-year charge [1])	1958 = 100	year-to-year charge [2])
1954	98·1		91·3		68·2		72·2		82·2		86·1		83·4		87·0	
1955	100·0	+1·9	95·0	+ 4·1	74·4	+ 9·0	78·7	+ 9·0	83·4	+ 1·4	87·3	+1·4	85·0	+1·9	88·7	+1·9
1956	101·1	+1·1	96·7	+ 1·8	80·2	+ 8·7	84·9	+ 7·8	86·6	+ 3·9	90·7	+3·9	89·5	+5·3	93·4	+5·3
1957	100·6	—0·5	97·6	+ 0·9	91·5	+14·1	95·6	+12·6	96·1	+11·0	99·6	+9·8	97·4	+8·8	100·6	+7·7
1958	100·0	—0·6	100·0	+ 2·5	100·0	+ 9·3	100·0	+ 4·6	100·0	+ 4·1	100·0	+0·4	100·0	+2·7	100·0	—0·6
1959	95·3	—4·7	109·1	+ 9·1	105·4	+ 5·4	99·3	— 0·7	98·2	— 1·8	93·6	—6·4	100·0	+0	95·3	—4·7
1960	94·9	—0·4	120·0	+10·0	110·1	+ 4·5	105·1	+ 5·8	96·3	— 1·9	91·6	—2·1	98·4	—1·6	94·0	—1·4
1st six months 1961	95·2	+0·3	128·2	+ 6·8					97·0	+ 0·7	94·1	+2·7	97·6	—0·8	95·3	+1·4
2nd six months 1961	91·5[4])	—3·4[4])	129·6[4])	+ 8·0[4])												
1961	93·3[4])	—1·6[4])	128·8[4])	+ 7·4[4])												

[1]) For definitions of the terms "wage-costs" and "employers' related expenses", see explanatory notes in *Statistiques Sociales*, No. 3/1960, published by the Statistical Office of the Communities.
[2]) These indices are based on an invariable exchange rate of exchange for France and the Saar.
[3]) These indices take account of the three changes in the exchange rate of the French franc to the dollar.
[4]) Provisional figure.

GRAPH No. 1

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

Community averages

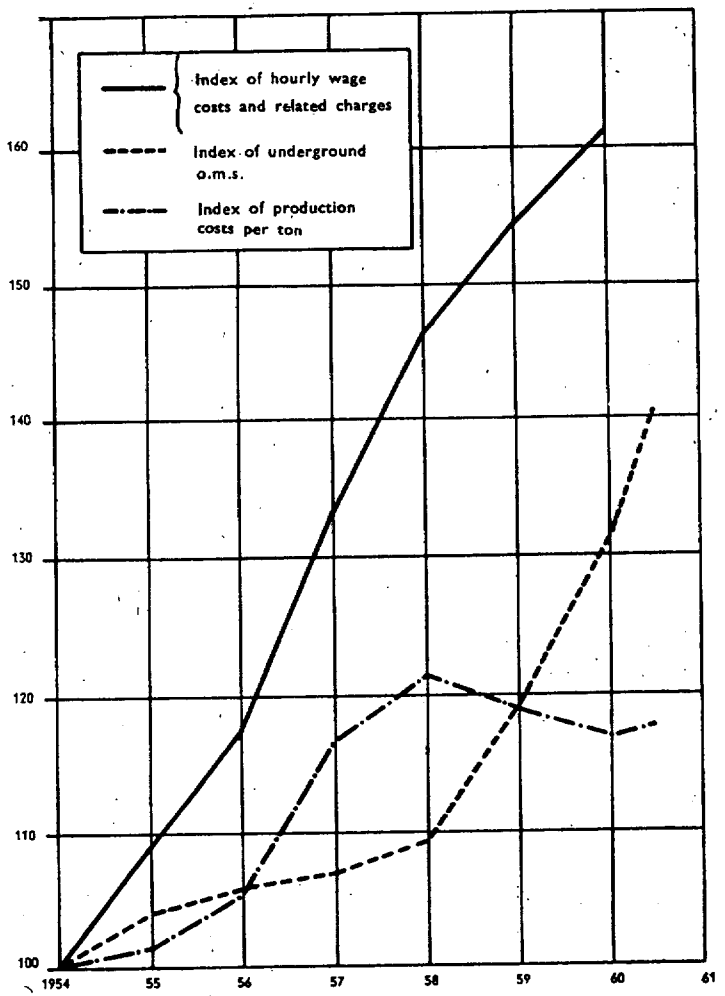

TABLE 10

Indices of Direct Hourly Wages and Employers' Hourly Wage Costs and Related Charges[1])
(Underground and surface workers)

(Indices 1954 = 100 — Based on national currencies)

	Germany (Fed. Rep.)		Belgium		France		Netherlands	
	Direct hourly wages	Employers' wage costs and related charges	Direct hourly wages	Employers' wage costs and related charges	Direct hourly wages	Employers' wage costs and related charges	Direct hourly wages	Employers' wage costs and related charges
1954	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
1955	108·8	109·0	102·5	103·7	103·5	110·4	107·3	110·9
1956	120·5	115·9	108·3	110·5	118·9	123·4	114·6	122·1
1957	130·2	128·6	127·6	132·2	134·2	141·9	131·5	139·9
1958	132·7	140·8	130·4	137·2	150·2	159·5	140·4	147·2
1959	134·6	148·3	130·9	135·3	157·9	170·8	141·0	146·9
1960	142·9	156·6	133·0	138·8	162·3	185·0	153·4	157·8

[1]) See footnote [1]) to Table 9.

The supply position regarding oil

FLOW OF CRUDE OIL

Internal production

124. Internal production within Europe in 1961 was one million metric tons higher than in 1960, and in the Sahara 8 million tons higher, remaining in the associated territories of Gabon and Congo unchanged at 800,000 tons.

Imports

125. Imports of crude oil from third countries showed a further substantial increase notwithstanding the expansion in internal production, rising from 100 million metric tons in 1960 to 108,500,000 in 1961. Tonnages contracted for from the Soviet Union were appreciably larger than in 1960, as may be seen from the following figures:

Tonnages of Soviet oil contracted for

('000 metric tons)

Country	1960[1])	1961
Germany (Fed. Rep.)	917	1,700
Benelux	—	—
France	700	550
Italy	2,800	4,000
Community	4,417	6,250

[1]) Actual imports. In the case of the Federal Republic of Germany the quantity laid down in the trade agreement was 1,500,000 metric tons; although the whole amount was not in fact delivered, the new agreement provides for a larger tonnage.

FLOW OF REFINED PRODUCTS

The total supply of petroleum products in the Community is the sum of refinery production and of other ancillary resources, less net exports to third countries and oil for ships' bunkers.

Refinery capacity

126. In 1961 refinery capacity in the Community underwent expansion representing rather over 10 million metric tons per annum — a considerably smaller increase than in 1960, when the figure was over 20 million tons.

Correspondingly, the quantity of crude oil refined rose from 120 million metric tons in 1960 to rather more than 135 million in 1961.

Other resources

127. These are as follows:

(a) in Germany, motor and industrial benzole, shale oil, and liquid fuels derived from hard coal and brown coal;

(b) in France and Italy, liquid hydrocarbons linked with the production of natural gas.

Total supplies of these in 1961 amounted to 1,300,000 metric tons.

Net external-trade balance

128. The Community is a traditional net exporter of refined products to third countries; if we add to these regular exports its shipments to the extra-European territories linked with the Community, the net balance of external trade for the year works out at much the same level as in 1960, *viz.* approximately 11,400,000 metric tons of products.

Imports of refined products from the Eastern countries also remained at much the same level as the year before, slightly over 4 million metric tons inclusive of procurements from East Germany.

PRICES

Motor gasoline

129. In Germany and Belgium the big companies lowered their prices and remodelled their price zones; as the independent distributors did not follow suit to the same extent, the disparities in ex-pump prices were in general reduced. In Italy, prices were cut by Lit.4 per litre following a reduction in turnover tax; in France ex-pump prices remained practically unchanged throughout the year; in the Netherlands they were slightly reduced following the currency revaluation.

Gas and diesel oil

130. There were in general no changes of note, apart from a new rises resulting from tax increases, in Germany owing to the extension of the compensatory tax on imports to include crude oil, and in Belgium to the raising of the flat rate of transmission tax from 12% to 14%.

Heavy fuel oil

131. Market trends respecting industrial heavy fuel oils are difficult to assess in certain member countries in the absence of any system of publication of prices actually charged. This matter was discussed, in particular, in the programme of initial measures for the co-ordination of energy policies. An effective solution taking due account of the various internal and international implications would be a notable step towards the establishment of normal conditions of competition in the energy market.

Though no definite details were available, it appeared at the end of the year that prices in some areas were tending to rise, by for example $2.00 per metric ton in Italy and Germany, while in Belgium they remained extremely de-

pressed, being still round about the level of the cost per supplementary ton of crude ex Middle East.[1])

The reductions recorded in gasoline prices were in line with the movements of the quotations ex Caribbean. The steadier behaviour of gas and diesel-oil prices in general reflected the state of the market for these products; on the other hand recent increases for the heavy fuel oils would appear unlikely to last. To assess these, it is necessary to append a brief analysis of the international market situation, for the following reasons:

(a) the Community is dependent on third countries for very much the preponderant part of its supplies, and the home markets of some member countries are wide open to outside suppliers;

(b) a grasp of the world context is essential, in view of the interlinked sales outlets of the major oil producer centres, which export to all parts of the world, and of the fact that the companies working the oilfields carry on refining and distributing operations in practically all countries.[2])

MAIN ASPECTS OF THE MOVEMENT OF THE INTERNATIONAL OIL MARKET IN 1961

132. The low level of the prices of heavy fuel oils in most Community markets since 1958 has been largely due to the expansion of world crude production capacity under programmes drawn up before the structural changes in world demand and the increase in the tonnages of Soviet crude on offer.

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[1]) *I.e.*, they do not cover any of the fixed costs which represent the greater part of the expense involved in oil development (prospecting, opening-up of deposits, building of tankers, capital schemes for refinery, transport and distribution facilities, etc.).

[2]) See *Statistical Annex*, Table No. 18, showing interconnection of markets in the world.

Structural changes in world demand

133. International trade in oil is being affected by increasing State intervention in many consumer countries, which is proceeding along three main lines:

(a) protection and development of and prospection for internal sources of energy (coal, oil, natural gas, hydro-electric power, nuclear power);

(b) endeavours to secure supplies by means of trade or barter agreements, *e.g.* with the Eastern European countries;

(c) formation of companies with indigenous capital to prospect for and develop new deposits in the big exporter regions themselves.

The movement of the world market is thus difficult to forecast, owing to uncertainty as to such factors as United States quota policy or possible action in other consumer countries which might have the effect of opening up the markets counted on by some producers to conquest by new suppliers.

Geographical diversification of sources and trend in production capacity

134. While expansion in the United States and Venezuela is proceeding only at a very leisurely pace, of late, and in particular in 1961, oil production has been increasing by leaps and bounds in countries where operations in this field are a recent development. This is so principally in the case of

(a) Canada, where the increase works out at 10 million tons a year from 1960 to 1962, in accordance with the targets set by the Government programme;

(b) Argentina, which was able to cover 85% of its home requirements in 1961 from internal production;

(c) North Africa, which though it was not even in the market at all up to a few years ago, will in 1962 be

supplying, from the Sahara and Libya, approximately 27 million metric tons, to go in principle to Europe.

135. Even so, the contribution represented by these new resources is still not anything like sufficient to cover the increase in demand. Hence the rapid expansion in Middle East production, amounting to about 9% in 1961 over 1960, or in absolute figures 22 million tons; in 1962 this region is expected to reach a production level of something like 300 million tons, and to account for 30% of total world supplies exclusive of the Soviet Union and Eastern European countries. The immense potential of the Middle East is further brought out by the ratio of proved reserves to current production: over two-thirds of world reserves (exclusive of the Soviet Union and Eastern European countries) are concentrated in the four States bordering on the Persian Gulf.

136. A further aspect of the world supply situation to which attention should be drawn is, however, the existence of quite a substantial surplus of production capacity, estimated early in 1961 at approximately 175 million tons per annum in the United States and 165 million in the other producer areas (in which it is divided more or less equally among Venezuela, the Middle East and "other regions") — that is to say, in all about one-third of the production in the world market. With the present changes in the pattern of supply, this surplus capacity has weighed on the markets and depressed prices; consequently its incidence on costs has become heavier and heavier, and so the operators are tending of their own accord to cut it back. All the same, there is a limit below which they cannot go without forfeiting the flexibility so essential to them and finding themselves exposed to almost intolerable pressures.

Except in the United States, each company works out its own limit, depending on its own particular desiderata and on whether or not it regards it as advisable to maintain a reserve in a given area, in order to be able to negotiate freely or to have something to draw on in the event of emergency elsewhere.

Changes in relations between producer countries and operating companies

137. The flow of oil to the world market can be subjected to various forms of pressure by the producer countries. Thus in the areas where the main proved reserves are concentrated, quite apart from cases of *force majeure* or local and temporary social or political tensions, changes are taking place in the relations between the State authorities and the concession-holding companies. Although developments in this connection in 1961 were only the continuation of a trend which had been in evidence for some time, a striking number and variety of them occurred in the space of this one year: instances are the measures introduced in such States as Venezuela, Iraq and Indonesia and the endeavours by the Governments of the exporter countries to harmonize their position *vis-à-vis* the producer companies and the consumer countries.

Special mention should be made of the formation in the autumn of 1960 of the Organization of Petroleum-Exporting Countries (O.P.E.C.): this body set up a permanent secretariat, which is now engaged in assembling data on a number of matters, including the returns on the capital invested in the petroleum industry, the possible reactions of the consumer countries to an increase in royalties, and the function and scale of consumption or excise taxes charged.

138. This general state of affairs is liable to influence suppliers to retain substantial standby capacities, and can hardly fail to impel the authorities in the consumer countries to pay greater attention to security of supply and, in the shorter term, to ensure that larger stocks of crude or refined products are built up.[1]) By and large, short-term potential supply and world demand may well be better in balance in 1962 than in previous years. At the same time, changes in or introductions of import restrictions in certain major markets in the course of the year might release production capacity to serve other areas instead.

[1]) The programme of initial measures for the co-ordination of Community energy policies submitted to the member Governments early in 1961 (see *Ninth General Report*, Nos. 147 ff. draws attention to this point.

Thus the hardening in fuel-oil prices observed at certain points in the Community at the beginning of the winter cannot as yet be regarded as likely to persist.

Moreover, against a background thus largely in a state of flux, the exact nature of the action which will be needed to reconcile the new production structures with established trading positions remains unclear, and unless and until it does emerge clearly no accurate forecast is possible as to the time and level at which the prices of petroleum products will become stabilized. This uncertain situation is serving to increase the element of risk in prospecting operations, and so to reduce the amounts of capital available for prospecting purposes and at the same time cause what capital there is to be concentrated on the most obviously advantageous areas; a further concomitant is a substantial increase in investment in refining and distributing facilities. Such are the factors underlying the overall falling off in prospecting activities in the world in general in the course of the last few years, which has reached very considerable proportions in some countries, including in particular Venezuela. While prospecting work is continuing nevertheless outside the Middle East, this is largely the result of special measures directly of indirectly favouring or promoting it.

The supply position regarding electricity

139. Throughout 1961 demand for power and energy was covered in all the Community countries and an adequate power reserve simultaneously kept in hand. Temporary local shortages were met without difficulty by drawing on the great interconnected grid. Given the steady expansion of generating capacity and the transmission and distribution network, electricity requirements will also be fully covered in 1962.

Hydro-electric resources

140. As within the Community economically-workable hydro-electric resources are to a great extent already being

exploited, the already preponderant share of electricity from thermal power-stations is bound to increase still further. This is very clearly apparent from the latest French and Italian investment programmes.

Overall, 1961 was a more or less average year as regards weather and water-level conditions. Approximately 35% of electricity production was of primary origin, *i.e.* generated from water power (the proportion represented by nuclear energy and, in the case of Italy, geothermal energy being negligible), and 65% came as secondary energy, from the thermal power-stations. If we assume average water-level and other conditions for 1962, the pattern of production may be expected to work out at 33·5% for primary (103 TWh) and 66·5% for secondary (205.9 TWh). Should conditions be exceptionally favourable or exceptionally unfavourable, hydro-electric production may vary from this figure by anything up to 12 TWh either way, with an additional possible variation of 1 TWh either way according to the fluctuations in the exchanges of electric current over interconnections with countries largely geared to hydro-electric production such as Austria and Switzerland. The result would of course be an increase or decrease, as the case might be, in the production of the thermal power-stations.

Thermal power-stations

141. The net production in 1961 of the thermal power-stations in the Community countries is provisionally estimated at approximately 187 TWh, and is expected in 1962 to rise to about 206 TWh, an increase of about 10%.

The shares of the different types of fuel used in thermal production vary widely from one country to another according to the availabilities of primary energy (internally produced or imported), the price per thermal unit and the general characteristics of the operation of the power-stations. Thus whereas in Germany the breakdown is hard coal 61% / brown coal 30% / oil and gas 4-5% each, in Italy it is hard coal about 14% / brown coal 10% / oil about 50% / gas about 25%.

These percentages are unlikely to show any change to speak of in 1962. Although the share of hard coal and brown coal — together representing something like 80% of thermal production — is being very slightly encroached on by that of petroleum products, the absolute increase works out in the neighbourhood of 10% for 1961 and for 1962. With the rate of specific consumption being reduced by an estimated 2% per annum — average specific consumption of fuels for 1962 is expected to stand at 2,900 kcal/kWh — the increase in coal consumption should be round about 8%: in the case of hard coal, this represents an additional 3,500,000 metric tons.

To obtain a rough idea of the possible further reductions in specific consumption over the next few years, it should be recalled that there are already power-stations so highly modernized as to operate (given reasonably constant load conditions) with a specific consumption of between 2,200 and 2,400 kcal/kWh. In the United States the most up-to-date hypercritical generating-set has achieved the record low figure of 2,020 kcal/kWh.

Oil is not very extensively used as the sole fuel in Community power-stations. Notwithstanding its considerable advantages, particularly from the point of view of the capital expenditure involved, and also of the price per thermal unit, most electricity producers were unwilling to commit themselves to the construction of oil-fuelled power-stations, as they felt there were insufficient guarantees as to supplies and long-term prices. The increase in the demand for fuel oil in the electricity industry is therefore mainly accounted for by the use of dual-fired plant; the majority of the oil-using power-stations are strung out along the coasts and in areas remote from the coalfields (more especially in Italy).

Possible fluctuations in the thermal power-stations' production, and hence in their fuel requirements, as a result of variations in the productibility of the hydro-power stations owing to favourable or unfavourable water-level conditions, may be reckoned at approximately 5 million metric tons hard-coal equivalent either way, most of this total being represented by hard coal itself.

Nuclear power-stations

142. The share of the nuclear power-stations in total electricity production expected to increase appreciably in 1962. Experimental power-stations with an installed capacity of 80 MW are now operating satisfactorily in France (at Marcoule) and in Germany (at Kahl); by the end of 1962 further installations will probably have been brought into service in Belgium (the BR3 at Mol), in France (the EDF1 at Chinon) and in Italy (at Latina). These together represent a net electric capacity of some 280 MW, but as they are only to be started up in the course of the year, total Community nuclear electricity production in 1962 is unlikely to be much above the 500 million kWh which can be supplied by the experimental power-stations already in operation.

The supply position regarding gas

143. The considerable structural changes in progress regarding the supply of gas may be summed up as follows.

(a) *Increase in share of natural gas.* Production of natural gas in the Community countries in 1961 showed an increase of about 15% over 1960, and a further increase of approximately 10% is expected for 1962, bringing the proportion of total gas production represented by natural gas to about 22%.

The proportion is highest in Italy, at 70%, where natural-gas deposits in the Po valley have been worked for some ten years; further deposits have also been discovered recently in the south of the country and in Sicily.

In France, the natural-gas workings at Lacq have now been brought into full production, and the share of this product in total gas production amounts already to almost 30%. This figure is calculated exclusive of the Saharan deposits now being opened up to supply European consumers.

Efforts in the Netherlands and Germany to turn natural-gas reserves to better account have been intensified, but it will be some years before the full effects are felt in the gas market.

(b) *Increase in share of refinery and liquefied gas.* This is going ahead in line with the vigorous expansion in refinery capacity. Production of refinery gas is estimated as showing an increase of about 11% for 1961 and 12% for 1962, and production of liquefied gas increases of approximately 9.5% and 8.5% respectively. The share of these two categories in total gas production is about 13%.

(c) *Decrease in share of gasworks gas.* This contracted in 1961 by 5·5%, and is expected to shrink further in 1962 by approximately 7%. However, since more and more gas from other sources is being purchased, actual deliveries by the gasworks will continue to increase. The gasworks are now operating increasingly as mere distributors. This is a consequence of the extension of the long-distance network and the formation of new companies, the network being supplied either with natural gas or with refinery and coke-oven gas. Which of the two types is mainly used depends on the structure of the gas sector in the country concerned: in Germany, for example, the long-distance network distributes principally coke-oven gas, and in France and Italy natural gas. The long-distance piping of refinery gas is expected to reach substantial proportions in certain regions.

144. As coke-oven and blast-furnace gas represent something like 60% of total gas resources, the aggregate volume of gas supplies depends in considerable measure on the level of activity in the iron and steel industry. 1961 was a rather slack year in that industry, and this condition is expected to persist in 1962, at any rate for the first six months or so. Reductions in the specific consumption of coke at the blast-furnaces caused a slight drop, of 0·5%, in the production of

blast-furnace gas in 1961, and a further and more substantial decrease, amounting to about 4%, is forecast for 1962. Production of coke-oven gas remained unchanged in 1961, and is expected to increase by about 2% in 1962. This movement conflicts both with the state of the coke market and with the forecast trend in pig-iron production, but is explained by the fact that the collieries expect to have to increase their pithead stocks and consider it preferable to stock coke rather than coal.

THE ENERGY BALANCE-SHEET

Balance in 1961 and 1962

145. In 1961, the energy position was balanced without either changes in stocks, short-time working or movements of prices occurring to any appreciable extent. Producers' and importers' stocks of hard coal increased by 500,000 metric tons, while their stocks of coke decreased by 1,100,000, the changes differing slightly from one country to another but in no case assuming major proportions.

TABLE 11

Changes in Producers' and Importers' Stocks of Hard Coal and Coke

('000,000 metric tons)

Country	1961		1962	
	Hard coal	Coke	Hard coal	Coke
Germany (Fed. Rep.)	+1·5	+1·2	+2·6	+1·5
Belgium	—1·1	+0·1	—1·1	+0·1
France	+0·4	—	—0·9	+0·7
Italy	—	—	—	—
Netherlands	—0·2	—	—0·1	+0·1
Community[1])	+0·5	—1·1	+0·4	+2·4

[1]) Rounded figures, which may differ slightly from the sum of the individual items

Coal production was only 1,700,000 metric tons (0·7%) less than the production potential calculated at the beginning of the year, as against 6 million tons less in 1960 and 12 million in 1959.

In 1962, the position will probably continue much the same, with total Community stocks increasing somewhat, no short time (in fact, it is likely, some difficulty in recruiting face workers), and stable prices. The expected change in stocks is the net result of two opposing trends, an increase of approximately 4,200,000 metric tons of hard coal and coke in Germany and a decrease of 1,300,000 in Belgium and France.

The maintenance of this balance beyond 1962 is, however, subject to considerable uncertainties. Indeed, it is open to question whether the absence of serious difficulties in 1961 and 1962 indicates a healthy trend in the medium trend or whether it does not itself mark certain dangerous trends.

Uncertainties as to the 1962 balance

The position can be regarded as balanced only to the extent that the basic assumptions on which it is calculated are in fact borne out by events. There are four main factors of uncertainty.

Cyclical conditions

146. The estimates on which the energy balance-sheet is based are considered by the market experts as liable to undergo fairly drastic changes in the coming months, and especially those arrived at on the assumption of a gradual upward trend in economic activity during the first six months and a marked revival thereafter. Should the revival not materialize, the actual rates of growth might be appreciably lower than those presupposed. From the other angle, the likelihood of a greater expansion than was forecast is slight. Allowing for the relatively independent movement of consumption in the

motor-fuels and household sectors, we may, for instance, estimate that the increase in total demand would amount to no more than 5-8 million metric tons hard coal equivalent instead of 18 million, if industrial production were to rise by only 3% instead of the 5.6% initially assumed. Such a contingency might send coal consumption down by a further 6-8 million metric tons hard-coal equivalent over and above the reduction of 5 million tons forecast in the balance-sheet. Sales of other energy products would drop by some 3-4 million metric tons hard-coal equivalent, this shrinkage affecting almost exclusively the petroleum products.

More specifically, there is the uncertainty as to developments in the iron and steel industry. Present forecasts suggest a rise in consumption but a slight falling-off in production, due to a rundown of stocks. Forecasts concerning this type of movement are always particularly fallible.

Water-level conditions

147. Aberrations in water-level conditions may cause thermal energy production to deviate upwards or downwards by as much as 12,000 million kWh. While overall consumption of primary energy is comparatively little affected, consumption of fuels, and more particularly of coal, may depart from the figures shown in the balance-sheet by anything up to 5 million metric tons hard-coal equivalent.

Weather conditions

148. The mean winter temperature appreciably affects energy consumption, especially in the household sector. The estimates in the balance-sheet, which are based on the assumption of an average temperature, may in the event prove 8-10 million metric tons out.

Conditions in the oil market

149. In the world oil market there is a margin of uncertainty with regard to import and export flows, owing to the possibility of measures by Governments, unforeseeable eventualities, decisions by enterprises and so forth: action to step up or down the flow of supplies to some markets may affect the amounts on offer in others, and consequently alter price trends.

It should further be noted, over and above these various factors, that the balance-sheet submitted indicates, with respect both to the actual figures recorded for 1961 and to the forecasts for 1962, a noticably higher elasticity of energy consumption in relation to industrial production than was observable in the four or five preceding years. This change is due to a number of reasons which are set forth in the Report outstanding among which are the very marked increase in consumption of motor fuels and the continuing rapid growth in electricity consumption in consequence of the mechanization drive in progress to compensate for the manpower shortage.

Briefly, the 1962 balance-sheet, like its predecessor, is indicative of a vulnerable market situation accentuated by the natural uncertainties as to temperature and water-level conditions. Most vulnerable of all is the coalmining industry, which after some years of vigorous general economic activity is now left with pithead stocks of hard coal totalling something like 25,500,000 metric tons, plus 6,400,000 metric tons of coke.

Is the existing balance adequate?

150. Although not marked by any major disturbances, the course of 1961 saw the emergence of certain considerable problems with regard to the actual nature of the approximate balance established in the energy market. These must also be borne in mind in studying the estimates for 1962.

151. In the *coalmining industry*, we have two apparent contradictions, firstly the existence side by side of a surplus of coal production and a shortage of manpower, and secondly the

fact that this surplus is concentrated in a country whose coalfields are generally reckoned the most economic in the Community.

The recruitment drive now in progress in most coalfields does in fact appear to be somewhat illogical: it might be thought that the aim should rather be to turn the state of the labour market to the best advantage for the purpose of tailoring supply to demand, by allowing full play to the drift away from the industry.

It is admittedly an understandable reaction on the part of enterprises for whom the present shortage of colliery labour concerns only one category of underground personnel, the face workers, the proportion of whom to total personnel employed below ground is tending to shrink.

Now in point of fact it is this category of workers that determines the technical saturation point of the production units,[1]) and hence appreciably affects the colliery's overall production costs.

The drive to recruit face workers, and the basic assumptions concerning supply which derive from it, therefore reflect the collieries' anxiety to maintain a utilization rate calculated to reduce production costs to a minimum, even if this should necessitate a certain accumulation of stocks. This tendency is particularly noticeable in Germany, where production potential is to remain practically the same as in 1961, whereas in France and Belgium it is to be fairly drastically pruned.

152. At all events, it is fair to wonder whether the enterprises' intended policy in 1962 is really in line with the longer-term orientation of the Community coalmining industry. Their approach amounts to a series of gambles, not even fully consistent with one another, whereas the industry's really fundamental problem is to arrive at that level of supply which can be maintained in the longer term in face of sales outlets which are proving impossible to stabilize — given present conditions of competition and price relations — even with

[1]) The term "technical saturation point" is to be taken as meaning the ratio of actual mean production per day to technically-possible production per day.

the rate of growth in industrial production running at 5 or 6%.

153. As regards the *oil industry*, the increasingly important position occupied by oil in the Community energy market, and the fact that it comes mainly from outside and, in particular, that Europe's sources of supply are pretty well concentrated in a handful of Middle Eastern States, make it essential that the most careful attention be given to questions of security of supply. A watch should be kept on movements of stocks, which do not appear to be increasing at the same rate as consumption.

It must also be emphasized how indequate is the information available concerning the prices actually charged for petroleum products, and how exceedingly valuable it would be if the arrangements in this connection could be improved, since it is of the highest importance to know whether these prices, which influence the division of the market as between coal and fuel oil, are in fact compatible with a soundly-established balance in the market.

154. In sum, adjustments in the energy field are at present being effected by means of an assortment of individual measures. Apart from certain regional difficulties still continuing, the social complications in the coal sector have become less acute, increasing numbers of miners having gone over to other industries which they felt offered them a more promising future. No substantial increases in oil production capacity are sheduled to take effect during 1962 as a result of the oil companies' various independently-planned capital schemes; in 1963 and 1964, on the other hand, a number of new plants and extensions will come into service, making it necessary for the oil industry further to expand its markets, with the incidental result of further stepping up competition *vis-à-vis* Community coal.

The question is therefore whether the fact that the present energy trend is at the moment free from obvious jolts and jars does not conceal lurking dangers in the medium term. The new General Objectives for coal will endeavour to give a reasoned answer.

CHAPTER THREE

THE COMMON MARKET FOR COAL AND STEEL

Section 1: The Trend in the Common Market for Coal and the Work of the High Authority

TREND IN THE COMMON MARKET FOR COAL

General Situation

155. As was noted in previous General Reports, political events unconnected with ordinary economic fluctuations, such as the Korean war and the Suez crisis, interfered with the operation of the coal market by accentuating the impact of the cyclical factors. The internal demand for Community coal, which had increased substantially, reaching its peak in 1956-57 at the time of the Suez episode, plunged again in 1958-59 under the combined efforts of a slackening in industrial expansion (resulting *inter alia* in a drop in the level of activity of the iron and steel industry) and of a growing competition from other forms of energy, mainly from oil. The situation was further worsened by consumers' tendency to run down the stocks of solid fuels which they had built up during the shortage.

In 1960, a particular burst of industrial expansion caused an upturn in the demand for coal. But this proved temperary only: in 1961, demand was again below the previous year's level, even though the rate of economic growth was a satisfactory one, with the industrial-production index showing a 6% rise and the iron and steel industry running slightly above the 1960 level.

As the volume of imports in 1961 differed by less than one million metric tons from that in 1960, it was possible by readjusting Community coal production to reduce total pithead and importers' stocks by some 1,500,000 tons; this approximately corresponds to the tonnage forfeited by short-time working during the year. This balance between potential availabilities and demand is comparable with that achieved in 1960, when the amount by which stocks were reduced was also about the same as the amount lost by short-time working, *viz.* 5,000,000 metric tons. Thus if short time had not been imposed in the collieries in 1960 and 1961 the pithead stocks would have remained at the very high level recorded at the beginning of 1960.

156. However, this balance of a sort can be said to exist only for the Community as a whole. The position varies from one member country to another, as may be seen from Table 12.

As these figures indicate, the position in Germany is different from that in the other Community producer countries: we have in 1961 an increase in stocks of hard coal and coke as against quite a sizeable decrease in 1960, the reason being that both imports and production continued at much the same level whereas demand dropped by 4 million metric tons from one year to the other. In Belgium thanks to the reconstruction drive and the quotas imposed on imports and on trade with other E.C.S.C. countries under Article 37 of the Treaty, producers' stocks were further reduced in 1961. In France, the situation also shows an improvement but perhaps a less considerable one than the table would suggest, since a substantial portion of the increase in stocks in 1960 was due to the exceptionally high general water level in that year, which resulted in reduced consumption of coal in the thermal power-stations.

TABLE 12

Movement of Producers' Stocks[1])

('000 metric tons)

Country	1960			1961		
	Hard coal	Coke	Total H.C.E.	Hard coal	Coke	Total H.C.E.
Germany (Fed. Rep.)	—4,618	—1 605	—6,737	+1,142	—502	+ 479
Belgium	— 931	— 21	— 959	—2,192	— 4	—2,197
France	+2,247	— 112	+2,099	—1,358	+157	—1,151
Italy	— 18	— 98	— 147	— 83	+ 49	— 18
Netherlands	— 209	— 80	— 315	— 104	+ 76	— 4
Community	—3,529	—1,916	—6,058	—2,596	—224	—2,892

[1]) Exclusive of importers' stocks.

157. Notwithstanding the reductions in the last two years, Community pithead stocks remain extremely high, since at the end of 1961 they still stood at 25,100,000 metric tons of hard coal and 6,400,000 of coke-oven coke, *i. e.* a total of 33,500,000 metric tons hard-coal equivalent, to which must be added some 5 million tons of hard coal stocked by importers.

The energy balance-sheets, and in particular the coal balance-sheet, for 1962 indicate a drop in coal consumption. The general economic hypotheses are less favourable than they were for 1961: there is a good deal of uncertainty as to the trend in business conditions in the second half of the year, present estimates suggesting that the position is liable to deteriorate and total producers' and importers' stocks to rise by a further 3,500,000 metric tons.

The trend in the individual countries will probably be much the same as in 1961, with practically the whole of the

increase concentrated in Germany, where production is to continue at the same level as before. This state of affairs would be the consequence of pressure of competition from other sources of energy and of a slight contraction in the activity of the iron and steel industry. Should any change occur in the outlook, it is likely to be for the worse rather than for the better, barring unforeseen developments, and apart, of course, from the possibility of unusual climatic conditions, such as cold spells tending to push up consumption of household and industrial coal, or low rainfall requiring a higher rate of activity on the part of the thermal power-stations.

158. It is clear from this brief description that, while in general the expression "crisis" no longer applies to a situation the short and medium-term aspects of which are mostly known and which is progressing only little by little, the fact remains that the coal situation is serious and may quite possibly become steadily worse. It is therfore essential that every effort should continue to be made to adjust production to demand and to render Community coal more competitive *vis-à-vis* the other sources of energy.

Trend in demand for coal

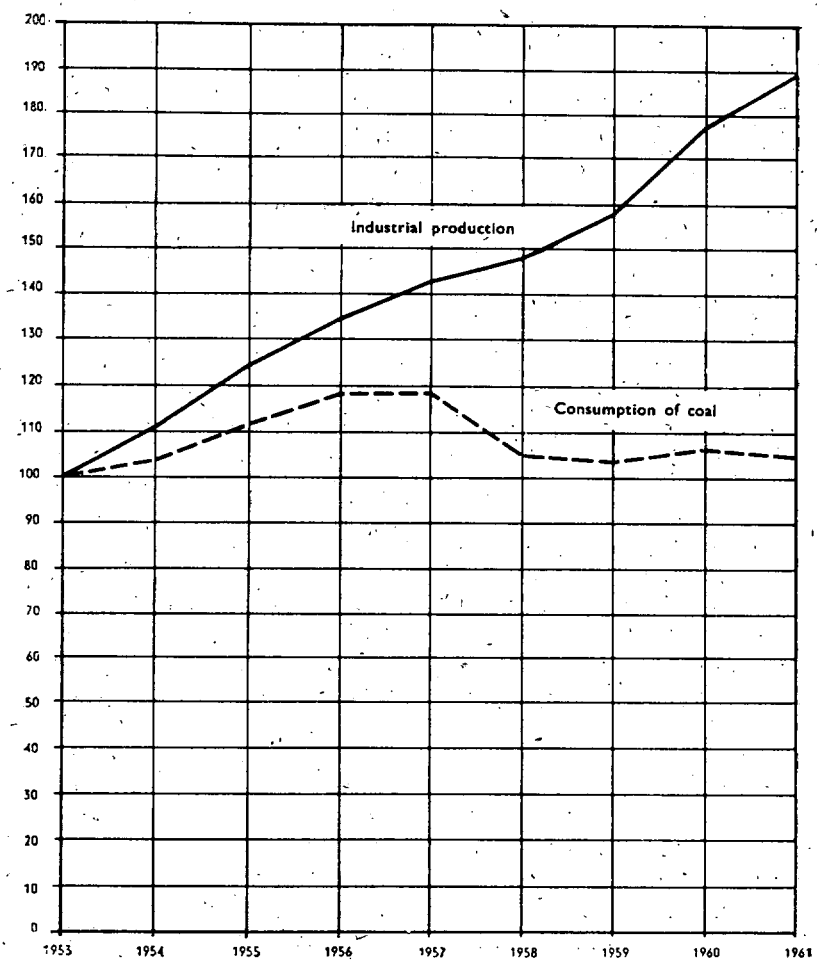
159. The disparity between the rate of growth of industrial production and coal consumption is becoming increasingly marked,[1]) the more so as the gross-energy-consumption index remains lower than the industrial-production index. The coefficient of elasticity is not constant, but at all events it is less than 1:1, owing to the technical progress on fuel efficiency.

The indices of gross consumption of energy and hard coal are based on real-consumption figures, in order to exclude movements of consumers' stocks.

[1]) See *Graph No. 2* following.

GRAPH No. 2

Comparative Indices of Industrial Production [1]) and Coal Consumption in the Community



[1]) Exclusive of building, foodstuffs, beverages and tobacco.

TABLE 13

Comparative Movement of Industrial-Production, Energy-Consumption and Hard-Coal Consumption Indices in the Community

(*1953 = 100*)

Year	Industrial production index	Gross energy-consumption index	Gross hard-coal consumption index
1953	100	100	100
1957	143	127	118
1959	157	128	103
1960	178	139	107
1961	(189)	145	105

Consumption of hard coal

160. Graph 2 shows the respective movement of the industrial-production and of the coal-consumption index. It is clear that to take 1957 as the reference year in assessing present rates of consumption is misleading, and that it is necessary to go back to 1953-54. Coal consumption in the Community touched a peak in 1957, but in spite of the falling-off in the past four years it is still 11 million metric tons higher than in 1953. At the same time, though the actual tonnage consumed shows little change, the pattern of consumption has altered in a number of respects. For the last eight years, the coalmining industry has had two really satisfactory and reliable outlets.

First, there has been the tremendous expansion in the iron and steel industry; steel production has risen by 84% and pig-iron production by 73%, and as a result the industry's total consumption of coke has been stepped up from 33 to 50 million metric tons, an increase of 52%. The difference between the increase in pig-iron production and in coke consumption is due to the reduction of the coke input rate at the blast-furnaces; this, however, only began to be effective in 1957, as may be seen from the Table following.

TABLE 14

Comparative Movement of Iron and Steel-Production and Coke-oven Coke Consumption Indices in the Community

('000,000 m. t.)

	1953	1957	1961	Change in % 1953-61
Community steel production	39·7	59·8	73·2	+84·4
Community pig-iron production	51·5	45·1	54·6	+73·3
Community consumption of coke-oven coke	33	45·8	50	+51·5
Community coke rate[1])	990	997	897	— 9·5

[1]) Blast-furnaces and sintering-plants. (in Kg. per metric ton of pig-iron).

Secondly, there have been the thermal power-stations, which have also increased in number and capacity in line with the growth in the demand for electricity, and have therefore likewise stepped up their consumption of coal, though not on such a scale. Coal consumption by the public

TABLE 15

Real Consumption of Hard Coal and Briquettes

	1953	1957	1959	1960	1961	
	('000 m.t.)	(1953 = 100)	(1953 = 100)	(1953 = 100)	('000 m.t.)	(1953 = 100)
Carbonization	80,763	125·4	115·2	121·7	97,850	121·2
Public power-stations	20,627	123·6	118·5	120·1	26,754	129·7
Gasworks	11,748	102·7	84·2	78·9	8,663	73·7
Railways	18,988	90·0	71·3	66·6	11,509	60·6
Iron and Steel industry	4,442	96·5	89·7	84·9	3,550	79·9
Other industries	35,963	107·7	95·6	96·1	32,531	90·5
Private households	34,454	127·6	95	100·1	34,722	100·8
Miscellaneous	5,137	95·5	74·3	69·9	3,280	63·9
Total	212,122	116·8	101·8	104·6	218,859	103·2

power-stations has risen over the eight years from 20,600,000 to 26,700,000 metric tons, notwithstanding a steady reduction in specific consumption; that by the pithead power-stations, 50% of whose production goes to the general electricity network, totalled 17,400,000 metric tons in 1961 as against 14 million in 1953.

Coal consumption in all other sectors is either stationary or declining.

Previous' years indices are given to enable the present general level of demand for coal in the Community to be seen in context; the table also shows the recent movement of consumption in the different consumer sectors.

161. In contrast to the proceding years, production in the *carbonization* sector ceased to rise, remaining approximately at the same level as in 1960. The level of activity in the iron and steel industry was only very slightly higher than the year before, and the rapid reduction in the coke rate at the blast-furnaces was therefore reflected to the full in the coke-consumption figures: for the Community as a whole this reduction (which had first begun in 1958) worked out at 3%, the rate falling from 924 kg. to 897. Large sums are being spent on ore-sintering plant: sinter capacity has increased by about 20% in a single year. In addition, the fact that fuel-oil injection and oxygen blowing are being introduced more and more into blast-furnace practice is also making for a reduction in the coke rate, though a less considerable one than the increased recourse to sintered ore.

162. The *thermal power-stations* are at present the only sector in which coal consumption is still expanding. The rate of capital expenditure on these is now higher than on the hydro-electric stations, since there are fewer and fewer economically-workable sites left for the construction of the latter. Coal consumption is also favoured by the fact that the demand for electricity is increasing all the time and at much steadier pace than demand in general. Nevertheless, where it is a question of efficient utilization of thermal generating plant as a whole, public and pithead, within the range hard-coal-fired/brown-coal-fired/oil-fired/gas-fired, the brunt

of fluctuations in the overall water-level conditions has to a great extent to be borne by hard coal, the incidence on hard coal consumption being anything up the several million metric tons. Hard-coal consumption in the thermal power-stations, including pithead stations, increased from 41,800,000 metric tons in 1960 to 44,200,000 in 1961.

163. The "other industries" sector (*i.e.* other than iron and steel) covers industries whose rates of specific coal consumption (chemical industry, cement works, etc.) vary widely, and whose rates of development are not necessarily in line with the movements of the general industrial-production index.

Coal consumption in these industries taken as a whole has been declining for some years, and in 1961 worked out below the 1960 level, despite a 6% growth in industrial production.

The year-to-year percentage changes in the industrial-production index and in hard-coal consumption in the "other industries" sector are shown in Table 16 below.

TABLE 16

Year-to-Year Percentage Changes in Industrial Production and in Hard-Coal Consumption in the "Other Industries" Sector

(Community)

	1954	1955	1956	1957	1958	1959	1960	1961
Industrial production	+11·8	+10·5	+9·5	+5·2	+3·1	+7	+13·1	+6·5
Hard-coal consumption in "other industries" sector	+ 7·4	+ 3·7	+0·8	—4·1	—9·1	—2·4	+ 1	—6·3

Over the year the difference between the two percentage changes becomes greater: from 5 points in 1954 it rises steadily to stand at about 12 points from 1958 onwards. This is due primarily to keener competition from petroleum products, once the supply difficulties resulting from the Suez crisis had been overcome.

164. In the railways and gasworks sectors radical structural changes are causing coal consumption to drop steadily and steeply. In the case of the *railways* it has fallen from 19 million metric tons in 1953 to 11,500,000 in 1961, a decrease of 40%. The process of modernizing the networks by electrification and dieselization gathered speed from 1957 onwards, and the average reduction in consumption for the Community as a whole is now in the region of 10% per annum.

Progress on the rationalization of the *gasworks* varies from one country to another, depending on the trend in the production of the different types of gas and on the amounts becoming available from fresh sources, including in particular natural gas. 80% of coal consumption by gasworks is now accounted for by Germany. Community consumption has shrunk from 11,700,000 metric tons in 1953 to 8,700,000 in 1961, a 28% reduction the whole of which has taken place since 1957; the drop from 1960 to 1961 was 6·5%.

165. Coal consumption in the *household* sector is not accurately known. No figures are available for consumers' stocks, nor, therefore, for real consumption, while in addition a succession of particularly mild winters makes it difficult to establish any consistent trend in consumption, even in the medium term. Coal does, however, seem for some little time to have been standing up better to competition: in particular, there has been an upturn in sales of coal-burning stoves and similar room-heating appliances while coal continues to be used to quite an important extent in the big block-heating systems. This improved showing is more apparent for hard coal than for coke-oven coke, Deliveries of coal to the household sector in 1961 totalled 34,700,000 metric tons, approximately the same as in 1953 and in 1960.

Coal deliveries by countries

166. The foregoing details concern the real consumption in the main consumer sectors. To give a picture of the general trend regarding sales outlets, we add the figures for disposals in each country of hard coal and briquettes to all consumer sectors together, including collieries' own consumption.

TABLE 17

Deliveries of Hard Coal and Briquettes, by Countries
(Including collieries' own consumption)

('000 metric tons)

Country	1953	1957	1960	1961	Change in %	
					1953-61	1960-61
Germany (Fed. Rep.)	128,117	151,997	136,318	132,490	+ 3·4	—2·8
Belgium	26,458	28,650	25,121	24,481	— 7·5	—2·5
France	59,726	73,767	62,533	62,100	+ 4	—0·7
Italy	10,140	12,742	10,542	11,060	+ 9·1	+4·9
Luxembourg	286	324	254	229	—19·9	—9·8
Netherlands	17,588	19,176	17,170	17,035	— 3·1	+0·8
Community	242,315	286,657	251,939	247,395	+ 2·1	—1·8

Consumption of coke-oven coke

167. Consumption of coke-oven coke in 1961 amounted to 68,400,000 metric tons, 2% less than in 1960, but still, in consequence of the expansion in the iron and steel industry,

TABLE 18

Consumption of Coke-Oven Coke, by Consumers Sectors
(Community)

('000 metric tons)

	1953[1])	1957	1960	1961	Change in %	
					1953-61	1960-61
Iron and steel industry	32,866	45,843	50,777	49,900	+51·8	—1·7
Other industries	7,394	8,976	8,181	8,450	+14·3	—3·3
Households	7,838	11,198	8,968	8,350	+ 6·5	—6·9
Miscellaneous	3,058	3,021	1,852	1,670	—45·4	—9·8
Total	51,156	69,038	69,778	68,370	+33·7	—1

[1]) Deliveries.

34% more than in 1953. The iron and steel industry now takes almost 70% of the total production of coke-oven coke; this does, of course, unfortunately leave the coke market largely defenceless in face of any falling-off in the industry's level of activity.

In the "other industries" sector, coke consumption has remained during the last few years a little above 8 million metric tons, which is slightly higher than the 1953 figure. As in the case of coal, the sector is made up of a large number of widely-differing industries whose consumption trends vary considerably.

168. The Table following compares deliveries of coke-oven coke to all consumer sectors (coking plants' own consumption included) for the years 1953, 1957, 1960 and 1961, broken down by member countries.

TABLE 19

Deliveries of Coke-Oven Coke, by countries
(Including coking-plants' own consumption)

('000 metric tons)

Country	1953	1957	1960	1961	Change in %	
					1953-61	1960-61
Germany (Fed. Rep.)	28,399	38,609	35,890	34,400	+21·1	—4·2
Belgium	5,051	6,292	6,825	6,630	+31·3	—2·9
France	12,672	17,766	18,712	19,000	+49·9	+1·5
Italy	2,147	3,595	3,892	3,860	+79·8	—0·8
Luxembourg	3,098	3,867	4,140	4,080	+31·7	—1·4
Netherlands	2,190	2,717	2,704	2,500	+14·2	—7·5
Community	53,557	72,849	72,160	70,470	+31·6	—0·9

Trade among Community countries

169. The volume of trade in hard coal, hard-coal briquettes and coke-oven coke among the Community countries remained much the same as in 1960.

TABLE 20

Trade in Hard Coal and Hard-Coal Briquettes within the Community

('000 metric tons)

Country	1960	1961	Change in % 1960-61
Deliveries			
Germany (Fed. Rep.)	15,250	14,540	— 4·7
Belgium	2,077	2,330	+ 1·2
France	986	970	— 1·6
Netherlands	2,498	2,765	+10·7
Total	20,811	20,605	— 1
Purchase			
Germany (Fed. Rep.)	1,332	1,355	+ 1·7
Belgium	3,086	3,370	+ 9·2
France	8,629	8,355	— 3·2
Italy	3,766	3,400	— 9·7
Luxembourg	249	210	—15·7
Netherlands	3,750	3,915	+ 4·4
Total	20,811	20,605	— 1

Trade in Coke-Oven Coke within the Community

('000 metric tons)

Country	1960	1961	Change in % 1960-61
Deliveries			
Germany (Fed. Rep.)	7,791	78,55	+ 0·8
Belgium	731	695	— 4·9
France	85	65	—23·5
Italy	—	2	—
Netherlands	1,708	1,965	+15
Total	10,315	10,582	+ 2·6
Purchase			
Germany (Fed. Rep.)	386	260	—32·6
Belgium	245	270	+10·2
France	5,098	5,517	+ 8·2
Italy	163	165	+ 1·2
Luxembourg	4,087	4,080	— 0·2
Netherlands	337	290	—13·9
Total	10,315	10,582	+ 2·6

The German industry's deliveries of *hard coal* to Italy went down by 550,000 metric tons, to 2,770,000. Both sales to and purchases from Belgium rose following the increases in the quotas laid down by the High Authority. The arrangements concerning French procurements of Saar coal were amended as from July 1: total procurements of coal and coke must now not exceed 8% of French coal production, though this is an overall quota within which the actual tonnages of coal and coke respectively may be adjusted according to circumstances.

The volume of trade in *coke-oven coke* shows a slight increase, accounted for by a stepping-up of Netherlands deliveries, which rose to nearly 2 million metric tons, about 300,000 tons more than in 1960.

Imports from third countries

170. Imports from third countries in 1961 totalled 18,700,000 metric tons, 900,000 tons *more* than in 1960. Most of the extra tonnages came from Britain (775,000 metric tons more, an increase of 45%) and from Soviet Union (575,000 tons more, an increase of 42%). Imports from the United States were down by 526,000 metric tons, or 4%, while imports of Polish coal continued at the same rate as before.

All exporter countries' sales to the Community were lower than in the peak year 1957, with the exception of the Soviet Union's, which were almost twice as high as they had then been.

Imports into Germany under the two-year quota for 1961 and 1962 were in 1961 not quite up to the ceiling actually fixed for that year, the importers taking about 500,000 metric tons less than the specified proportion of American coal allowed them. Belgian imports, which are also governed by a quota, remained below the level authorized, while in the Netherlands too imports were slightly lower than in 1960. In the other countries they increased, in Italy by 600,000 metric tons to a total of 6,700,000, and in France by 500,000 to 2,400,000.

TABLE 21

Hard-Coal Imports from Third Countries

('000 metric tons)

Importer country	1960	1961
Germany (Fed. Rep.)	5,461	5,600
Belgium	934	830
France	1,882	2,360
Italy	6,166	6,750
Netherlands	3,304	3,130
Community	17,747	18,670

171. The flow from the *United States* accounts for two-thirds of total Community coal imports. In 1961, American coal maintained its position in the markets of all the member countries except the Netherlands: in the latter country its sales dropped from 2,200,000 metric tons in 1960 to 1,700,000.

TABLE 22

Hard-Coal Imports from the United States

('000 metric tons)

Importer country	1960	1961
Germany (Fed. Rep.)	4,369	4,450
Belgium	800	670
France	578	650
Italy	4,428	4,430
Netherlands	2,211	1,660
Community	12,386	11,860

172. Imports from the *United Kingdom*, on the other hand, rose sharply, particularly those by the Netherlands, France and Germany. In Germany's case this was due to the increase in the import quota. French imports of British coal (mainly anthracite) went up by 200,000 metric tons. The Netherlands,

which takes 50% of total Community procurements from Britain, imported from that source 400,000 metric tons more than in 1960, thus partly making up for the decrease in its purchases of American coal.

TABLE 23

Hard-Coal Imports from the United Kingdom

('000 metric tons)

Importer country	1960	1961
Germany (Fed. Rep.)	395	540
Belgium	132	135
France	175	415
Italy	124	125
Netherlands	909	1 295
Community	1,735	2,510

173. Community imports from *Poland* in 1961 totalled 1,700,000 metric tons, the same figure as in 1960. The proportions accounted for by the individual countries are, however, somewhat different, Germany and France taking rather smaller tonnages and Italy a rather larger one.

TABLE 24

Hard-Coal Imports from Poland

('000 metric tons)

Importer country	1960	1961
Germany (Fed. Rep.)	506	400
Belgium	—	—
France	265	225
Italy	812	945
Netherlands	120	130
Community	1,703	1,700

174. 70% of the increase in imports from the *Soviet Union* was concentrated in Italy. Incomings of Russian coal rose from 500,000 million metric tons in 1960 to 900,000 in 1961, most of the increase being constituted by additional purchases of coking coal, which ultimately accounted for some 60% of Italian coal imports from the Soviet Union. The traditional flow of Russian graded anthracite to the Community continued much as before, with the exception of an increase of 146,000 metric tons in shipments to France.

TABLE 25

Hard-Coal Imports from the Soviet Union

('000 metric tons)

Importer country	1960	1961
Germany (Fed. Rep.)	38	45
Belgium	2	20
France	784	930
Italy	496	890
Netherlands	35	25
Community	1,355	1,910

Exports to third countries

175. Exports of *hard coal* totalled 3,600,000 metric tons, roughly the same as in 1960. The German producers' exports fell by 250,000 metric tons; the Belgians', on the other hand, doubled.

Exports of *coke-oven coke* amounted to 3,700,000 metric tons, 300,000 tons less than in the previous year. The fall in export sales affected producers in all the member countries except France and Italy.

Community experts of hard coal and coke-oven coke, which had passed their peak in 1955, were in 1961 back below the level of 1954, when the European coal market was in balance and changes in consumers' stocks were negligible.

If we except the United Kingdom, whose purchases were suspended in January 1959, an examination of the trend in coal sales to those European third countries which are the biggest consumers of Community coal shows that the gradual shrinkage in E.C.S.C. exports is not proportionate to the decrease in coal consumption in these countries.

In point of fact the balance of their supply arrangements is tilting in favour of producers in the Eastern European countries.

176. Imports of coal and coke from all sources by the four Scandinavian countries and Austria and Switzerland (the six of whom together take 80% of the E.C.S.C. producers' total exports) now stand at 20,500,000 metric tons a year, as against 22 million in 1954. During this period E.C.S.C.'s share has contracted from 9 million to 5,500,000 metric tons, and Britain's from 6 million to 3 million, while the share of the Eastern European countries has increased from 4,500,000 to 9 million.

Eastern European coal has strengthened its position in the Finnish and, particularly, the Danish markets, in which it now accounts for 90% and 45% respectively of total coal imports, while deliveries to Austria have doubled and

TABLE 26

Exports of Hard-Coal and Coke-Oven Coke to Third Countries

('000 metric tons, added ton for ton)

Importer country	1954	1960	1961
Denmark	1,598	984	884
Sweden	2,411	1,417	1,191
Norway	151	129	123
Finland	288	96	129
Austria	2,427	1,515	1,431
Switzerland	2,158	1,896	1,734
Others	4,371[1])	1,619	1,789
Total	13,404	7,656	7,281

[1]) Of which: United Kingdom, 2,373.

represent 50% of coal imports; in Switzerland, on the other hand, the share of Eastern European solid fuels remains extremely small, only about 5%. Over and above the increasing use of Eastern European in preference to Community coal, there has been a drop in sales of coke-oven coke, particularly to Sweden.

The Table above gives the trend since 1954 in exports to the main customer countries.

Production of hard coal

177. The *hard-coal* production of the Community decreased further in 1961: the figure was 230 million metric tons, 1·7% below that for 1960, whereas 1960 production had been only 0·4% less than 1959. The contraction took place in the French and Belgian industries only.

TABLE 27

Hard-Coal Production, by Countries

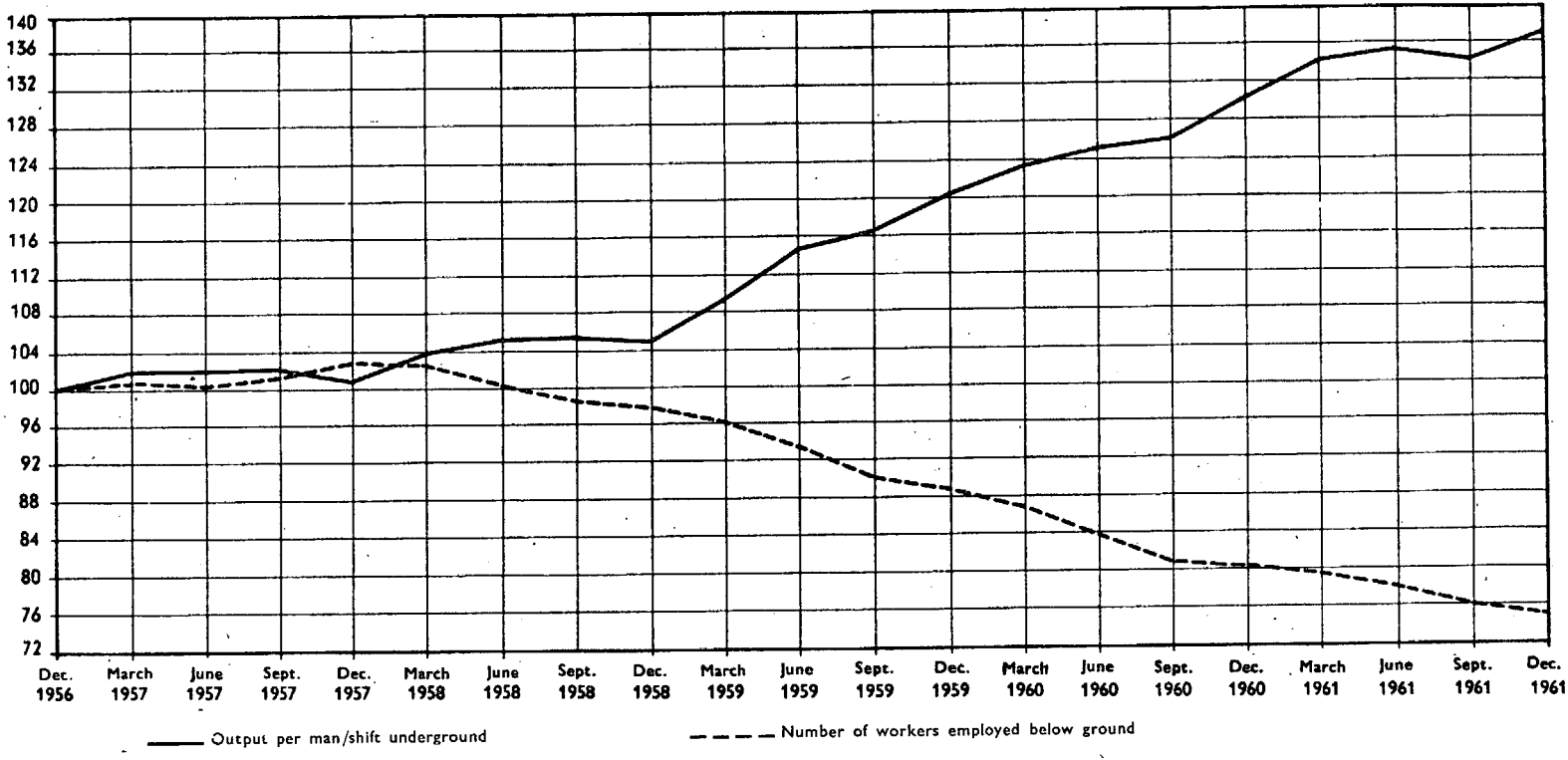
('000 metric tons)

Country	1953	1956	1959	1960	1961	Change 1960-61	
						m.t.	%
Germany (Fed. Rep.)	140,889	151,497	141,833	142,287	142,741	+ 454	+0·3
Belgium	30,060	29,555	22,757	22,465	21,516	— 949	—4·2
France	52,588	55,129	57,606	55,961	52,356	—3,605	—6·4
Italy	1,126	1,076	735	736	741	+ 5	+0·7
Netherlands	12,297	11,836	11,978	12,498	12,618	+ 120	+1·0
Community	236,961	249,092	234,908	233,947	229,972	—3,975	—1·7

178. In studying Table 27, it is necessary to bear in mind the trend in *short-time working* in the Community coalmining industry over the previous two years. In 1959, production forfeited by short-time working had amounted to 12,300,000 metric tons; in 1960 this figure had been halved,

GRAPH No. 3

Comparative Indices of Output per Man/Shift Underground and Number of Workers Employed Below Ground in the Community Coalmines



to 5,800,000; in 1961 it worked out at only 1,200,000. Such short time as did prove necessary in 1961 was mainly concentrated in the Belgian Campine and the French Centre/Midi, though one day was also not worked in Lorraine and a handful in the Ruhr. No short time was worked in Belgium after October, owing partly to the introduction of the five-day week and partly to the improvement in the situation.

While actual production showed little change from one year to the other, the volume of production theoretically possible without short time, was reduced fairly substantially, the possible production of the Community as a whole falling from 239,700,000 metric tons in 1960 to 231,100,000 in 1961. The incidence of the reduction varied from one coalfield to another, as may be seen by reference to the Tables annexed.[1])

The downward trend in numbers employed and the upward trend in output per man/shift which have been simultaneously observable since 1958 continued in 1961.

179. The number of *underground workers* employed in the Community coalmining industry, after temporarily decreasing in 1954 and 1955, had subsequently risen again and reached its maximum in the end of 1957, thus reflecting a sometime

TABLE 28

Numbers of Underground Workers on the Books

('000 men)

Country	End 1953	End 1957	End 1960	End 1961	Reduction	
					1961	1960
Germany (Fed. Rep.) and Saar	375·0	381·7	297·0	278·8	18·2	29·0
Belgium	115·3	109·4	71·6	60·9	10·7	12·8
France	154·5	143·4	125·1	119·4	5·7	11·3
Italy	7·3	4·6	2·5	2·3	0·2	0·3
Netherlands	30·0	31·5	28·2	26·6	1·6	1·3
Community	682·1	670·6	524·4	488·0	36·4	54·7

[1]) See *Statistical Annex*, Tables Nos. 2 and 3.

quite appreciable timelag discrepancy between the results of recruitment policy and market requirements. The drift of underground personnel away from the industry in 1961 was less marked than the year before, total wastage in the Community amounting to 36,400 as against 54,700 in 1960. The largest percentage decreases were in Belgium (14·9%), Germany (6%) and France (4·6%). The unequal distribution of wastage, not only as between one colliery and another but also as between one type of job and another, is resulting in serious recruitment difficulties.

180. Underground output per man/shift continues to rise, the increase in 1961 over 1960 being 7·4% for the Community as a whole. In the Ruhr, o.m.s. reached 2,246 kg., a 6·9% improvement on the previous year. In Dutch Limburg, it increased by 266 kg., or 15%: the steady and substantial increase in output in the Netherlands industry is the result of a determined mechanization and automation drive, combined with the effects of the new five-day week. Belgian o.m.s. rose by 137 kg. to 1,714, an increase of 8%. In France, the improvement was slighter, from 1,748 kg. to 1,878.

Pithead stocks of hard coal

181. Following a rundown in 1960, pithead stocks of hard coal at the beginning of 1961 totalled 27,700,000 metric tons; they rose to 29,500,000 in June, but thereafter fell again and at the end of the year stood at 25,100,000. The position varies, however, from country to country. The Belgian industry lifted 2,200,000 metric tons from stock, and the French collieries 1,400,000. In Germany, stocks reached a peak in June, then dropped again for a time, but by the end of the year were 1,100,000 metric tons higher than at the beginning.

Production of coke-oven coke

182. Community production of coke-oven coke in 1961 was 73,400,000 metric tons, about the same as in 1960 and

3,300,000 tons more than in 1959. In Belgium, the year's production would have been the same as the previous year's had it not been for the strikes in January 1961. Italy was the only member country in which coke production continued to expand during 1961; the rate of growth in this sector since 1953 has been greater there than in any other Community country. The Italian coking-plants obtain much of their coal from the United States, and a special collier fleet has been built to keep them supplied.

The general level of coke production was maintained in 1961 by lifting less from stocks. Stocks at the coking-plants had gone down by nearly 2 million metric tons in 1960, but in 1961, after a further rundown during the first part of the year, they began to rise again in July and finally returned to much the same level as at the beginning of the year. It is not possible to adjust production to the shrinkage in coke requirements, since the demand for gas has to be met. As a result, it is likely that 1962 will see a fresh accumulation of stocks of coke-oven coke.

TABLE 29

Production of Coke-Oven Coke

('000 metric tons)

Country	1953	1957	1960	1961	Change 1953-61	Change 1960-61	
					%	m.t.	%
Germany (Fed. Rep.)	41,366	49,517	44,541	44,294	+ 7·1	—247	—0·6
Belgium	5,945	7,156	7,539	7,252	+22	—287	—3·8
France	8,631	12,564	13,605	13,464	+56	—141	—1
Italy	2,327	3,687	3,725	3,876	+66·6	+151	+4·1
Netherlands	3,245	4,243	4,518	4,555	+40·4	+ 37	+0·8
Community	61,514	77,168	73,929	73,442	+19·4	+487	—0·7

Price trends

Coal prices in the Community

183. In last year's General Report[1]) an account was given of the various factors which had affected price trends during 1960, namely rising prices and wages, which had impeded efforts to reduce production costs, and the pressure of competition from sources of energy other than coal, which was obliging producers to take drastic defensive action.

In general, these factors continued to operate much as before: price changes were on a small scale, and affected only certain grades, which varied from one coalfield to another.

184. The only notable change in the relative price levels of the different coalfields took place as a result of an event unconnected with the industry as such, namely the 4·75% *revaluation* of the Deutsche Mark and Dutch guilder on March 4 and 5, 1961, which automatically sent up the price of coal supplied from the two countries concerned and lowered that of tonnages entering them from elsewhere.

The German and Netherlands industries reacted slightly differently, in accordance with the difference in their respective positions in relation to their home markets and their Community and third-country markets. The Netherlands producers sell 36-38% of their coal in markets where the revaluation caused it to become 5% dearer, the German producers only 18-20%: concequently the operation was more prejudicial to Netherlands than to German sales. These considerations cannot be said to have played a major role, but their effect was reflected nevertheless in reductions in Netherlands price schedules, though these were not so large as to offset the revaluation altogether, and were differentiated according to the types and grades of coal concerned. At the same time, price increases were introduced for some grades in particular demand. The German producers, on the other hand, with a few exceptions, continued to charge the same prices as before.

1) See *Ninth General Report,* Nos. 221 ff.

185. A few other price changes may be noted.

The French producers put up their prices for certain products. In particular, price increases were introduced in the Nord/Pas-de-Calais coalfield for sized coal of 6mm. and over and for some high-volatile and low-volatile grades, while on the other hand larger summer rebates were allowed. Price increases for Lorraine coal were in practice largely offset by improved preparation.

In Belgium, whose prices were still appreciably higher than their Netherlands or German counterparts, an all-round cut in the prices of washed and untreated fines on January 1, 1961, was followed on April 1 by other reductions for various grades over 30mm. in semi-bituminous and smokeless steam coal. The collieries not belonging to the Comptoir Belge des Charbons charged approximately the same prices as the Comptoir's.

On December 1, 1961, increases of about 15% were made in the prices of Ruhr anthracite nuts Nos. 3 and 4, bringing these more or less level with other Community producers' quotations for comparable grades.

The Table annexed[1]) shows the movement of prices since 1953.

Alignments with E.C.S.C. schedules

186. Community producers availed themselves of the price-alignment arrangements to about the same extent as in 1960. The aggregate quantity sold by alignment with E.C.S.C. schedules in 1961 amounted to approximately 8 million metric tons, slightly over 4% of total sales. The Community average is thus well below the 20% fixed by the rules in force as the maximum proportion of each enterprise's production to be sold by alignment with other E.C.S.C. prices (Decision No. 3/58).[2]) However, while the Netherlands, French and German collieries continued to show little interest in the possibility, fairly extensive use made was of it by Belgian producers.

[1]) See *Statistical Annex*, Table No. 14.

[2]) See *Journal Officiel de la C.E.C.A.*, March 29, 1958 (seventh year, No. 11).

Although the alignment percentage for Germany, as for the other countries, is calculated in respect of the industry's total sales, in the case of Ruhr production alignment was in fact practised only by the selling agencies. The proportion would therefore work out rather higher if it were calculated in respect of the tonnage marketed by the agencies, especially as regards alignments with the prices of third-country coal.

The extent to which Community producers have had recourse to price alignment may be summed up as follows.

In the Netherlands, the schedule prices were already low enough to be competitive with those of other Community producers not only within the Netherlands but also in Belgium and in frontier regions of France and Germany. The Netherlands collieries therefore sold only a tiny fraction of their production at E.C.S.C.-aligned prices, the tonnages in question going exclusively to non-frontier areas in France and Germany.

The German producers' E.C.S.C. alignments were for the most part effected within the country, and were mainly confined to Saar deliveries to southern Germany.

The French producers also sold only very small quantities at E.C.S.C.-aligned prices, such alignments as were made were mostly with internal French prices, more particularly by the Centre/Midi collieries and the coastal briquetting-plants with the prices of the Nord/Pas-de-Calais.

Belgian alignments concerned mostly sales within Belgium, and were with the shedule prices of the Ruhr. Some quotations for deliveries to France were aligned with Nord/Pas-de-Calais prices.

The revaluation of the German and Netherlands currencies gave the producers in the other countries and particularly in Belgium, the benefit of a smaller financial loss to themselves in aligning their prices with those of their German and Netherlands competitors.

Alignments with third country quotations

187. The aggregate amount sold by alignment with third-country quotations was about the same as that sold by align-

ment with Community prices, namely 8 million metric tons, or a further 4% of E.C.S.C. producers' total sales. Here too, however, the proportion varies considerably as between one country and another, working out for the Netherlands and Germany at approximately 4% of all sales, and for Belgium at 15%. The Netherlands producers aligned their prices in respect only of small tonnages sold in the home market and to Italy, and the German producers in respect of deliveries to German coastal areas, Italy and the Netherlands. Belgian alignments concerned mainly sales within Belgium, though some were also effected for smaller consignments to the Netherlands and Italy.

The amounts of the rebates allowed varied widely according to the areas concerned and the country of origin, being in general small in coastal regions close to the pits, and fairly substantial in those farther away.

188. The total Community tonnage sold by alignment either with E.C.S.C. or with third-country prices remained much the same as in 1960.

It should be noted that alignments effected in areas of high industrial consumption where coal from a range of Community and non-Community countries is in the market to serve to maintain quite keen competition among producers, quite apart from the competition from fuel oil in all areas. The resulting situation obliges producers to remain constantly on the alert in the matter of pricing.

Prices of third-countries coal

189. American coal prices f.o.b. Hampton Roads remained in 1961 at about the same level as in previous years, between $9.50 and $11.00 per ton for coking coals, according to grade, and $8.50 for industrial bituminous slacks.

On the other hand, the ruling single-voyage freight-rates Hampton Roads-Rotterdam rose from $3.50 at the beginning of the year to $4.10 and $4.20 by the middle, subsequently hardening even further to above $4.20; at the

end of the year, however they eased again to their earlier level of $3.50.[1])

Prices c.i.f. Rotterdam thus during 1961 reached a maximum of $13.75-$15.25 for coking coal and $12.75-$13.25 for bituminous slacks. Eastbound freight-rates to Italian ports rose less steeply, touching a level of about $4.50; the difference *vis-à-vis* Rotterdam was thus reduced to 30 cents.[2])

Delivered prices for British and Polish coal remained much the same as American; the British quotations, however, were slightly above the American level, while the Polish were frequently somewhat below.

THE ADJUSTMENT OF THE COALMINING INDUSTRY

Reorganization and rationalization

190. Having regard to the vital need to adjust itself to the changed situation in the energy market, the Community coalmining industry went ahead during 1961 with the process of reorganization begun in 1957.

This is involving both "negative" and "positive" rationalization — that is, on the one hand the closure of pits and workings which have become uneconomic, and on the other concentrations and link-ups, the modernization of coal-winning methods and the rationalization of surface installations.

These measures are essential if coal is to remain competitive *vis-à-vis* the other sources of energy: their object is to enable coal to be mined and marketed as economically and advantageously as possible, and at the same time to overcome the shortage of personnel by means of modernization and mechanization.

The High Authority is continuing to further the reorganization drive, both by its activities in connection with

[1]) $3.50 = 25s. sterling; $4.10 = 29s.; $4.20 = 30s.

[2]) For previous years, see *Statistical Annex*, Table No. 17.

the co-ordination of energy policy by pursuing its work for the readaptation of miners and by launching a policy of industrial redevelopment in the areas hardest hit by pit closures.[1])

Federal Republic of Germany

191. Although there is no definite reconstruction programme, and no actual production target appears to have been fixed for the years immediately ahead, the reorganization projects indicated in last year's Report have been duly carried out, and others are in hand.

In 1961, five pits with an aggregate 1957 production of 2,027,000 metric tons were closed, several partial closures were effected, and two pits were linked to form one.

This makes a total of 15 pits closed since 1958, representing a 1957 production of 5,259,000 metric tons, and a total of 16 link-ups.

Germany (Fed. Rep.)	Pits ceasing production			Pits linked with others		
Year	Ruhr	Lower Saxony	Saar	Ruhr	Lower Saxony	Saar
1958	1	1	—	4	1	2
1959	2	—	2	2	—	1
1960	4	—	—	3	—	1
1961	4	1	—	2	—	—
Total	11	2	2	11	1	4

192. Pits in production now number 138, of which 115 are in the Ruhr, 8 in the Aachen area, 3 in Lower Saxony and 12 in the Saar.

Underground output per man/shift rose considerably in consequence of these various closures, rationalizations and concentrations, from 1,846 kg. in 1959 to 2,057 in 1960 and 2,200 in May 1961. As the net result of total and partial

[1]) See Nos. 518 ff. below.

closures, absenteeism, the drop in the number of underground workers employed and the shorter working week on the one hand, and of the sharp rise in productivity on the other, production in 1961 totalled 142,700,000 metric tons, as against 149,600,000 in 1957.

Several collieries have announced their intention of effecting further total closures in the next year or two. The pits scheduled for closure are five in number, and represent a 1957 production of 5,169,000 metric tons. The aggregate 1957 production capacity which will have been forfeited by total closures by the end of 1963 may therefore now be estimated at 11,800,000 metric tons, or 7·5% of the 1957 total.

Belgium

193. A schedule of closures was drawn up at the end of 1959 to accelerate the reorganization drive, providing for a cutback of 9,500,000 metric tons in production capacity between 1959 and 1963. The phasing of the closure operations was fixed by the High Authority's Decision No. 46/59, of December 23, 1959, in accordance with the rate of reduction planned.[1])

The closures effected by December 31, 1961, may be tabulated as follows.

Year	No. of pits	1957 production ('000 metric tons)
1959	19	2,522
1960	15	2,509
1961	11	1,967
Total	45	6,998

[1]) See No. 202 below.

This leaves only another 2,500,000 metric tons' capacity to be scrapped before the scheduled total of 9,500,000 is reached. It has not yet been decided which of the pits selected for elimination before the end of next year are to close in 1962 and which in 1963.

194. All the pits closed up to December 31, 1961, were in the Southern coalfield. Of the 120 which were in operation at the beginning of 1958 (113 in the South and 7 in the Campine), 57 have now been closed as part of the process of reorganization.

Broken down by coalfields, the changes since the end of 1957 in the number of pits in production have been as follows.

Coalfield	Pits in production at December 31, 1957	Pits in production at December 31, 1961
Campine	7	7
Borinage	20	6
Centre	15	3
Charleroi	52	29
Liège	26	18
Total	120	63

The coalfields with the highest incidence of closures have been the Centre and the Borinage: capacity forfeited between the end of 1957 and the end of 1961 totalled 2,600,000 metric tons (74% of 1957 production) in the Centre and 2,200,000 (55% of 1957 production) in the Borinage. Closures in the Charleroi coalfield during the same period represented 2,300,000 metric tons, or 34% of 1957 production, and in the Liège area 1,200,000 tons, or 27%.

Belgian production in 1961 totalled 22,100,000 metric tons, as against 29,100,000 in 1957.

195. As a result of the closure of those pits which had proved impossible to integrate into the Common Market for coal, the average production of the Southern pits remaining in operation at the end of the year concerned was increased from 165,000 metric tons in 1957 to 182,000 in 1960.

Underground output also increased substantially in the South, the overall underground average exclusive of managerial and suppervisory personnel rising from 1,125 kg. in 1957 to 1,462 in 1960, and 1,635 in November 1961.

It should be noted, in connection with the reorganization of the Belgian coalmining industry, that an Act of Parliament was passed on November 16, 1961, instituting a Board to be known as the Directoire de l'Industrie Charbonnière.[1]) The duties of the Directoire with regard to the reorganization drive include *(a)* ordering the closure of pits whose production is so poor as to constitute a standing obstacle to a balanced market or whose costs are higher than is compatible with a satisfactory price level, and *(b)* ordering any leasing, assignment or amalgamation of concessions which may be deemed necessary to improve output and costs, specifying the procedure to be followed in these operations.

France

196. Operations continued in 1961 under the reorganization scheme to bring production into line with the Government's target for 1965. The targets for the individual coalfields (exclusive of Provence) are as follows.

Coalfield	Production in 1965 ('000,000 metric tons)	Change in relation to 1959 production (%)
Nord/Pas-de-Calais	*28*	*— 4·3*
Lorraine	*13·50*	*—10·8*
Centre-Midi	*10·15*	*—21·7*
of which: Aquitaine	(1·55)	—27·2
Loire	(3·48)	—25·3
Cévennes	(2·22)	—24
Auvergne	(0·60)	—47·8
Blanzy	(2·50)	— 8·1
Dauphiné	(0·80)	+11·1
Total	*51·65*	

[1]) See No. 283 below.

The French Government's stated aim in setting these targets is to close the most unproductive pits and to make the prices of French coal more competitive.

One pit was closed in 1961 in the Lorraine coalfield, and a number in the Aquitaine and Cévennes areas of the Centre/Midi. The concentration drive which has been going on for some years in the Nord/Pas-de-Calais continued; a link-up of pits was also effected in Lorraine.

In consequence of these various operations, the number of nationalized (Charbonnages de France) pits in production was reduced from 95 at the end of 1960 to 86 at the end of 1961.

Coalfield	Pits in production	
	at December 31, 1960	at December 31, 1961
Nord/Pas-de-Calais	56	51
Lorraine	11	8
Centre Midi	28	27
Total	95	86

The small non-nationalized mines also closed during the year.

197. Underground o.m.s. for all pits rose steadily from 1,798 kg. in 1960 to 1,891 in December 1961, the most marked increase being in the Centre/Midi, from 1,789 to 1,964.

Under the Government plan, a number of pits in Lorraine are to reduce their capacity in the course of the next few years, and one total and one partial closure are also scheduled to take place during the same period in the Auvergne coalfield.

Total Charbonnages de France production, which in 1960 had been 55,700,000 metric tons, was in 1961 52,300,000, whereas the forecasts had put it at 53 million (including Provence) for 1965.

This speedy scaling-down of production in France is due not only to the rationalization operations, but also to the sharp decrease in underground personnel, together with the introduction of the shorter week in October 1960. The number of underground workers employed fell from 125,100 at the end of 1960 to 119,400 at the end of 1961, a drop of 5,700, or 4·6%. These factors adversely affected output, which increased only very slightly.

Netherlands

198. In contrast to the trend in Germany, Belgium and France, in the Netherlands production has actually been increasing: in 1961 it reached 12,750,000 metric tons, as against 11,380,000 in 1957.

This is the result of the rapid rise in o.m.s., from 1,515 kg. at the end of 1957 to 2,128 at the end of 1961, a 40% increase which has more than offset the 15·6% drop in the number of underground workers during the same period. The increase is due to the fact that better seams have been opened up.

Community

199. The present production potential of the Community coalmining industry may be estimated at 228 million metric tons, some 20 million less than in 1957.

The net effects of the positive and negative rationalizations undertaken over the past five years have been

(a) a sharp reduction in the number of pits in operation;
(b) an increase in underground output, resulting in a lowering of costs;[1])
(c) a steep increase in production from fully-mechanized underground workings;
(d) an increase in average daily production per pit;

[1]) See Nos. 119 ff. above.

(e) the adjustment of the volume of production to the shrinkage in demand, more particularly in the case of the grades exposed to competition from other sources of energy.

The industry is to continue the process of rationalization in the years immediately ahead, and to tailor its production to market requirements as regards both tonnages and grades. At the same time, it will be going ahead with its efforts in connection with the mechanical, thermal and chemical valorization of coal, in order to strengthen its competitive position in the energy market.

THE HIGH AUTHORITY'S WORK CONCERNING COAL

Alongside the action thus taken to adjust the coalmining industry to the trend in the market, the High Authority in 1961 retained in force the various measures introduced earlier to assist the process of adjustment as and where necessary.

Special action on behalf of Belgium

In the case of Belgium, where it was essential to push ahead quickly with the reorganization programme, the High Authority in December 1960 extended for a further period the application of Article 37 of the Treaty. It also authorized the Belgian Government to subsidize the production of certain collieries and reintroduced for 1961 its special temporary financial allowance to Belgian mineworkers placed on short time.[1])

IMPLEMENTATION OF ARTICLE 37

200. Last year's Report[2]) contained an account of the reasons which had impelled the High Authority to invoke the provisions of Article 37 of the Treaty in favour of Belgium, and of the action taken by it to implement these for 1960 and 1961 by its Decisions Nos. 46/59 and 25/60.

[1]) See No. 497 below.
[2]) See *Ninth General Report*, Nos. 180 ff.

Implementation of Decision No. 25/60

201. Like its predecessor, this Decision provided that the reorganization of the coalmining industry should be continued by the closure of pits which had no prospect of ever qualifying for integration into the Common Market; in return, it afforded protection to the Belgian coal market by placing restrictions on trade in Community coal, on imports of coal from third countries, and on the selling-off of stocks.

202. The *reorganization programme* outlined in Decision No. 46/59 had indicated that capacity representing a total 1957 production of 9,500,000 must be scrapped by the end of 1963, and had specified the rate at which the closures were to take place. The programme was carried out well up to schedule.

('000,000 m. t.)

Year	Planned	Effected
1959	2·3	2·522
1960	2·5	2·509
1961	2	1·967
1962-63	2·7	—
Total	9·5	6·998

This leaves a further 2,500,000 metric tons' capacity to be closed in 1962 and 1963, before the full total of 9,500,000 is reached.

The High Authority has noted that the closures, combined with the rationalization operations, have resulted in better output figures and in a certain improvement in the competitive position of Belgian coal.

203. As regards the *restrictions on trade* in coal between Belgium and the other Community countries, the High Authority considered it advisable to introduce a certain flexibility into the arrangement, enabling the restrictions on such deliveries to be adjusted to the actual movements of

production and of sales in the Belgian market. Accordingly, in Article 3 of its Decision No. 25/60 it provided that tonnages above the maximum fixed by it might be delivered on condition, firstly, that the additional outgoing and incoming consignments correspond ton for ton, secondly, that the increase was not such as to prejudice the process of reorganization in the Belgian industry, and thirdly, that the principle of equitable treatment as among member States was not infringed.

In accordance with these provisions, the quotas were increased in the course of the year by 115,000 metric tons in respect of deliveries to and from the Netherlands,[1]) and by 50,000 in respect of deliveries to and from Germany.[2]) Both intra-Community trade and imports from third countries were carried on in conformity with Decision No. 25/60.

Implementation of Decision No. 25/60, as supplemented by Decisions Nos. 6/61, 9/61, and 10/61

TABLE 30

Deliveries of Hard Coal and Hard-Coal Briquettes to Belgium

('000 metric tons)

Country of origin	Quota under Decision No. 25/60	Quota under Decisions Nos. 25/60, 6/61, 9/61 and 10/61	Actual deliveries in 1961
Germany (Fed. Rep.)	2,066	2,116	2,205
France	258	258	240
Netherlands	826	941	853
Community	3,150	3,315	3,298
Third countries	620	620	562

[1]) See Decision No. 6/61, *Journal Officiel des Communautés Européennes*, April 8, 1961, (fourth year, No. 25) and Decision No. 10/61, *Journal Officiel, des Communautés Européennes*, November 30, 1961, (fourth year, No. 77).

[2]) See Decision No. 9/61, *Journal Officiel des Communautés Européennes*, October 19, 1961, (fourth year, No. 68).

TABLE 31

Deliveries of Hard coal and Hard-coal Briquettes from Belgium

('000 metric tons)

Country of destination	Quota under Decision No. 25/60	Quota under Decisions Nos. 26/60, 6/61 9/61 and 10/61	Actual deliveries in 1961
Germany (Fed. Rep.)	200	250	185
France	950	950	705
Netherlands	800	915	923
Luxembourg	45	45	34
Community	1,955	2,160	1,851

204. With regard to the *restrictions on lifting of stocks*, the Belgian Government by a Decree of January 30, 1961, made it illegal to sell off more than 35% of the non-seasonal stocks held at the pitheads at December 31, 1959. The prohibition was obeyed, the tonnages sold from stock being in fact well below the maximum specified.

The position at the end of 1961

205. The High Authority noted that thanks to the action taken, and in particular to the trade and import restrictions, the position of the Belgian coalmining industry — doubtless assisted by favourable general economic conditions — improved in the course of 1961: although actual production remained more or less at the level planned, over 1,200,000 metric tons were sold from stock, and the incidence of short time amounted to only 10 days not worked and a production less of 800,000 metric tons, as against 33.5 days and 3,500,000 metric tons in 1960. Thus, thanks to the reorganization and with the aid of the protective measures taken, the adjustment of production to demand was well on the way to success.

However, neither these measures nor the exertions of the collieries themselves had at the end of 1961 as yet fully achieved their object: the delivered prices for practically all

the Belgian coal in the market remained higher than those for comparable and competing grades from the other Community coalfields and from third countries, the estimates were that Community production in 1962 would exceed demand, and the accumulated pithead stocks were still seriously encumbering the market.

Decision No. 13/61 [1])

206. On November 10, 1961, the Belgian Government submitted a Memorandum to the High Authority describing the position in the Belgian coalmining industry and its effects on the country's economy, and requesting an extension of the protective measures introduced under Article 37 by Decisions Nos. 46/59 and 25/60. The High Authority acknowledged that unless some action was taken to safeguard the Belgian market, not only would further progress with the reorganization drive be seriously held up, but the whole state of the industry would deteriorate rapidly, with the probability that what the Treaty terms "fundamental and persistent disturbances" would develop in the Belgian economy.

There was, however, one difficulty. The protection of the Belgian coal market is conditional upon the implementation of the shedule of closures, and the Belgian Government is required to furnish an itemized list of the closures to be effected in the course of each year. In this case, the Government, while fully intending to carry out the schedule, was unable to indicate by name the pits which were to be closed in 1962, though it undertook to do so before the middle of the year.

This time-limit was settled in conjunction with the question of the new Belgian Directoire de l'Industrie Charbonnière.[2]) The High Authority then, after consulting with the Special Council of Ministers, duly issued its Decision No. 13/61, of December 13, 1961, extending for 1962 the application of Article 37 of the Treaty in favour of Belgium.

[1]) See *Journal Officiel des Communautés Européennes*, December 23, 1961, (fourth year, No. 84).

[2]) See No. 283 below.

207. With regard to the *reorganization of the Belgian coalmining industry,* the Decision repeated the stipulation contained in Decision No. 46/59 that the schedule of closures should be adhered to. It was further specified that the High Authority would rescind the Decision if the itemized list of intended closures was not forthcoming at latest by May 31, 1962, or if the reorganization operations planned were not in fact put into effect. At the time the Decision was issued, an aggregate production capacity of 2,500,000 metric tons remained to be closed in 1962 and 1963, of which 2,231,000 had not yet been allocated.

208. With regard to the *protection of the Belgian coal market,* the Decision, in recognition of the fact that all protective and safeguarding measures should be degressive in character, somewhat relaxed the restrictions earlier imposed on deliveries and imports of coal to Belgium. In order not to prejudice the reorganization process, the slightly less stringent arrangement now to be permitted was worked out on the basis of the Belgian coal balance-sheet for 1962. Thus the quota for deliveries to Belgium from other member countries was fixed 4% higher than it had been for 1961, while the maximum volume of deliveries by Belgium to the rest of the Community was to remain unchanged.

209. Decision No. 13/61 also permitted the continuance of the arrangement enabling the restrictions on deliveries to be adjusted to the actual movements of production and home demand: that is, it empowered the High Authority in 1962 to increase the quotas fixed as between any country requesting such an increase and Belgium, on condition that the Belgian Government supported the request, that Belgium's own deliveries to the country in question were increased by the same amount, that the increases were not such as to prejudice the process of reorganization, and that the principle of equitable treatment as among member States was not infringed.

In further mitigation of the original measures, the Decision also contained a new provision to the effect that any increase in deliveries of anthracite by other member countries to Belgium need not be paralleled by an equivalent increase

TABLE 32

Deliveries of Hard Coal and Hard-Coal Briquettes from Other Member Countries to Belgium

('000 metric tons)

Country of origin	1960 (Decision No. 46/59)	1961 (Decision No. 25/60)	1962 (Decision No. 13/61)
Germany (Fed. Rep.)	2,000,000	2,066,000	2,148,000
France	350,000	258,000	268,000
Netherlands	800,000	826,000	860,000
Total	3,050,000	3,150,000	3,276,000

Deliveries of Hard Coal and Hard-Coal Briquettes from Belgium to Other Member Countries

('000 metric tons)

Country of destination	1960 (Decision No. 46/59)	1961 (Decision No. 25/60)	1962 (Decision No. 13/61)
Germany (Fed. Rep.)		200,000	
France		950,000	
Luxembourg		45,000	
Netherlands		800,000	
Total		1,995,000	

in deliveries in the other direction, provided the High Authority was able to ascertain that the tonnages in question were in fact of anthracite.

210. The ceiling on imports from third countries was also raised, to 640,000 metric tons as against 620,000 in 1961 and 600,000 in 1960.

211. As regards the restrictions on the lifting of stocks, the Belgian Government was required, as in the two previous years, to see to it that the reorganization was not interfered with by the liquidation of non-seasonal pithead stocks.

SUBSIDIES

212. As has been noted on earlier occasions,[1]) the High Authority has for some time been allowing the payment of subsidies as provided for in Section 26 of the Convention containing the Transitional Provisions. Its view has been that the closures imposed under the reorganization scheme must be effected at a rate carefully calculated not to involve undue economic and social hardship, and that subsidization is the means of enabling pits scheduled for closure to carry on until their time came. Furthermore, it was felt that some Belgian collieries should ultimately be able thanks to subsidies to qualify for full integration into the Common Market.

Subsidies in 1961

213. By the terms of the High Authority's Decision No. 1/61,[2]) the Belgian Government was authorized to grant subsidies

TABLE 33

Breakdown of Subsidies for 1961

Collieries		Type	Production 1959	Production 1961	Non-repayable subsidies	Repayable advances
No.	Coalfield		(m. t.)	(m. t.)	(Bfr. '000)	(Bfr. '000)
1	Mons	Bituminous grade B				
		Bituminous grade A				
2	Centre	Smokeless steam coal, Semi-bituminous	2,510,980	3,407,224	303,000	8,000
		Low-volatile				
1	Liège	Anthracite				
1	Charleroi	Semi-bituminous	73,854	67,157	11,000	
1	Mons	Semi-bituminous				
1	Charleroi	Anthracite	716,157	644,552	—	58,000
1	Liège					
8			3,300,991	4,118,933	314,000	66,000

1) See *Eighth General Report*, No. 70, and *Ninth General Report*, No. 192.

2) See *Journal Officiel des Communautés Européennes*, January 25, 1961 (fourth year, No. 6).

up to a maximum of Bfr.400 million in respect of production to total not more than 3,300,000 metric tons, *on the basis of the 1959 production.* The subsidies were allocated as shown in Table 33.

The total amount paid out was Bfr.380 million (of which Bfr.66 million were in the form of repayable advances), *i.e.* less than the prescribed maximum of Bfr.400 million. Subsidies were in fact granted in respect of 4,100,000 metric tons, which correspond to 3,300,000 tons *on the basis of the 1959 production.* The tonnage subsidized thus remained at the level for which subsidies had been authorized, *i.e.* 3,300,000 metric tons (reference year 1959). The figure of 4,100,000 tons is explained by the fact that the enterprises subsidized in 1961 had, in 1959, lost 900,000 metric tons through short-time working.

Within the limits indicated, the payment of subsidies was authorized on condition that the enterprises concerned carried out the schedule of closures for 1961 and kept their production below the ceilings imposed. The ceilings were to be fixed at such a level as to ensure that the aggregate production of coal other than non-subsidized anthracite in the Southern coalfields would not exceed 7,800,000 metric tons for the year 1961. The High Authority carried out quarterly checks to see whether these requirements were being complied with, and found no case in which the limits had been overstepped. The production in question in fact amounted in 1961 to 7,245,378 metric tons.

The High Authority also found that the enterprises concerned had not made use of their subsidies to step up their rate of operation higher than that of non-subsidized collieries producing the same type of coal.

Subsidies in 1962 and 1963

214. The High Authority is required by Section 26,4 of the Convention to submit to the Special Council of Ministers every two years proposals concerning the tonnage to be subsidizable. In 1960 it submitted such proposals for the years 1960 and 1961.

With regard to 1962 and 1963, the High Authority on November 22, 1961, reminded the Belgian Government that

the detailed proposals must be forwarded to it without delay to enable it to consult the Council in good time as to the tonnage to be approved for subsidization during these two years, due account to be taken of the principle that the successive tonnages so authorized must be on a descending scale. The Belgian Government has been thinking in terms of subsidies totalling approximately Bfr.250 million in 1962 and Bfr.100 million in 1963, after which it considered that subsidization should be discontinued altogether. Also, pending such time as it should itself be able to take a definite decision, the High Authority requested the Belgian Government to see that the collieries qualifying for subsidies did not increase their rate of production in relation to the rate registered in 1961. The matter is to be discussed at a meeting of the Council in the near future.

Special measures in Germany concerning imports of third-country coal

215. In January 1959, in order to prevent the market from becoming swamped by imports under the various import contracts concluded earlier for a total of something like 40 million metric tons of coal, the Federal Government, in accordance with a High Authority recommendation of January 28, imposed a duty of DM.20.00 on every ton of third-country coal entering the Federal Republic in excess of a duty-free quota fixed for 1959 at 5 million tons. The duty and the quota were reimposed unchanged for 1960.

In 1961, the High Authority, taking the view that the factors warranting some degree of tariff protection for the Federal Republic were still present but that the state of the German market had so far improved as to allow of a certain relaxation of the import restrictions, conveyed a fresh recommendation to the Federal Government that the new quota should be fixed at not less than 6 million metric tons, the rate of duty to remain unchanged at DM.20.00.

The Federal Government complied. The other member States, by the terms of their previous undertaking, must continue to afford "mutual aid" to the Federal Government by checking the origin of coal entering the Federal Republic from their territories.

The movement of German imports of third-country coal has been as follows.

('000,000 metric tons)

Year	Total imports	of which from U.S.A.
1957	17·234	15·991
1958	12·926	11·215
1959	5·956	4·617
1960	5·471	4·369
1961	(5·601)	(4·449)

The High Authority's reason for making these recommendations was that it felt the introduction of a duty on imported coal to be a means of promoting the commuting of long-term import contracts concluded earlier and to ensure that future imports under uncommuted contracts would be on a scale compatible with the conditions prevailing in the market, coming in within the limits of the duty-free quota.

216. Although the commuting of contracts had by then been completed, the High Authority on re-examining the position came to the conclusion that the forecasts of production and demand for 1962 suggested a continuing imbalance, and that it would be right and proper to maintain the duty and quota arrangements in force. As regards the level of the quota, the High Authority took into account the fact that additional imports of about 720,000 metric tons of American coal were to be brought in over and above the quota to supply the American troops stationed in Germany, instead of the American Army's taking German coal as heretofore.

The High Authority therefore in December 1961[1]) dispatched a further recommandation, under Article 57 and 74 of the Treaty, to the effect that the Federal Government should maintain the duty-free quota for 1962 at the same

[1]) See *Journal Officiel des Communautés Européennes*, December 23, 1961 (fourth year, No. 84).

level as for 1961. It also requested the other Community Governments to take such steps as might be necessary to enable this to be done.

Section 2: The Common Market for Steel

GENERAL SITUATION

217. 1961 witnessed a falling-off in the high rate of expansion recorded for 1960, with crude-steel production increasing only very slightly, from 72,800,000 to 73,300,000 metric tons crude steel.

This was due to a number of factors. In Germany and the Netherlands industrial production did not rise during 1961 above the level reached at the beginning of the year. In France it did, but in certain big steel-consuming industries, such as the motor industry, there was a temporary downturn in production, due more particularly to a drop in exports. In Belgium and Luxembourg, although general industrial production increased, the trend in the iron and steel sector was effected by that in the neighbouring countries, while even in Italy, where both industrial and iron and steel production increased substantially as a result of the very marked structural expansion in progress, the influence of developments elsewhere in the Common Market was reflected in the price movements. Except in Italy, the effects of these economic trends on the demand for steel were considerably accentuated by a tendency on the part of the consumers to reduce their stocks. A certain diminution in net exports also contributed to the divergence between the curves shown in Graph No. 4, comparing the trend for the Community in overall industrial production and in steel production.

The change in economic conditions in 1961 may mark the emergence of a new type of market balance. For the previous ten years production capacity, and expecially blast-furnace and steelworks capacity, had had great difficulty in keeping pace with demand: nevertheless, even by 1960, a highly active year in itself, supply and demand were rather more in balance, and it would seem that, generally speaking,

capacity is now expanding sufficiently fast in relation to demand for questions of supply no longer to be the first consideration — indeed, in the case of some products the trend could even reach a point at which the means of production were growing more rapidly than the demand. Moreover, larger tonnages are coming in offer in the world market, both from other European countries and from distant sources such as Japan; the flow from Eastern Europe is also increasing; and finally, the American iron and steel industry has substantial surplus capacity at its disposal, though the effects of this are at present lessened by the high level of American export prices.

Thus, despite a comparatively satisfactory flow of orders, export prices dropped sharply in 1961, in the case of sheet and of hoop and strip touching their lowest level since the introduction of the Common Market. Published schedule prices in most Community countries went down (in national currencies if not in dollars, owing to the revaluations), while there was an increase in the proportion of sales at prices aligned with the lowest E.C.S.C. schedules or with quotations from third countries. The differences between the prices of flats and of other products continued to shrink, and changes also began to be made in the structure of extras for size and extras for quality.

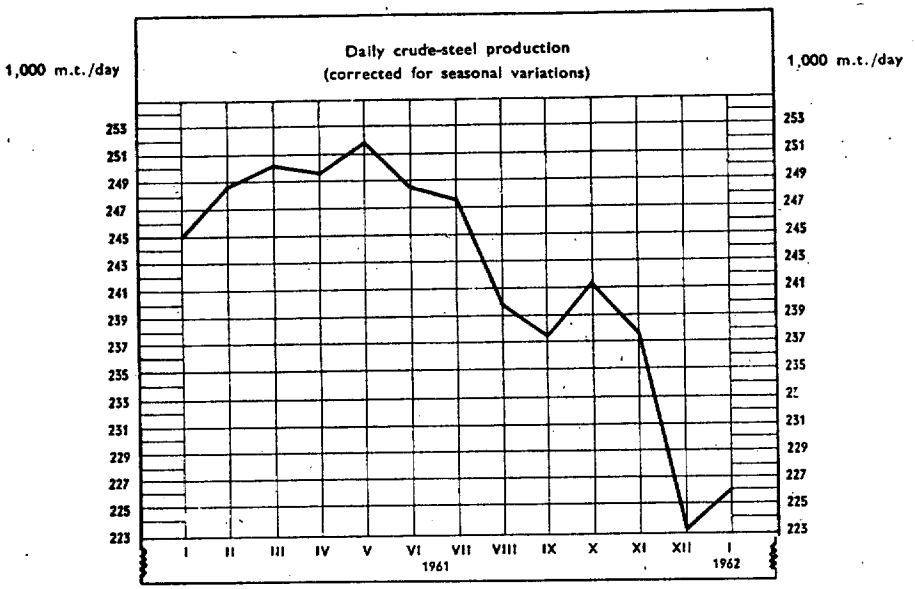
At the same time, as will be described, practice in the Common Market for steel entered on a new stage[1]), aided certainly in part by the advance of general economic integration, but also by the changed market conditions whereby consumers have a wider choice of supplier.

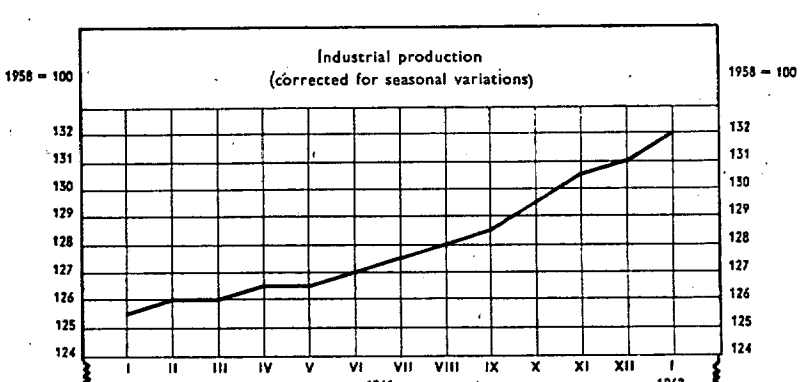
In addition, the keener competition in the steel market caused a group of producers to draw renewed attention to the disparate fiscal systems in force in the member countries. These problems had already been studied in detail by High Authority and Government experts in the early days of the Common Market for coal and steel: the whole subject, as relating to the General Common Market, now comes under E.E.C., and is being examined by the E.E.C. Commission in

[1]) See No. 241.

GRAPH No. 4

Trends in Industrial Production and Daily Crude-Steel Production





co-operation with the High Authority. The High Authority for its part is studying to what extent the Common Market for coal and steel raises special problems in this connection.

218. On the raw-materials side also a new stage seems to be developing in which problems of supply are taking second place to problems of consumption. Some of the iron-ore mines (admittedly the smaller ones) are having difficulty in withstanding competition from imported ores. The coking-plants are facing sales problems owing to the steady reduction in the specific consumption of coke in pig-iron production In the scrap sector, the reduction of blast-furnace consumption and the increasing availabilities of lower-grade scrap are making it necessary to examine whether dealers might not usefully install technical equipment of their own to render this inferior scrap suitable for use in modern production plant. Finally, some independent blast-furnaces are finding it difficult to sell their pig-iron.

These various matters, and the action taken by the High Authority in respect of them, are dealt with in the pages following. The main figures concerning the iron and steel economy of the Community will be found in the Statistical Annex[1]).

IRON ORE

Extraction and stocks

219. Extraction of crude ore in the Community in 1961 totalled 95,900,000 metric tons, approximately the same amount as in the previous year. This levelling-off was principally apparent in the major Community producer countries, France and Germany; extraction in Luxembourg, where iron and steel production continued high, showed an increase of 7%.

220. Stocks at the Community mines at December 31, 1961, amounted to 10,800,000 metric tons.[1]) The collieries in-

[1]) See Tables 21-47

[2]) See *Statistical Annex*, Table No. 23.

creased their of stocks at the beginning of the year: since extraction remained high while procurements by the works fell off in varying degrees, a certain accumulation inevitably resulted, mainly in the French orefields.

Intra-Community trade in iron ore

221. The volume of trade in iron ore within the Community fell from 26,600,000 metric tons in 1960 to approximately 25,200,000 in 1961.[2]) This was partly due to the fact that the ores mined in the Community have mostly a low Fe content, so that third-country ores are preferred, as they are more economic to transport owing to their higher Fe content and are available in sufficient quantities. No change having taken place in the attractive prices quoted for imported ores, they continued in favour in 1961.

External trade in iron ore

222. About 700,000 metric tons of iron ore was exported to third countries in 1961. This marked a further continuation of the downward trend which had been momentarily broken in 1960.

223. Imports from third countries rose from 34,200,000 metric tons in 1960 to approximately 35,300,000, and may be expected to increase further. This reflects the close interrelation between the Community iron and steel industry and the raw-materials suppliers in the other European countries and overseas.[1]) As the ore often has to be transported considerable distances, the downward trend in freight-rates favours the purchase of overseas ores; the rates for shipments from the Far East, however, showed a certain hardening.

[1]) See *Statistical Annex,* Table No. 24.

[2]) See *Statistical Annex,* Table No. 25.

The blast-furnaces' tendency to use more imported ore was a definite blow to the prospects of two categories of suppliers in this sector, the scrap trade (to which more detailed reference will be made later) and the Community iron-ore industry. Internal ore production is still almost everywhere the basic source of supply for the iron and steel industry in the area, but as blast-furnace burdens are today largely made up of sintered and imported high-ferrous ores less and less use is being made of grades which are poorer in quality and more costly to transport. Consequently, certain mines in southern and western France and in Germany, which are awkwardly situated in relation to the consumer and have high production costs, are having difficulty in standing up to competition and are in some cases having to close.

Ore sintering and blast-furnace coke rate

224. The iron and steel industry's desire to use a larger proportion of sintered ore in the blast-furnaces was more in evidence than ever, the rate being stepped up from 636 kg. per metric ton of pig-iron produced in 1960 to 713 kg. in 1961. Production of sintered ore in the Community in 1961 totalled 39 million metric tons, an increase of more than 13% over the 1960 figure of 34,400,000 tons.

The steady rise in the proportion of sinter employed is due partly to the larger quantities of fine ores now available to the works, and partly to various technical and economic advantages.[1])

225. Largely owing to the increase in the use of sinter, the blast-furnace coke rate went down in 1961 by a further 30 kg., standing by the end of the year at 853 kg. per metric ton of pig-iron produced.[2]) Coke consumption in the sintering-plants increased; the overall coke consumption of the iron and steel industry (including steelworks-owned coking-plants' own consumption) however, fell from 51,100,000 metric tons in 1960 to about 50,200,000 in 1961.

[1]) See No. 462 below.

[2]) Exclusive of coke consumption at the sintering-plants.

Prices

226. Schedule prices for iron ore again remained in general unchanged, the only exception being in Germany, where the Siegerland mines introduced a general rebate of 4% from April 1961.

SCRAP

General situation

227. At the beginning of 1961 the Common Market for scrap showed much the same features as in 1960, but as time went on demand fell behind supply and the market weakened.

As in previous periods of slackening activity, the proportion of works' own arisings increased; however, since consumption remained about the same as in 1960, with the steelworks taking 29,850,000 metric tons and the blast-furnaces 2,880,000, the industry merely reduced its purchases of scrap. There was at the same time an increase in salvage and process scrap in consequence of the continuing economic expansion, but as this expansion had been specially marked in the case of the manufacturing industries using light rolled products, the bulk of the increase was in the form of poor-quality scrap; on the other hand, demand for high-grade scrap could not be fully met from within the Community.

Partly for this reason and partly under existing long-term contracts, the Community iron and steel industry imported a total of some 2,080,000 metric tons of scrap, as against 1,800,000 in 1960. Stocks at the works rose during the summer and autumn, but fell again towards the end of the year, so that the net increase was only 240,000 metric tons. The stocks so constituted represented three months' procurements of bought scrap. Requirements in bought scrap at the end of the year were 12% lower than at the end of 1960.[1])

[1]) See *Statistical Annex*, Table No. 26.

228. The scrap input rate at the blast-furnaces, which from 1960 to mid-1961 stood at 56 kg. per metric ton of pig-iron produced, fell thereafter to 40 kg. by the end of the year. This reduction, which is aimed in part at bringing down the level of ore stocks, is macking it still more difficult for the poorer qualities of scrap to find a market.

The scrap input rate at the steelworks (including steel foundries) remained practically the same as in 1960. It is possible that the integrated works' efforts to avoid any increase in ore stocks have prevented the fall in the price of scrap from having much effect on the tonnages of scrap used.

229. The German scrap dealers applied to the High Authority in the autumn of 1961 for the lifting of the general embargo on the export of scrap, owing to a surplus of the lighter grades and particularly of blast-furnace scrap. The High Authority and the Council of Ministers are examining the matter.

Trade and prices

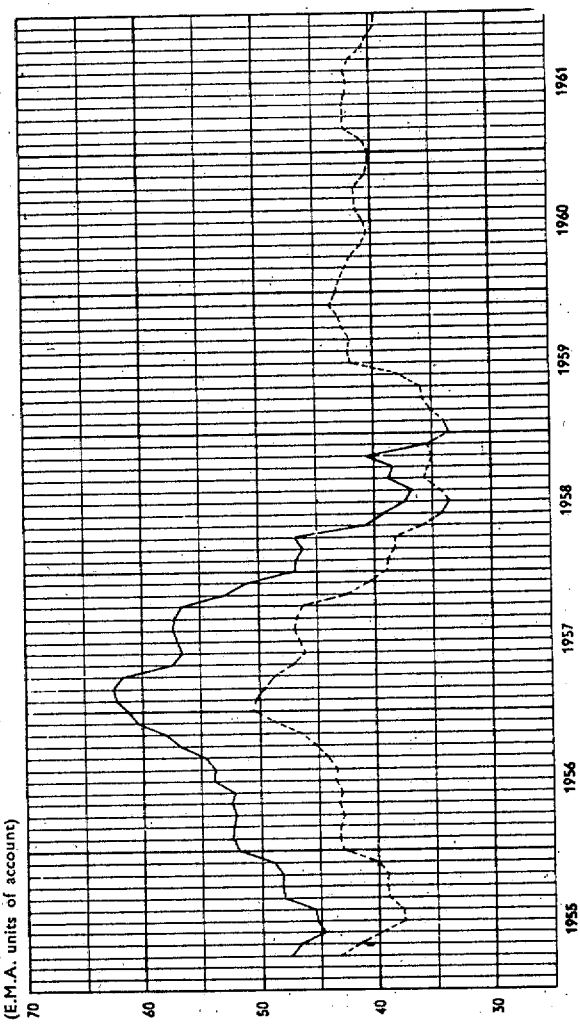
230. As the scrap position is not in balance in all parts of the Community, intra-Community trade continued active at about 3,200,000 metric tons. Most of this was accounted for by Italian purchases from southern Germany and France.[1] Italian scrap procurements within the Community increased towards the end of the year.

Scrap prices remained for some time unchanged; in September, however, when the first decreases in iron and steel production became known, the basis prices for scrap went down, and so did the hitherto fixed rebates for sub-standard products, while the extras for quality were increased. Thus whereas in April (after the mark and gilder revaluation) the average prices ex yard, inclusive of tax, for basis grade 11 had been $39.25 in the Ruhr, $36.50 in France and $44.80 in Italy, by the end of the year they were down to $35.50, $30.50 and $42.30 respectively.

[1]) See *Statistical Annex,* Table No. 27.

GRAPH No. 5

Scrap Prices in the Community[1]



N.B. As the price-compensation scheme for imported scrap ended on November 30, 1958, the contribution in respect of bought scrap was abolished as from December 1958.

[1]) Corrections made to figures in *Ninth General Report*.

231. The composite price of the United States, the world's largest scrap exporter (which, however, given the present state of the Community market did not in 1961 particularly affect developments there) moved somewhat erratically, first rising (January $31.20, April $39.50), dropping again in the summer (July $36.70), rising again with the revival in the American steel market (October $39.20), and then falling once more, owing to a decline in scrap exports, at the end of the year ($35.20).

PIG-IRON

232. Community production of pig-iron in 1961 totalled 54,600,000 metric tons, as against 54 million in 1960.

Specific consumption of pig-iron in steel production stood at 693 kg. per metric ton. The rate has changed very little for some years (it was 696 kg. in 1960, and 699 in 1959), and fluctuated only slightly with the movement of the scrap market.

General situation

233. During the first half of 1961 the monthly average sales of the blast-furnaces were 6.5% higher than in 1960; in the second half of the year, however, the trend was reversed and in the last month or two sales fell to about the 1959 figures.

The high level of activity during the first half-year was mainly due to the fact that the integrated works were covering their peak requirements of steelmaking pig by purchases from the independent blast-furnaces. Total deliveries of steelmaking pig, spiegeleisen and high-carbon ferro-mangenese in the Community and the third countries amounted in 1961 to 3,250,000 metric tons, as against 2,490,000 in 1960.

For about three-quarters of the year the foundries did outstandingly good business. However, the producers' hopes of receiving an increased volume of orders for *foundry pig* were only partially fulfilled: sales during the first half-year were higher than in 1960, but in the autumn the upturn petered out as demand fell off again. Total deliveries of foundry pig in the Community and the third countries amounted in 1961 to 1,980,000 metric tons as against 2,040,000 in 1960.

Intra-Community and external trade

234. The gradual recovery in the pig-iron market from 1959 onwards had brought with it a revival in intra-Community trade also, exclusively due to increased trade in foundry pig. In the first half of 1961 the record figure of 100,000 metric tons a month was reached; in the ensuing months, however, a decline set in.

Imports of pig-iron from third countries dropped slightly, but owing to the weakening of demand in the foundry sector this did not really relieve the pressure on the pig-iron market. Imports in 1961 totalled about 920,000 metric tons, as against 970,000 in 1960. Exports continued to decrease, working out at 330,000 metric tons as against 390,000 in 1960.[1])

Prices

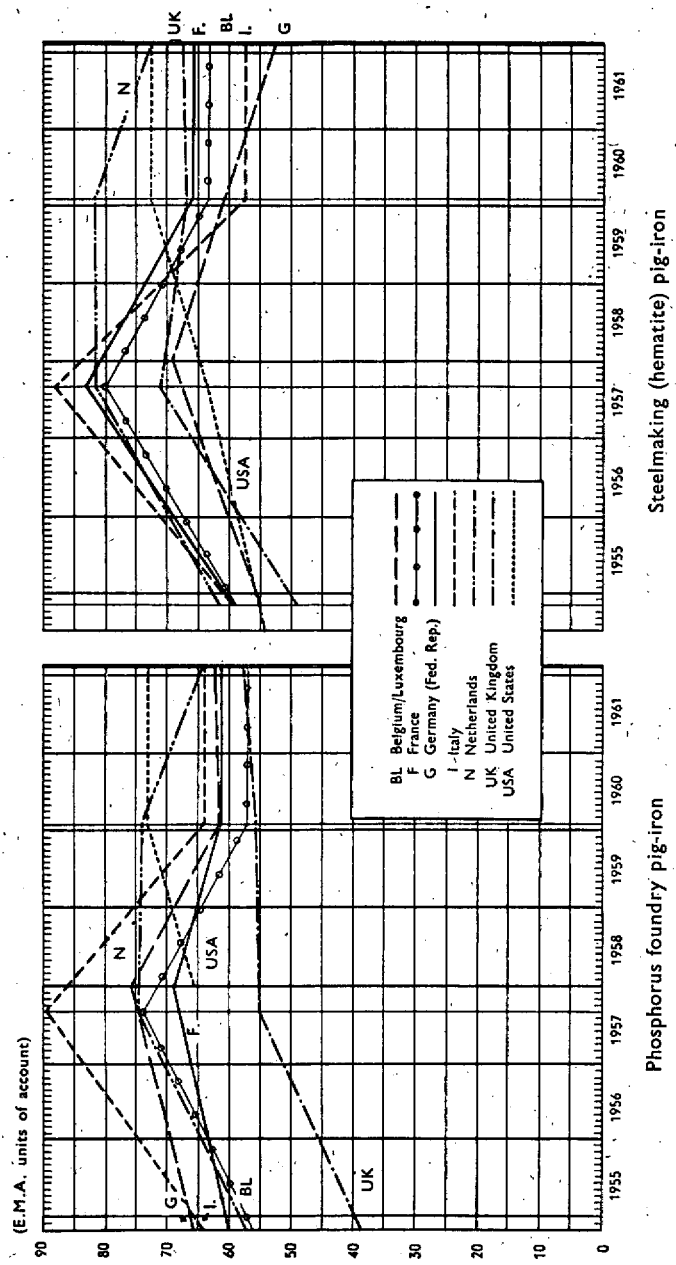
235. The trend during the first six months was satisfactory only as regards the actual tonnages sold, for while the volume of sales did show a certain increase, prices remained unchanged; in fact, for the most part it was only possible to retain the schedule prices at all by granting rebates to bring quotations level with those of competitors, or, in other cases, by effecting price alignments. In 1960, of some 60,000 metric tons of pig-iron a month (including spiegeleisen and ferro-manganese) had been sold by alignment on third-country prices. In 1961, the figure was 67,000 a month, including 25,000 metric tons of foundry pig (19% of total sales of this product in the Community) and 30,000 of steelmaking pig (19% of total Community sales), together with various small tonnages of ferro-mangenese, spiegeleisen and other special grades. The alignments were with third-country quotations, which stood for steelmaking pig at between $49.00 and $55.00 c.i.f. port of destination and for foundry pig at between $52.00 and $68.00.

Schedule prices remained in general unchanged, apart from minor adjustments by individual firms. The German

[1]) See *Statistical Annex*, Table No. 29.

GRAPH No. 6

Trend in Pig-Iron Prices



producers granted an additional rebate of DM.40.00 per metric ton in the autumn to Community consumers taking extra amounts of foundry pig: this was discontinued on January 1, 1962, and replaced by a graduated additional rebate of between DM.2.50 and DM.7.50 per metric ton payable on total tonnage charged (cold), while at the same time the normal rebate on foundry pig was increased to DM.10.00 per metric ton.

STEEL

General situation

236. 1961 was by and large an average year for the iron and steel industry of the Community. Crude-steel production totalled 73,300,000 metric tons, which was above the outstandingly high level recorded for 1960, but only a very little above, the increase amounting to no more than 500,000 metric tons as against 9,600,000 from 1959 to 1960, when a vigorous upswing had been in progress. Moreover, production in the second half of the year was appreciably lower than in the first: from the summer onwards the monthly averages for most of the Community countries were below those for the corresponding months of 1960. As production capacity had meantime continued to expand, the rate of utilization dropped especially towards the end of the year, though remaining at a quite adequately economic level.

There was a certain falling-off in the volume of *new orders* from consumers in a number of Community countries, principally owing to anxiety to reduce stocks. With average delivery dates now shortened from 3 months to 2½, consumers' stocks, which had increased during 1960 and up to the spring of 1961, entered on a period of adjustment which may continue for some time to come. The steel stockholders, whose sales account for approximately one-quarter of total deliveries, kept their stocks at a fairly even proportion of their own particular turnover.

The rundown of stocks was especially marked in Germany (which accounts for close on half of total Community steel consumption), but less so in the Benelux countries and in

France; in Italy, where the rate of economic expansion was better maintained, demand continued high. The latest indications (early 1962) suggest that sales are picking up somewhat in the countries originally most noticeably affected by the stock-rundown tendency.

Export demand remained about the same as in 1960. The flow of orders underwent fairly regular ups and downs, sometimes accentuated by fortuitous circumstances, the highest monthly figures being in the region of 1 million metric tons and the lowest of 650,000. This is indicative of a highly competitive market, with a sustained demand and a reasonably abundant supply: the balance between the two is thus produced by prices and new orders pulling in opposite directions.

Orders from all sources in 1961 amounted to 50,700,000 metric tons,[1]) less than deliveries, which totalled 53,700,000 tons. The backlog of orders in hand shrank from 13,200,000 metric tons[1]) at the beginning of the year to 10,300,000 at the end: however, although this represents deliveries for only 2-2½ months ahead, it should be borne in mind that even at peak points during 1959-60 the tonnages on order represented little over 3 months' production, in comparison with 4½ in 1956.

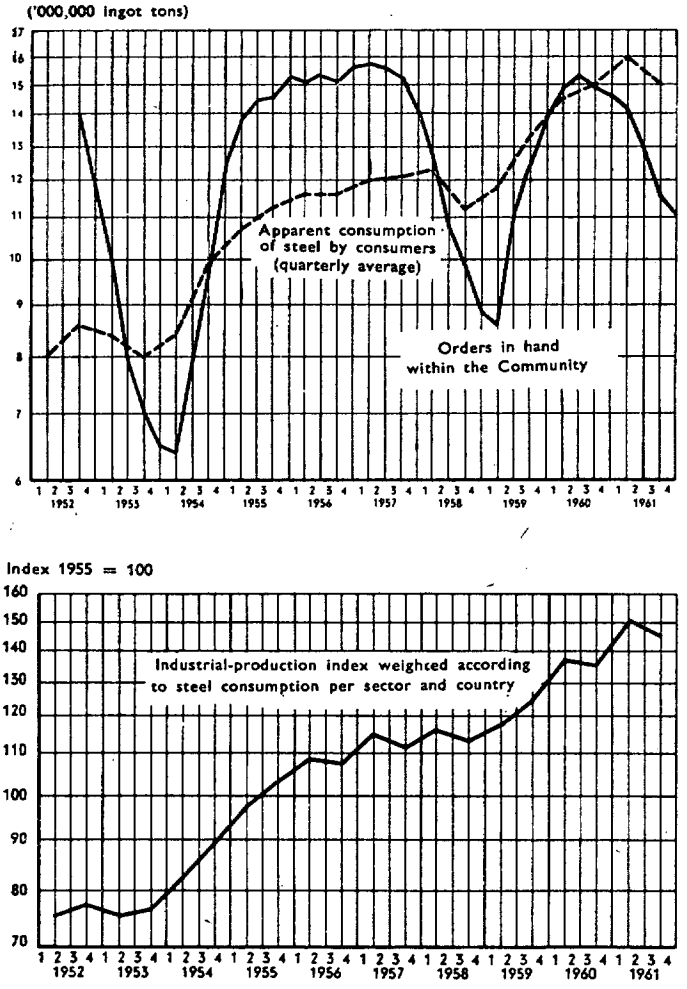
This lessening in the scale of fluctuations in the volume of orders from within the Community (in crude-steel equivalent) on the books is clearly revealed in Graph No. 7; a similar trend is observable in consumers' stocks, which even when they stood highest, in the spring of 1961, never represented nearly as many weeks' consumption as during the previous period of outstanding activity.

237. The comparative evening-out of the movements of these two elements, orders in hand and stocks — which used formerly to make the incidence of fluctuations in the steel market sometimes really acute — is an important advance in the direction of steadier expansion on the part of this major industry. It is mainly due to the fact that production capacity is now large enough for the consumers to feel assured of not

[1]) Of Treaty products, exclusive of special steels.

GRAPH No. 7

Steel Order-Books and Consumers' Stocks



Variations in the volume of orders in hand produce stock variations which in turn produce much more marked fluctuations in apparent consumption than in industrial production, which indicates the approximate trend in real consumption of steel. Thus, a mere levelling off in the trend of industrial production corresponds to a downturn in apparent consumption, representing the rundown of stocks. It is the level of apparent consumption which determines the level of steel production.

finding themselves short of steel. The quarterly "programmes with forecasts" and the studies on the market outlook for each year have proved most valuable in this connection: by indicating in advance the necessary adjustments, they make it possible, if they are taken to heart, to counteract incipient imbalances and so prevent those sharp alterations in the rate of activity which are so detrimental both to stability of employment and to the economic utilization of existing plant. The General Objectives conduce to the same end by noting the perequisites for a balanced position in the medium and long term.

Production

238. Community crude-steel production as a whole showed an increase of 0·6% over 1960: in Belgium and Germany there was a drop of 2-2·5%, in Luxembourg, the Netherlands and France a rise of 1-2%, and in Italy a more substantial rise of 11%.[1]) The increase in 1960 over 1959 had been 15·3% for the Community as a whole, the rates ranging from 25% for Italy to 11.5% for Belgium and Luxembourg, with Germany and the Netherlands coming slightly above the mean and France slightly below.

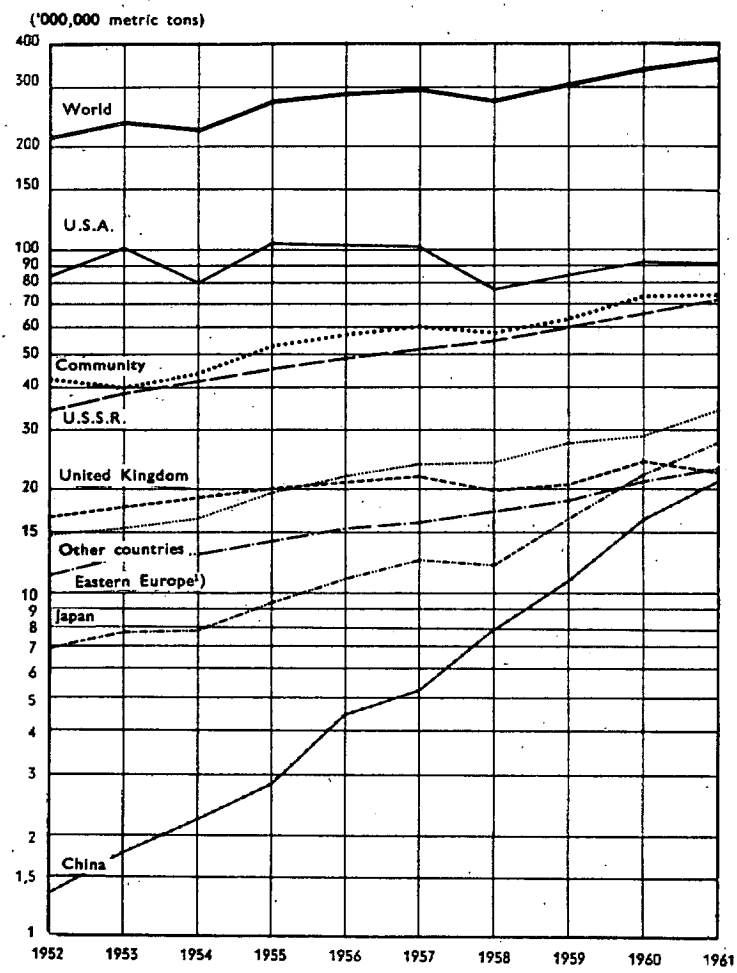
The disparate trends in production are due in part, not only to the differences already noted in the movements of general economic conditions and in long-term rates of growth, but also the differences in approach on the part of the market operators, depending on whether the consumers observe some degree of flexibility with regard to the placing of orders and the stepping-up or down of their stocks, and whether the producers are chiefly concerned to maintain the level of production or the level of prices.

239. World crude-steel production rose from 343,500,000 metric tons in 1960 to 363,300,000 in 1961, with the result that the Community's share fell from 21·2% to 20·1% (as against 19·3% in 1955). American and British production decreased slightly, and the American share of the world total underwent a further contraction, in line with the trend which has brought

[1]) See *Statistical Annex*, Table No. 35.

GRAPH No. 8

World Crude-Steel Production



¹) Eastern Germany, Bulgaria, Poland, Roumania, Czechoslovakia, Hungary.

it down from 39·8% to 25·1% in six years. The striking advance of the Japanese iron and steel industry continued, with 28,300,000 metric tons of crude steel in 1961 as against 22,100,000 in 1960 and 7,700,000 in 1954. The Eastern European countries maintained their steady expansion, and mainland China increased its production from 16,500,000 metric tons in 1960 to 21 million in 1961.

Western Europe overall,[1]) with 108 million metric tons or 29·7% of world production, stands first among the economic groups of the world, ahead of North America with 26·5% and Eastern Europe with 25·8%. Western Europe and North America together thus account for 56·2% of world steel production.

240. The proportion of the steels produced by the *new oxygen blown processes* increased from 2·2% of total production in 1960 to 3·4% in 1961, causing a corresponding shrinkage from 49·3% to 48·5% in the share of basic Bessemer steels and from 37·8% to 37·1% in that of open-hearth. Production of L/D steels is expected to increase by half as much again in 1962; this will enable consumers to accustom themselves to taking these pending the major expansions in production planned for 1963 and 1964, when capacity is to be doubled and then doubled again.

The share of electric-furnace steels also increased, from 10·4% to 11%: this was, however, partly due to cyclical factors, inasmuch as Italian production, a particularly large proportion of which is in the form of electric-furnace steel, was the only one to rise appreciably in 1961.

Production of high-carbon and special steels, the increase in which from 1959 to 1960 had been 22% as against 15·9% for steel production at whole, also showed a steeper rise from 1960 to 1961: it accounted for 8·5% of total steel production, as compared with 8·2% in 1960, 7·6% in 1959 and 8·0% in 1956. The share of the carbon steels, which are in some degree in competition with ordinary quality steels and with the alloy steels, actually hardly changed at all: the increase

[1]) Community, United Kingdom, Norway, Sweden, Finland, Denmark, Ireland, Iceland, Austria, Switzerland, Spain, Portugal, Yugoslavia, Greece, Turkey.

was in the share of the alloy steels, which stood in 1961 at 5·6%, as against 5·4% in 1960 and 4.6% in 1958.

The share of *flat products* in the total production of the rolling-mills was only 45·1%, smaller than in 1960, when it had been 46·6%, and indeed smaller than 1959, for which the figure was 45·3%. Sheet production in 1961 totalled 10 million metric tons, slightly less than 1960, the decrease being in the production of hot-rolled sheet.

Sheet, in fact, which had been in comparatively short supply practically ever since the war. in 1961 became if anything rather too plentifully available. This easing was due to a slackening in the expansion of demand, resulting from a falling-off in the rate of growth in the motor industry and the fact that exports were now down again from the exceptionally high level recorded in 1960 more particularly for shipments to the United States and the United Kingdom

Production of sections and merchant bars increased from. 1960 to 1961, as did that of heavy plate; production of hoop and strip went down, while production of wire-rod remained unchanged.

In studying these year-to-year movements, it is necessary to bear in mind the long-term trend, which indicates quite as marked a rate of growth in sheet production as in other lines, or more so: nevertheless, they do clearly demonstrate that the tremendous increase in the demand for sheet since the war is not destined to continue indefinitely, at all events not at the same pace.

Intra-Community trade in steel

241. The proportion of total Common Market orders represented by tonnages ordered from one Community country by another rose to 19·9% in 1961, as against 19·2% in 1960 and 18·4% in 1959.

Quite apart from movements in the rate of interpenetration which are governed merely by the prevailing degree of competition as resulting from the general level of business activity, it would appear that for the past three years or so

[1]) See Nos. 377 ff. below.

there has been a steady increase in interpenetration in the Common Market, due more particularly to the fact that production capacity has become distinctly larger in relation to demand. Consumers were long impelled by the dread of running short in a boom period to keep in as well as they could with their traditional suppliers (in their own countries) regardless of price, even when the state of the market was all in their favour, so that if and when a boom developed the suppliers would give them priority. For this reason, after the first upward leap following the introduction of the Common Market in 1953, the rate of interpenetration remained more or less static from 1954 to 1958, varying from 15 to 17% according to the tightness or otherwise in the market. (The rate in 1950-52 had been 10-12%).[1])

Now, however, competition is being carried on in the Common Market in respect of all products, including sheet. With the consolidation of the General Common Market proceeding at the same time, supply arrangements specifically confined to the consumer's own home market are likely to give place more and more to business relations dictated by economic factors.

Side by side with this permanent alteration in pattern, the currents of trade are also affected by the state of the market in the individual countries. Thus the biggest increase in 1961 over 1960 was in deliveries to Italy, owing to the continuing high level of demand there; deliveries to France and Belgium increased slightly, those to the Netherlands remained about the same, and those to Germany fell off sharply.[2])

That the Common Market is a practical fact is demonstrated, incidentally, not merely by the tonnaged traded, but also, and even more markedly, by the interpenetration of prices: as soon as it is seen that a surplus of production is likely to come on offer at lower schedule prices, other

[1]) The figures for the years prior to 1960 are slightly higher than those previously published, as the Saar, which sells substantial quantities to France, has been included for the sake of comparability under Germany.

[2]) See *Statistical Annex*, Table No. 39.

producers will frequently align their own quotations accordingly, even though this may not lead to any increase in the actual volume of trade.

External trade

242. Exports fell off in 1961 for the first time since 1954, from 10,800,000 metric tons of semi-finished and finished products in 1960 to 10,500,000.[1]) This minor downturn is actually only a delayed repercussion of the strike in the American iron and steel industry in 1959, which for some time, up to the end of the first quarter of 1960, resulted in the Community's sending exceptionally large tonnages to the United States and to certain other third countries which normally bought American steel. The category affected by the decrease against the abnormally high 1960 level was that of flat products; exports of sections, on the other hand, continued at the same rate as before.

243. From 1955 to 1959 inclusive, Community steel *imports* ran steadily at about 1 million metric tons a year, and were made up in approximately equal proportions of Treaty semis and Treaty finished products, including more especially high-grade sheet. In 1960, however, they rose to 1,900,000 metric tons and in 1961 topped the two-million mark — a striking increase, made still more so by the fact that it concerned chiefly ingots, semis and coils, and that in 1961 at any rate the Community's own plants were not working to capacity. The largest increases were in imports from Sweden and Spain; those from Austria, however, declined.

The reasons underlying this rise in imports (which it is intended to discuss with the consumers) fall under three heads. The countries bordering on the Community are tending to sell more and more to the Common Market, an understandable development reflecting the latter's power of attraction (although it is true that imports of coils from Austria have gone down and not up, owing to an increase in

[1]) See *Statistical Annex*, Table No. 41.

Community capacity and a slight drop in demand). Spain, where new capacity has recently been installed, has at the moment a surplus of semis for export, while distant countries such as Japan are embarking on price competition with regard to certain products, notably coils. Finally, some other countries, including the Soviet Union, as part of a campaign to develop their trade relations with the Common Market countries are offering to undertake rerolling of coils, with a resulting rise in the rate of utilization of the Community's cold widestrip mills and fall in that of its hot mills.

Prices

The gradual movement in the direction of a buyers' market from the end of 1960 onwards caused a general tendency during 1961 to adjust prices downwards and to reduce price disparities as between different products and different markets.

244. Schedule prices, which in 1960 had undergone no general changes in France, where they had been raised by 5%, were in 1961 reduced for many products in the other Community countries. *The revaluation of the mark and guilder* in March sent up the dollar prices of German and Netherlands steel, but various successive reductions were introduced later for different products. Italian schedules were subjected to all-round cuts in July and August, which finally eliminated the very substantial disparity existing in the early days of the Common Market between Italian and other Community prices: for many products the Italian prices are now lower than the German in the case of open-hearth steel. In Belgium, a number of works which have long followed a highly flexible pricing policy in October 1961 published schedules containing major reductions for certain products. In Luxembourg, although no changes were made in the actual schedules, alignment with other producers' schedules is a particularly frequent practice. The only increase of note in the Community in 1961 took place in France in December, when the prices of sections, beams and high-resistance steels were put up by 3%.

Overall, as a result of the Italian and of certain Belgian and Netherlands reductions, there was some drawing-together of the basis prices ruling in the Common Market, but the considerable gap between the French and the German schedules remained unaltered.

The largest reductions and alignments were for *flat products*, and more especially for tinplate, hoop and strip, sheet and wide strip; fairly substantial ones were also made for wire-rod and reinforcing rods. Details concerning the movement of prices in the different countries will be found annexed[1]).

245. Intra-Community alignment was practised on a considerably increased scale during 1961, serving to some extent to offset the differences among the schedules and to lessen the rigidity of some of them.

As they are subject neither to declaration nor to limitation, intra-Community alignments naturally play a much greater rôle with regard to steel than to coal. The competition thereby made possible within given regional markets enables the areas within the purview of competing producer centres to be kept economically supplied without unduly encroaching on the relative importance of the different centres concerned, and at the same time makes for the fully economic utilization of Community production potential.

Alignment with third-country quotations, which had been notably less popular in 1960, was in 1961 very much to the fore, the total amount sold by this means being 457,000 metric tons as against a previous maximum of 371,000 tons in 1959. Of this total, as in 1959, about half was represented by tinplate, a quarter by coils, and the remainder mostly by heavy plate and certain types of sheet. An increase in alignments with third-country quotations is an indication of an even greater increase in alignments with the lowest schedules in force within the Community.

246. In the United Kingdom all home prices were increased by 1% in June, and there was also a certain increase for

[1]) See *Statistical Annex*, Table No. 45 and Observations.

hoop and strip in November following revision of extras. Generally speaking, British prices remained slightly below the Community level for flat products, and slightly above for most sections.

There was no change in United States home prices, which are well above the Community's except for certain grades of sheet.

247. Taken overall, the *price spread* for the different rolled products, which had remained considerably wider in the Community than either the United Kingdom or the United States, closed up fairly markedly, in the case of the prices actually charged (including alignments) even more than in that of the regular schedule prices. The narrowing of the gap between prices for flats and for other products reflects the progressive adjustment of these to the modern production techniques which have been coming into use in the Community in the course of the last ten years, whose influence on prices had been retarded by the fact that demand so greatly exceeded supply.

Other structural adjustments also began to be made in respect of extras for quality, in order to allow for the alteration in production conditions.

Graph No. 9 shows the spread of export prices, which are the most changeable prices of all. It is of course necessary to take into account the general economic situation, which at the dates selected may be favourable or unfavourable to any given product: thus at the beginning of 1962 the market is relatively better for merchant bars than for heavy plate or wire-rod. These minor deviations apart, the main fact remains that the basis prices for the different products are tending to cluster together within a narrower spread; this has, incidentally, been the case for a good many years in the United States, and to a lesser extent in the United Kingdom.[1])

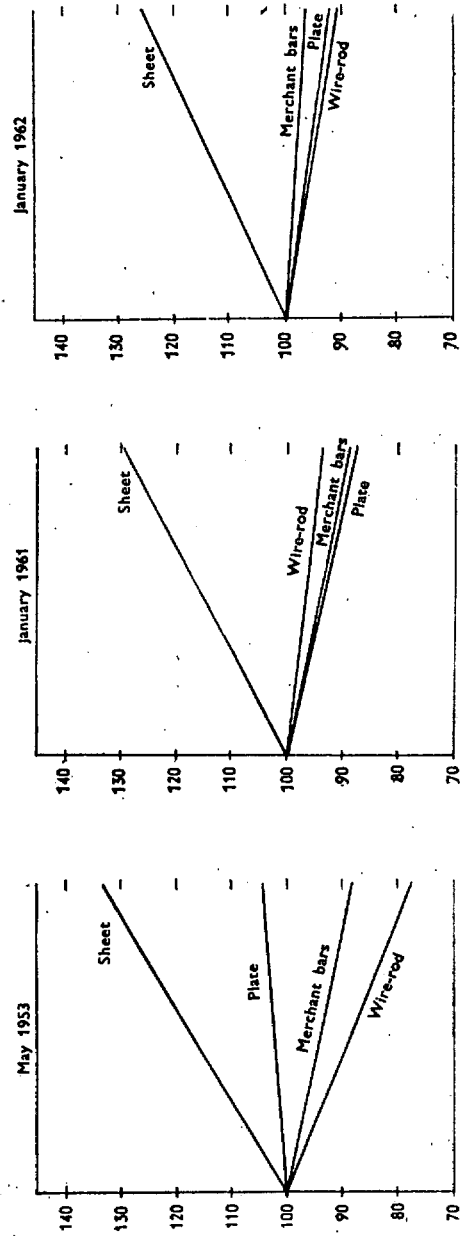
248. Export demand remained substantial, but as supply for the most part exceeded it, export prices in general declined,

[1]) See *Seventh General Report*, p. 116, "Pattern of Prices."

GRAPH No. 9

Changes in Spread of Community Export Prices

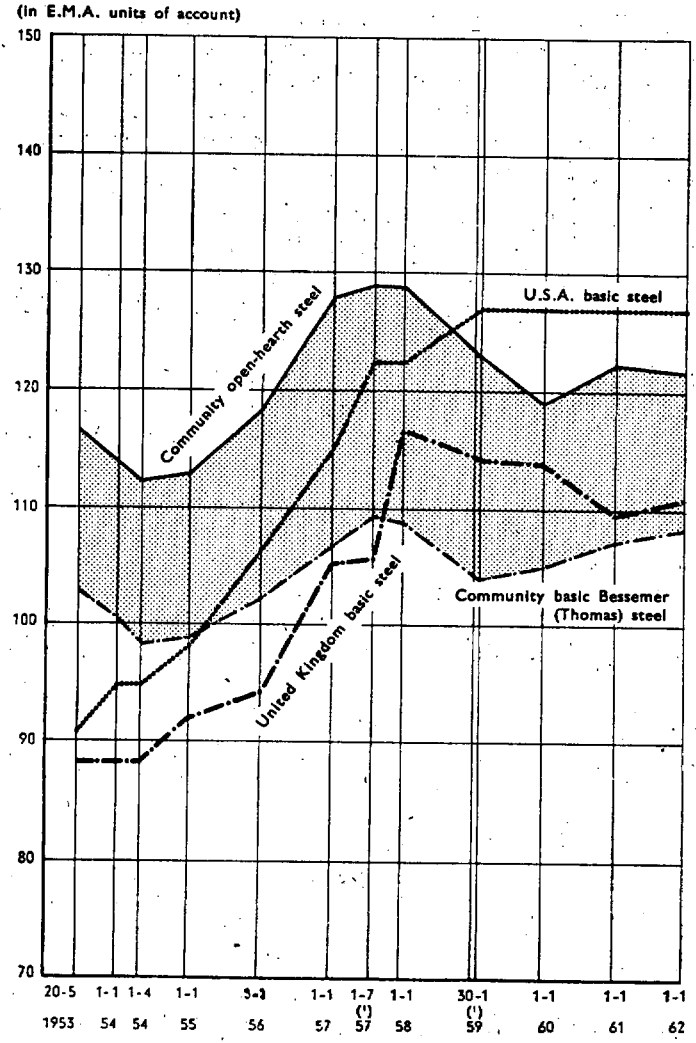
(Price level of four typical products; market prices)
Index: average price for the four products = 100



GRAPH No. 10

Trend in Average Schedule Prices for Steel

Community - United Kingdom - United States



(1) French monetary measures.

despite temporary upturns, throughout 1961. The drop was especially marked in the case of flat products, and in particular of sheet, once the last after-effects of the American steel strike were over and the balance between supply and demand abruptly restored. Prices for wire-rod and reinforcing rods also went down quite considerably. The fall was smaller for sections and merchant bars, but their prices had already been lower at the beginning of the year. In their case, it should be noted that extras for size had been increased in 1960, so that although their basis prices are now down as low as at the beginning of 1959, the net prices are somewhat higher.

At January 1, 1962, export prices were on the average 10% lower than at January 1, 1961, and 20% lower than at January 1, 1960.[1]) Prices for flats were below the lowest point touched during the recession of 1958 and early 1959.

249. United Kingdom published export prices remained pratically unchanged; United States prices were reduced for sections, heavy plate and hoop and strip. These official British and American prices are appreciably higher for all products than the Community's, but do not necessarily represent the prices actually charged, which may be a good deal lower. However, the American industry, whose home prices are high and which is essentially geared to the home market, has up to now in general refrained from differentiating its export prices, which lessens its power to compete.

250. The Community market is being increasingly penetrated in respect of certain products by supplies from some outside countries such as Japan, which are affecting the position not only from the point of view of the actual tonnages concerned (imports, as we have seen, have risen in consequence) but also, and even more so, from the point of view of prices. Some little time must elapse before the Community iron and steel industry can fully react to this new inflow, but its competitive capacity does not seem to be in any danger: indeed amid the keener competition which is developing in the world market its general level of sales was well maintained during 1961.

[1]) See *Statistical Annex,* Table No. 47.

It is nevertheless a fact that considerable progress has been made by its competitors in regard to production techniques, and still more to the types of product turned out; even though some of them are as yet playing only a minor role in the world market, the Community industry will need to work fast on these same aspects in order to maintain its competitive capacity in the future.

THE WORK OF THE HIGH AUTHORITY

Winding-up of the scrap compensation scheme

251. The winding-up of the compensation scheme continued in 1961.

Following its series of Decisions in 1960 concerning measures to put past irregularities to rights,[1]) the High Authority took a further Decision No. 7/61[2]) making changes and additions to the interest arrangements previously in force, in order to allow, *inter alia*, for the incidence of the retrospective corrections to the credit balance due to the enterprises concerned.

Decisions Nos. 18, 19 and 21/60 required the High Authority to arrange for the checking, correction and centralization of the books of the compensation scheme for the period prior to the judgments delivered in the Meroni case in June 1958. The books had previously been kept partly by the Brussels Offices and partly by the various regional bureaux. All entries therein, together with those in the books of the Luxembourg Office, which has been responsible for transactions after the date of the judgments referred to, are now being transferred to punched cards, in view of the many changes which may still be imposed following legal actions before the Court of Justice.

252. The evaluation of the findings of the check-ups on the scrap tonnages declared by enterprises for assessment purposes

[1]) See *Ninth General Report*, No. 249.

[2]) See *Journal Officiel des Communautés Européennes*, April 25, 1961 (fourth year, No. 30).

has now been practically completed. The findings concerning the origin of tonnages passed for compensation are currently the object of various civil and criminal actions before the national courts.

During 1961, the Court of Justice by its judgment on Appeals Nos. 42 and 49/59[1]) upheld the contention that contributions were leviable on so-called "group" tonnages of scrap, and ruled out of order the exemptions granted by the High Authority to two iron and steel enterprises on grounds of local integration.

The High Authority accordingly issued separate Decisions retrospectively rescinding the two exemptions, and rejecting twenty other applications then still before it. Four of its decisions were thereupon contested by Appeals Nos. 14, 17, 19 and 20/61 now pending.

The Court dismissed appeals by a number of Italian enterprises contending that the retrospective action taken with regard to the compensation scheme was incompatible with the observance of Article 60 of the Treaty requiring them to publish their prices.

Four French enterprises also brought actions, Appeals Nos. 19 and 21/60 and Nos. 2 and 3/61, claiming payment through the compensation scheme of certain transport costs within the Community. Two of these cases were disallowed and the other two dismissed.

At the end of the year a further series of appeals were lodged by Italian enterprises asking the Court to declare illegal certain exemption provided for by Decisions Nos. 2/57 and 16/58.

253. The International Market Committee of the European Parliament set up a sub-committee to study the special annex to the Ninth General Report concerning the High Authority's activities in connection with the checking for origin of scrap admitted for compensation. The sub-committee's report was examined by the Committee and then laid before the Parliament, which adopted the following resolution on the subject.[2])

[1]) See No. 33 above.

[2]) See *Journal Officiel des Communautés Européennes*, January 17, 1962 (fifth year, No. 3).

"The European Parliament

"has received its Committee's report and requests the High Authority to take full account of the observations therein contained;

"reminds the High Authority of the obligations incumbent upon it under Article 53 of the E.C.S.C. Treaty regarding financial arrangements common to several enterprises;

"emphasizes that the High Authority should in future not institute or authorize compensation arrangements unless it is convinced that effective deterrent control will be exercised, and requests the Executives, if and when it should be found necessary to authorize or institute compensation arrangements, to take all measures to ensure that such central will in fact be exercised over both the administrative action and the accounting practice adopted in connection with these arrangements;

"requests the High Authority to continue its investigations within the scope of its own terms of reference, and co-operate actively with the national legal and national administrative authorities;

"urges the Governments to take active steps through their own courts in such matters as do not fall within the jurisdiction of the High Authority, in order that the harm done by the irregularities in the operation of the scrap compensation schemes may be made good and the culprits dealt with."

254. As in previous years, the High Authority held a meeting with the consumers' and dealers' representatives at which various problems in connection with cyclical and structural factors in the Common Market for steel were discussed. At these meetings the High Authority is able to explain its approach and activities, while the consumers and dealers have the opportunity to state their own views with regard to the Common Market and the trend in the economic situation.

At the February 1961 meeting the main topics dealt with were the decline in the use of foundry pig-iron and the trend in delivered prices for rolled products in the various

consumer centres. The consumers' observations gave the High Authority a clearer picture of the special problems of the independent blast-furnaces concerned mainly with the production of foundry pig-iron. The meeting also discussed the employment of substitute products in place of steel: it was felt, however, that except in the case of certain special uses, which are of minor importance in relation to total steel consumption, there was little likelihood of any considerable advance by the substitute products.

The High Authority took the opportunity to draw the consumers' attention to the results of the annual survey on capital schemes in the iron and steel industry, emphasizing in particular the substantial increase in the share of the new steelmaking processes.

255. The High Authority also called a meeting of representatives of the rerolling enterprises, to obtain details as to the position in this particular sector. It was again found that notwithstanding the high level of activity in the steel market the rerollers had experienced no special difficulty in securing the semi-finished products they required, supply conditions being notably better than during the earlier outstandingly active period in 1956-57, when a number of rerolling firms had suffered from a shortage of certain types of semis. The improvement had resulted in large part from the expansion of Community capacity for semi-finished products, though even so it was necessary to import large amounts of semis from third countries in order to meet requirements. Concern had, however, of late been caused by the intensification of competition between the rerolling firms and the integrated iron and steel enterprises, as the latter were taking more and more to expanding their own finishing capacity. The resulting problems are to be examined at a later meeting with the rerollers' representatives.

256. In view of the improvement in the supply position regarding wide strip, it was found possible to make a start on the scaling-down of the duty-free import quotas. The restrictions on the export of old rails over 2.50 m. in length were lifted, as these now no longer rank as scrap but as semis for rerolling.

257. The differing interpretations which have gradually developed as to the applicability of the Treaty's provisions to certain categories of salvage scrap and own arisings, were discussed at various levels, and notably by committees of the Council of Ministers. The Council than asked the High Authority to work out a definition and to furnish details concerning the concept of scrap as referred to in Annex II to the Treaty. After consulting the Governments, the High Authority came to the conclusion that the best course was to adopt the definition of scrap contained in the Brussels tariff nomenclature, and submitted a written proposal to this effect to the six Governments on December 22, 1961. It is hoped that their approval will shortly be forthcoming.

258. The High Authority pursued the study undertaken in 1960 in co-operation with the Council of Ministers on structural difficulties in the pig-iron market, and submitted the results to the Governments. The findings were that sales of pig-iron were falling-off, and that the independent blast-furnaces were accordingly working at a low rate of utilization. The contraction was due to several factors. In the first place, the low prices charged by third-country producers had enabled them to increase their share of the market considerably, and also, despite the comparatively limited availabilities, were obliging the Community producers to make substantial cuts when aligning their own prices. In the second place, consumption of pig-iron had ceased to rise. The foundries were engaging in keen competition among themselves, and their sales too were threated by the increasing use of substitute materials, such as plastics and welded products. In the third place, whenever there was a slack period in the iron and steel market the integrated works tended to stop buying steel-making pig and start themselves selling foundry pig instead, thereby further limiting the sales outlets of the independent blast-furnaces. The study also indicated the High Authority's views regarding intervention in case of need. The Council's Technical Committee on Pig-Iron held a fresh discussion on the subject on January 4, 1962.

259. A number of improvements were introduced in the methods used in assessing and forecasting the demand for

steel for the purposes of the quarterly "programmes with forecasts," the annual calculations of requirements for the energy balance-sheets, and the five-yearly General Objectives.[1]) In the short term it is principally the movement of stocks which tends to accentuate the effects of market fluctuations; in the medium term, it is rather the changes produced by technical progress in the specific consumption of raw materials, and in particular of coke.

Section 3: Implementation of the Rules of Competition

PRICING RULES

Price alignments in the coal market

260. The general observations in last year's Report[2]) still apply.

During the period under review the High Authority received only one application for a raising of the tonnage ceiling laid down in its Decision No. 3/58 for sales of coal at prices aligned with other E.C.S.C. producers' quotations. The transaction in question concerned only a small tonnage of coking coal, and was confined to the Belgium/Luxembourg region.

No further enterprises in addition to those already exercising the option were granted authorization to effect alignments in respect of consignments hauled by road.

Publication of steel dealers' prices

261. On December 30, 1961, the High Authority issued an official notice[3]) to the iron and steel enterprises and to the trade concerning publication of steel dealers' prices. In this

[1]) See Nos. 402 ff. below.

[2]) No. 270; see also Nos. 186-188 of this Report.

[3]) See *Journal Officiel des Communautés Européennes*, December 30, 1961, (fifth year, No. 85).

communication the enterprises were reminded that under Article 5 of Decision No. 31/53 and Article 7 of Decision No. 37/54 they were required to insist that their customers (*i.e.* dealers), selling agencies and commission agents publish appropriate price schedules in respect of direct transactions handled by them ("direct transactions" within the meaning of the two Decisions being the consignment of tonnages direct from the producer works to the dealer's or agency's customer).

Steel trading firms are also bound by the terms of Decision No. 30/53, as amended by Decision No. 1/54, when reselling products as bought to observe the provisions in Articles 2-6 of the Decision relating to prohibited practices. Some, however, have not done so, and in view of the increase in trade exchanges in steel between Community countries and in the number of direct transactions handled by dealers the High Authority felt it advisable to bring these provisions to the attention of all the enterprises concerned.

Checks on Community enterprises

262. The following check-ups and investigations were carried out by High Authority representatives in 1961.

(a) Checks on the origin of scrap tonnages admitted by the Compensation office for Imported Scrap in 1954-58.

All checks performable by the High Authority in this connection were completed in 1961; in a number of special cases other investigations are being conducted at the national end, which are being followed with close attention by the High Authority's departments.[1])

(b) Checks on adherence to price-schedules by Belgian collieries under Article 60 of the Treaty.

Checks on the pricing practices of Belgian collieries continued. In view of the special circumstances, the number of technical checks required was increased.

[1]) See also the special annex to the *Ninth General Report*, and No. 251 above.

(c) Checks on financial aid to collieries in respect of excessive accumulation of stocks.

These were completed during 1961 for the 27 collieries listed for checking.

(d) Checks on compliance with the requirements of Articles 60 and 49 of the Treaty, and in particular on adherence to schedules and observance of the rules concerning price publication.

24 spot-checks were carried out during 1961, and inspectors also visited a number of other enterprises to obtain necessary information.

(e) Check under Article 65. One checking operation was conducted with the object of detecting concerted practices in the Community scrap market.

The High Authority had on several occasions to employ the services of trust companies, especially in connection with checks under (a), (b) and (d).

Action taken following checks for compliance by Community iron and steel enterprises with Article 60 of the Treaty

263. On the basis of the reports on the checking operations, disciplinary proceedings under Article 64 of the Treaty were instituted in 18 cases during the period January 1-November 30, 1961. The procedure is in the first place that a letter is sent to the offending enterprise listing in detail the findings of the High Authority's inspectors and requesting it to submit its written comments concerning the irregularities described.

Of the 18 enterprises here in question, six were fined a total of 37,250 dollar units of account under Article 64 of the Treaty. The following are some of the main offences brought to light by the spot-checks:

(a) improper alignments, the "aligned" price being lower than the lowest figure in any competitor's schedule;

(b) payment by the producer of transport costs from his works to the consumer's premises, whereas the schedules in force showed prices ex basing point or ex works;

(c) failure to invoice certain scheduled extras, including in particular extras for quality;

(d) granting of quantity rebates without due cause;

(e) failure to invoice scheduled additional charges for deferred payment;

(f) granting of trade-discounts to dealers without prior publication.

Two enterprises were sent letters of admonition, which will count as aggravating circumstances should the same enterprises be later found guilty of similar irregularities.

Where enterprises were found to have been merely remiss, or to have misconstrued the meaning of the Treaty, explanatory letters were sent.

CARTELS AND CONCENTRATIONS

264. 1961 was marked by a number of important events in connection with the implementation of Articles 65 and 66 of the Treaty. With regard to cartels, action was taken by the Community Institutions (the High Authority, the Council of Ministers and the Court of Justice) concerning the amendment of Article 65 in accordance with the procedure laid down in Article 95, 3-4; with regard to concentrations, the High Authority granted three applications relating to a substantial portion of the Common Market for steel.

Cartels

THE DRAFT "MINOR REVISION" OF ARTICLE 65

265. As was described in last year's Report,[1]) the High Authority, in accordance with a resolution of the European Parliament, in July 1960 proposed to the Council that a Joint Committee be set up to study the possibility of amending certain economic provisions in the Treaty.

[1]) See *Ninth General Report*, No. 23.

The Joint Committee was duly set up in November 1960; it met regularly for some time, and prepared a report which was laid before the Council on March 7, 1961. The report dealt in particular with matters concerning the organization and reconstruction of the coal market, and with various points in connection with the amendment of the provisions on cartels in Article 65.

The High Authority at the same meeting informed the Council of its own conclusions from this preparatory work regarding the suggestion of the German representatives on the Joint Committee that Article 65 should be amended by "minor revision". In the High Authority's view, in order to fulfil the requirements laid down for "minor revision" by Article, 95 3-4, a remodelled Article 65 permitting authorization of joint-selling organizations larger and more powerful economically than the Treaty at present allows would need

(a) to apply to both coal and steel, in accordance with the precedent established by the amendment of Article 56;

(b) to vest the power of authorization exclusively in the High Authority, as did the existing wording in order that there should be no change in the respective competencies of the Institutions;

(c) to be based on and tailored to the need to reorganize the market;

(d) to invest the High Authority with powers of supervision and intervention as a counterpoise to the influence of an organization placed in a position of market dominance.[1])

At its next meeting on May 16 the Council examined practical proposals submitted by the Federal Government for the revision of the Article under Article 95, 3-4. In accordance with the comments put forward at the meeting by the High Authority and the Government representatives, these were then subjected to various alterations and resubmitted to the Council's meeting on June 20, when, after

[1]) See statement by the President of the High Authority, May 8, 1961 (*Débats de l'Assemblée Parlementaire Européenne*, No. 40, VIII/61, p. 13).

introducing a number of further changes, the Council finally, by the five-sixths majority required under Article 95,4 and in agreement with the High Authority, passed the proposals for transmission to the Court of Justice. It should be noted that the Court in examining proposals of this kind has full powers to assess all relevant considerations both practical and legal. After the draft had been gone over once more by the Joint Committee, the High Authority and the Council on July 25 requested the Court for its official opinion on the following text. (For the sake of clarity, the proposed insertions are shown in italics. In the second sentence of Section 2, paragraph 4, formerly the second sentence of Section 2, paragraph 3, the words "in (a) to (c)" have been deleted.)

266. Revised text of Article 65,2:

"However, the High Authority shall authorize agreements to specialize in the production of, or to engage in the joint buying or selling of, specified products, if the High Authority finds

(a) that such specialization or such joint buying or selling will contribute to a substantial improvement in the production or distribution of the products in question; and

(b) that the agreement in question is essential to achieve these results and is not more restrictive than is necessary for that purpose; and

(c) that it is not capable of giving the interested enterprises the power to determine prices, or to control or limit the production or selling of a substantial part of the products in question within the Common Market, or of protecting them from effective competition by other enterprises within the Common Market.

If the High Authority should find that certain agreements are strictly analogous in their nature and effects to the above mentioned agreements, taking into account the application of this section to distributing enterprises, it shall authorize such agreements provided that it finds also that they satisfy the same conditions.

In the event of a fundamental and persisting change in marketing conditions for the coalmining and/or the iron and steel industry, the High Authority may grant the following further authorizations.

(a) *It may authorize agreements designed to ensure adjustment to the new marketing conditions, if it finds*

(i) *that these agreements are such as to achieve adjustment objectives which it recognizes to be appropriate; and*

(ii) *that these agreements are essential to achieve these objectives and are not more restrictive than is necessary for that purpose.*

(b) *It may, in authorizing joint-buying or joint-selling agreements, waive any or all of the requirements listed under 1, c above, provided*

(i) *that there are already in existence agreements of the type defined in (a) above between all the enterprises concerned, or other arrangements designed to achieve adjustment objectives recognized as appropriate by it: and*

(ii) *that these joint-buying or joint-selling agreements are such as to aid the achievement of adjustment objectives recognized as appropriate by it and are calculated to help ensure that the changes in marketing conditions will not result in serious economic and social disturbances.*

Authorizations may be made subject to specified conditions, and may be granted for a limited period. In that case the High Authority shall renew authorizations once or several times if it finds that at the time of renewal the conditions stated above are still fulfilled. *The authorizations referred to in paragraph 3 above shall be valid only for such time as may be necessary to enable the enterprises to adjust themselves to the new marketing conditions. The time-limit shall be so fixed as to allow the adjustment to take a form calculated to avoid economic and social disturbances. The term of an authorization may be extended as and where necessary.*

The High Authority shall revoke or modify an authorization if it finds that as a result of a change in circumstances the agreement no longer fulfils the conditions set out above, or that the actual results of the agreement or its execution are contrary to the conditions required for its approval. *The High Authority shall also revoke authorizations under paragraph 3 above if it finds, in the light of developments in the market and of the social and economic difficulties caused by adjustment thereto, insufficient results are being obtained in the way of adjustment.*

The High Authority shall follow up authorizations under paragraph 3 above by checks to establish whether the agreement is being or is likely to be employed to apportion or exploit the market, or is resulting in any other serious impairment of the operation of the Common Market. If it detects any such abuse, likelihood of abuse or other serious impairment of the operation of the Common Market, it shall address to the organization set up under the agreement all appropriate recommendations for the correction of the situation. If its recommendations are not satisfactorily implemented within a reasonable space of time, the High Authority shall, by decisions adopted after consultation with the Government concerned, lay down prices, conditions of sale and delivery schedules for the organization in question ;or alternatively it may revoke the authorization. If the matter is urgent, the consultation with the Government concerned may take place after the adoption of the decision.

Decisions granting, modifying, refusing or revoking an authorization shall be published together with the reasons therefor; however, the restrictions laid down in Article 47,2 shall not apply to such publication."

Revised text of Article 65,5:

"The High Authority may impose upon enterprises which have concluded a void agreement, or which have enforced or attempted to enforce by arbitration, forfeiture, boycott or any other means a void agreement or decision or an agreement for which approval has been refused or revoked, or which have obtained an authorization by means of information known to be false or misleading, or which engage in practices contrary to the provisions of Section 1 above, *or which infringe decisions of the High Authority adopted under the sixth paragraph of Section 2 above*, fines and daily penalty payments not to exceed twice the actual turnover on the products which were the subject of the agreement, decision or practice contrary to the provisions of this Article; however, if the purpose of the agreement is to restrict production, technical development or investment, this maximum may be raised to 10 per cent. of the annual turnover of the enterprises in question in the case of fines, and 20 per cent. of the daily turnover in the case of daily penalty payments."

267. In their covering communication requesting the Court's opinion, the High Authority and the Council advanced, *inter alia*, the following points in support of the proposed amendments.

In proposing the revision of Article 65, the High Authority and the Council are motivated by the desire to amend the present provisions of the Treaty so as to permit, in view of the radical changes which have taken place in economic conditions and which are directly affecting the Common Market,

(a) the authorization of agreements on adjustment to the new marketing conditions, where such agreements are found to be necessary;

(b) the autorization, provided there are already in existence agreements of the type just referred to or other arrangements such as to achieve adjustment

objectives recognized as appropriate by the High Authority, of joint-buying or joint-selling agreements calculated to aid the achievement of these objectives and to help ensure that serious economic and social disturbances are avoided.

The object of the revision is to amend Article 65 so as to empower the High Authority to authorize such agreements in accordance with the conditions laid down in the draft text, without necessarily having to observe the requirements listed in Section 2, 1, c. The proposed additional powers of supervision and intervention to be vested in the High Authority are designed to prevent any apportionment of exploitation of markets.

The complexe of changes in the market has made it even more necessary for the coalmining industry to adjust itself as fully as possible to the new situation.

All adjustments undertaken should be aimed essentially at establishing the necessary conditions for the rational operation of the mines and increasing the competitive capacity of Community coal.

The basis on which these adjustments are undertaken must depend on the particular circumstances: they may be officially imposed or introduced by individual enterprises of their own accord in line with adjustment objectives, or a combination of both.

It is, moreover, possible that, to ensure the proper coordination of these adjustments, agreements may have to be concluded bringing individual enterprises' plans into line with the overall adjustment objectives. Adjustment, particularly in respect of a group of enterprises, is liable to involve a number of economic, social, regional or Community-level factors going beyond the particular field of any one enterprise. It may be difficult, and even impossible, to achieve the adjustment objective given, *inter alia,* the scale of the action to be taken and the structural differences among enterprises located within the same producer area and selling to the same consumers.

In such cases it may be necessary to facilitate the achievement of the adjustment objectives by the

conclusion of joint-buying or joint-selling agreements designed more particularly

(a) to prevent all-out competition and commercial practices conducted purely with an eye to immediate advantage and commonly at variance with the more permanent elements of competition;

(b) to avoid serious economic and social disturbances such as might occur during the process of adjustment as a result of ill-regulated commercial practices liable to impede that process.

Joint adjustments might be undertaken in respect of a group of enterprises accounting among them for a substantial proportion of the products concerned in the Common Market. The authorization of joint-buying or joint-selling agreements in such cases, though calculated to make for rational and orderly adjustment, would contravene the restrictions laid down in Article 65,2,1,c. It is therefore necessary that the High Authority should be empowered to waive any or all of the requirements listed in Article 65,2,1,c.

On September 28, 1961, the Court submitted a list of questions in writing both to the draft text itself and to the necessity of revising the Article. The High Authority and the Council replied in writing on October 27, and on December 13 the Court finally handed down its Ruling No. 1/61.[1])

268. Points made by the Court in its ruling included the following.

(a) In principle, Article 95 does not bar modification of the rules concerning the exercise of the power vested in the High Authority under Article 65 by the amendment of Section 2 thereof so as to empower the High Authority to authorize either agreements of a character other than that provided for by the existing terms of the Article but tending to the same end, or agreements of the same

[1]) The full text of the Ruling, together with the grounds and the documentary material on which the Court based itself, will be published in a forthcoming issue of the Compendium of Community Case Law (Volume VII, Part 5).

character but tending to another end, or agreements of another character and tending to another end.

(b) It is, however, essential that the revised text should clearly specify what the character and end of an agreement must be to qualify it for authorization, inasmuch as otherwise the effect would be not to modify the exercise of a power already vested in the High Authority within the limited field of the exceptions permitted by Article 65,2 but to confer a power of undefined scope, *i.e.* to produce so great and indeterminate an extension of existing competences as to constitute a change in kind and not merely in degree: in other words, a new power.

(c) Article 65,2,1,c provides, with regard to the authorization of specialization and joint-buying and joint-selling agreements, for a system of prior examination; that system cannot, by revision under Article 95,3, be abandoned and replaced by a system of subsequent checking and direct intervention. Such a change would amount not to a mere modification of the High Authority's powers, but to the conferment of a new power.

(d) The "exception" clause of Article 65,2 contains one objective criterion, namely the circumstance of an agreement's relating to "a substantial part of the products in question within the Common Market." By reference to this criterion it is possible to establish under what conditions an agreement would be in any event incompatible with the prohibition contained in Article 4, d and in Article 65,1, Article 4,d constituting an entrenched principle the regulations for whose implementation are laid down in Article 65.

(e) This being so, the institution, by revision under Article 95,3, of an entitlement to waive the limitations laid down in Article 65,2,1,c is to be regarded as an infringement of the prohibition contained in Article 4,d.

The Court's final view was therefore that the draft amendments to Article 65 submitted by the High Authority and the Council of Ministers "are not in conformity with the provisions of Article 95,3-4 of the Treaty, inasmuch as

(a) the proposal to make agreements on adjustment to the new marketing conditions eligible for authorization under Article 65,2 amounts to more than an adjustment of the rules governing the High Authority's exercise of the powers vested in it by the terms of the Article;

(b) the proposal to permit the waive of any or all of the requirements of Article 65,2,1,c amounts to more than an adjustment of the rules governing the High Authority's exercise of the powers vested in it by the terms of Article 65,2 and moreover infringes the terms of Article 4,d of the Treaty."

269. At the Council's meeting on January 23, 1962, a preliminary discussion was held on the position as resulting from the Court's ruling. It was not known at the time of going to press at what conclusions the Council and the High Authority were likely to arrive.

BUYING AND SELLING ORGANIZATIONS

Ruhr coal-selling agencies

270. The Ruhr collieries' appeal to the Court of Justice against the High Authority's Decision declining to authorize the establishment of a single selling agency had not yet been heard at the time of going to press. The Government of Land North Rhine/Westphalia was admitted as an intervening party; the preliminary written proceedings were completed, but at the request of the appellants and the intervener the President of the Court on October 26, 1961, deferred the date of the hearing itself. After the Court had issued its ruling on the proposed amendment of Article 65, on December 13,[1]) the date of the hearing was fixed for February 1, 1962.

The interim arrangement authorized by the High Authority's Decision of June 22, 1960,[2]) remained in force.

[1]) See No. 268 above.

[2]) See *Ninth General Report*, No. 273, and Decision No. 17/60, *Journal Officiel des Communautés Européennes*, July 23, 1960, (third year, No. 47).

271. By its Decision of February 8, 1961,[1]) the High Authority gave its verdict on the Ruhr coal-selling agencies' applications concerning reference tonnages for the admission of dealers to the status of direct-buying whole-salers.

The substance of the new admission regulations is as follows:

(a) dealers seeking admission to direct-buying status must during the previous coal year have sold not less than 6,000 metric tons of hard coal, hard-coal coke or brown-coal briquettes from the agency concerned;

(b) temporarily, coal wholesalers in France need show only that they have during the coal year 1960-61 sold not less than 2,500 metric tons of hard coal, hard-coal coke or brown-coal briquettes from the agency concerned;

(c) as a further concession, wholesalers who have not previously been supplied direct and are seeking admission for the first time may include in the required total of 6,000 metric tons consignments bought by them indirectly from two or more selling agencies: if the combined tonnage so arrived at is sufficient, they may then apply for admission to any one of the three Ruhr agencies as direct-buying wholesalers.

In addition, two changes were made in the previous system:

(a) the division of the Common Market into seven sales areas is abolished;

(d) dealers seeking admission to direct-buying status are no longer required, as heretofore, to have offices in the sales areas in which they propose to operate, or to show that they market a wide range of types and grades of coal.

Contrary to the apprehensions voiced by the wholesalers' association when the High Authority's Decision came into force, the new system has not produced the predicted upheavals in the pattern of the Ruhr coal wholesale trade.

[1]) See Decision No. 3/61, *Journal Officiel des Communautés Européennes*, February 18, 1961 (fourth year, No. 14), and No. 282 below.

The most obvious consequence of the new reference arrangements — which do admittedly include special transitional provisions in respect of operators in France — has been that French firms too have from April 1, 1961 onwards been acting as direct-buying wholesalers of Ruhr coal. Also, the abolition of the sales areas has meant increased scope for the different wholesalers.

First figures to hand, overall but exclusive of French participation, indicate that the new regulations have resulted in a 10% increase in the number of admitted wholesalers in effective competition, the total at the beginning of the coal year 1961-62 being 318.

Cobechar

272. The reorganization of the Comptoir Belge des Charbons ("Cobechar") is still in abeyance. At the end of March 1961 Cobechar withdrew the application referred to in last year's Report, and asked for a respite in which to work out a system in conformity with the Treaty for the marketing of Belgian coal. The deadline, initially fixed at June 30, 1961, was subsequently three times extended by three months.

In granting these extensions, the High Authority was primarily concerned not to cramp the style of the talks begun by it with the Belgian Government towards the end of 1961 (which have so far produced no satisfactory results),[1]) and to enable a formula compatible with the Treaty to be hammered out for the distribution of Belgian coal.

Saarlor

273. The joint selling of fuels from the Lorraine and Saar collieries through the Franco-German joint-stock company Saarlothringische Kohlenunion or Union Charbonnière Sarro-Lorraine ("Saarlor"), was originally authorized by the High Authority on November 14, 1959, up to December 31, 1961,[1]) the expiry date of the convention between the Houillères du Bassin de Lorraine and the Saarbergwerke. On Novem-

[1]) See No. 283 below.

[1]) See *Eighth General Report*, No. 94.

ber 7, 1961, however, the two parties informed the High Authority that they intended to renew the convention, with certain minor textual and technical alterations, up to December 31, 1965, and requested a corresponding extension of the authorization.

The proportion of the two coalfields' production sold through Saarlor had increased between 1958 and 1960, the Saar's share rising from 11% to 20%, and Lorraine's from 3·6% to 5·8%. Nevertheless, Saarlor's overall share of total Saar and Lorraine sales works out at only about 15%.

The High Authority came to the conclusion that the grounds on which the 1959 authorization had been granted still held good, and accordingly decided, on November 20, 1961, to pass the application for an extension.[1])

Specialization and joint-selling agreements

274. By a Decision of March 22, 1961,[2]) the High Authority approved agreements between the two German iron and steel enterprises Hüttenwerke Salzgitter-Drütte, and Ilseder Hütte, Peine.

It considered that the specialization of production schedules provided for by the agreements — Ilseder-Peine ceasing to make certain flat products and tubes, Salzgitter undertaking not to produce certain sections and pilings — would make for better and prompter service to customers and help to increase output and reduce costs. Also, it considered that the provisions in the agreements relating to the joint selling of merchant bars (mainly through Illseder's sales organization) and the rules laid down for the marketing of other products, were calculated to improve the distribution of the products in question.

The High Authority took the view that, having regard to the volume of production and sales concerned, the agree-

[1]) See *Journal Officiel des Communautés Européennes*, December 30, 1961 (fourth year, No. 86).

[2]) See *Journal Officiel des Communautés Européennes*, April 8, 1961, (fourth year, No. 25).

ments were not such as to enable the two enterprises to determine prices or control or limit the production or sale of a substantial part of the products in question within the Common Market, or to protect them from effective competition by other enterprises within the Common Market.

Dealers' cartel

275. The High Authority learned that a number of dealers in iron and steel products were preparing agreements for the introduction of minimum prices and sales quotas in one part of the market. When the practical and legal position was made clear to them, however, the dealers abandoned the scheme.

Concentrations

During 1961 the High Authority gave rulings on the following concentration projects.

STEELMAKING/STEEL TRADE

276. Three applications were received relating to one important section of the Common Market for steel, namely plans for the acquisition of a majority holding.

in Stahlwerke Bochum AG. by the firm of Otto Wolff,
in Stahlwerke Rasselstein AG. by August Thyssen-Hütte AG., and
in Handelsunion AG, by August Thyssen-Hütte AG.

August Thyssen-Hütte, Stahlwerke Bochum and Stahlwerke Rasselstein are makers of sheet, while Handelsunion, the biggest German holding company in the steel trade, markets a particularly high percentage of the plate and sheet produced by Dortmund-Hörder Hüttenunion and by Hüttenwerke Siegerland, which is controlled by Dortmund-Hörder. In view of the important position occupied by the producers referred to in the German market for flat products, and especially for sheet, and of the possible effects of the projected

concentrations on the structure of the market, the High Authority examined the three cases together, although a separate Decision would of course be required for each. It ultimately ruled as follows.

Otto Wolff/Stahlwerke Bochum AG.

277. The High Authority authorized the acquisition by Otto Wolff of a majority of the shares in Stahlwerke Bochum AG.

Stahlwerke Bochum is a steelmaking firm, Otto Wolff an enterprise engaged in the distribution of iron and steel products, and controlling a number of other companies. On the production side, Otto Wolff controls or is directly or indirectly concentrated with two steelmaking firms, Stahlwerke Rasselstein AG., Neuwied, and Neunkirchen Eisenwerk AG. (formerly Gebr. Stumm G. m. b. H.), Neunkirchen. Accordingly, its acquisition of control over Stahlwerke Bochum also constitutes a concentration among the three steelmaking enterprises.

The crude-steel production of the enterprises thus directly or indirectly concentrated is inconsiderable, amounting to only 4.7% of total German and 2.2% of total Community production; for finished rolled products the proportions are rather higher, working out in the case of sheet at 22% and 6.9% respectively.

Since the concentration planned was unconnected with the two August Thyssen projects, and since the production percentages just mentioned — owing, *inter alia,* to the fact that the processing is done at the works themselves — were not such as appreciably to affect the supplies or sales of the enterprises concerned, the High Authority's conclusion was that the conditions required for authorization under Article 66,2 of the Treaty were fulfilled.

August Thyssen-Hütte AG./Handelsunion AG.
August Thyssen-Hütte AG./Stahlwerke Rasselstein AG.
Dortmund-Hörder Hüttenunion AG./Establech Gesellschaft für Eisen-, Stahl- und Blecherzeugnisse m. b. H.

278. At its meeting on September 27, 1961, the High Authority granted authorization in respect of three concentrations which are in practice interlinked, *viz.*

(a) acquisition of a majority holding in Handelsunion AG. by August Thyssen-Hütte AG.;

(b) acquisition of a 50% holding in Stahlwerke Rasselstein AG. by August Thyssen-Hütte AG.;

(c) acquisition of a majority holding in Establech Gesellschaft für Eisen-, Stahl- und Blecherzeugnisse m. b. H. by Dortmund-Hörder Hüttenunion AG.

The High Authority felt able to authorize August Thyssen's acquisition of control over Handelsunion after the various firms affected had taken certain steps to obviate the possibility of any restriction of competition as a result of influence exerted by Thyssens through Handelsunion on two other steel producers: the latter, Dortmund-Hörder Hüttenunion and its subsidiary Hüttenwerke Siegerland, sell a considerable proportion of their production through Handelsunion, and not possessing a sales organization of their own had hitherto been largely dependent on this channel.

Dortmund-Hörder acquired control of Establech G. m. b. H., which with its own subsidiary Hansa Eisen G. m. b. H. forms a sizeable steel trading concern. Dortmund-Hörder and Siegerland on the one hand and Handelsunion on the other further contracted an agreement providing for guatantees of deliveries and procurements, and for the gradual scaling-down of deliveries over several years until the percentage of sales through Handelsunion should be not greater than the usual rate for sales by German iron and steel enterprises through independent dealers. There can thus be no restriction of competition in these respects between August Thyssen-Hütte and the Dortmund-Hörder group.

To ensure proper observance of the agreements, the High Authority made it a condition of authorization that August Thyssen-Hütte, as the majority shareholder in Handelsunion, should see to their implementation. Another condition was that Thyssens should give up its minority holding in Siegerland, in order to break off also this link between it and the Dortmund-Hörder group.

August Thyssen-Hütte's acquisition of a 50% participation in Stahlwerke Rasselstein AG. does not amount to establishment of exclusive control, since the other half of the Rasselstein shares is held by Otto Wolff, and the enterprise can therefore be only jointly controlled by the two together. Nor does the operation constitute a concentration between August Thyssen-Hütte and Otto Wolff.

The directly and indirectly concentrated enterprises account for 12·1% of total German and 5.7% of total Community production of crude steel, and 10.5% of German and 5·7% of Community production of finished rolled products.

In the case of sheet, in which sector Thyssens and Otto Wolff have other interests in addition to their participation in Stahlwerke Rasselstein, an assessment of the effects of the concentration must take into account more than the mere production of the enterprises concerned. Even though joint control does not amount to concentration between the controlling firms, there is bound in practice to be some restriction of competition in respect of their production outside of the enterprise they jointly control. However, even so, the High Authority calculated that the share of the German sheet market so controlled was only approximately 20%.

Subject to the condition that Thyssens' participation in Rasselstein should be limited to 50%, and that the arrangement between the enterprises concerned whereby the products of Rasselstein were sold exclusively through Otto Wolff should remain in force, the High Authority granted the authorization requested, inasmuch as its conclusion, having regard to the whole of the position *de facto* and *de jure*, was that the requirements of Article 66,2 were fulfilled. A proviso was added to the effect that in the event of any change in that position the contracting parties must submit a fresh application under Article 66,1.

Finally, with regard to the acquisition of a majority holding in Establech by Dortmund-Hörder, which had hitherto had no special distributor of its own, the High Authority readily authorized the operation, un view of the volume of production and sales of the respective enterprises.

STEELMAKING/STEEL PROCESSING

Mannesmann AG., Düsseldorf/Lanninger-Regner AG., Frankfurt-am-Main

279. Mannesmann AG., Düsseldorf, received authorization on September 27, 1961, to acquire the shares of Lanninger-Regner AG., Frankfurt.

Mannesmanns is a coal and steel-producing concern, Lanninger-Regner a processing enterprise with a small consumption of coal and steel.

Mannesmanns has held a majority of the stock capital of Lanninger-Regner since 1955, but by the terms of various special agreements concluded at the time did not acquire actual control within the meaning of Decision No. 24/54. Now the agreements in question have expired, and Mannesmanns is taking over control along with the remainder of the shares.

The High Authority considered that the concentration would not place the enterprises concerned in a position to restrict competition in a manner contrary to Article 66 of the Treaty.

Phoenix-Rheinrohr AG., Düsseldorf/Officine Meccaniche e Fonderie A. Bosco S.p.A., Turin

280. The High Authority granted Phoenix-Rheinrohr AG. authorization to acquire a majority holding in Boscos.

Bosco's annual consumption of steel and steel products is less than 3,000 metric tons. The concentration is not such as to produce any change in the position of either enterprise in the Common Market.

STEEL/SCRAP TRADE

Verenigde Utrechtsche IJzerhandel N. V., Utrecht (VUIJ) / Koninklijke Nederlandsche Hoogovens en Staalfabrieken (Hoogovens)

281. At its meeting on July 19, 1961, the High Authority decided that there were no grounds for refusing permission to Koninklijke Nederlandsche Hoogovens en Staalfabrieken to acquire a minority holding in Verenigde Utrechtsche IJzerhandel N. V.

Hoogovens is the largest iron and steel enterprise in the Netherlands, VUIJ a commercial firm engaged principally in the srap trade.

The High Authority felt that while the arrangements in connection with this participation enabled Hoogovens to exercise control over VUIJ within the terms of Decision No. 24/54, they did not give Hoogovens the power to evade the rules of competition as laid down in Article 66 of the Treaty.

Cases taken up; cases disposed of[1])

TABLE 34

Cases under Article 65

Country	Taken up	Disposed of					
		Authorized	Prohibited	Article 65 not applicable	Cartels voluntarily dissolved	Otherwise handled [1])	Total
	1) *Cases examined following application for authorization*						
Germany (Fed. Rep.)	33	15	1	10	2	1	29
Belgium	14	4	—	5	2	—	11
France	39	6	—	21	—	—	27
Italy	11	2	—	6	—	—	8
Netherlands	4	—	1	1	1	—	3
Total	101	27	2	43	5	1	78
	2) *Cases examined by the High Authority on its own initiative*						
Germany (Fed. Rep.)	61	1	3	49	1	—	54
Belgium	9	—	—	4	—	—	4
France	30	—	—	15	1	8	24
Italy	3	—	1	2	—	—	3
Luxembourg	1	—	—	—	1	—	1
Netherlands	7	—	—	5	—	—	5
Community	3	—	—	—	—	—	—
Total	114	1	4	75	3	8	91
Grand Total	215	28	6	118	8	9	169

[1]) The category "otherwise handled" also covers cases held in abeyance pending receipt of further particulars.

[1]) For explanations concerning arrangement of the tables, see *Ninth General Report*, No. 288.

TABEL 35

Cases under Article 66

Country	Taken up	Disposed of						
		Authorized	Examined under Article 65,5	Concentrations effected before signing of Treaty	Exempt under regulations implementing Article 66,3	Article 66 not applicable	Otherwise handled[1])	Total
	1) Cases examined following application for authorization							
Germany (Fed. Rep.)	51	28	—	3	—	10	1	42
Belgium	12	4	—	2	2	4	—	12
France	28	7	1	—	—	12	—	20
Italy	3	1	—	—	—	1	—	2
Luxembourg	4	2	—	2	—	—	—	4
Total	98	42	1	7	2	27	1	80
	2) Cases examined by the High Authority on its own initiative							
Germany (Fed. Rep.)	26	3	—	2	1	16	3	25
Belgium	15	—	—	—	1	10	—	11
France	19	2	—	2	1	10	—	15
Luxembourg	2	—	—	1	—	1	—	2
Netherlands	2	1	—	—	—	—	—	1
Community	2	—	—	—	—	2	—	2
Total	66	6	—	5	3	39	3	56
Grand Total	164	48	1	12	5	66	4	136

[1]) The category "otherwise handled" also covers cases in which applications were withdrawn or the projects dropped.

FRENCH OFFICIAL REGULATIONS GOVERNING PURCHASES OF COAL FROM OTHER COMMUNITY COUNTRIES

282. As was announced to the European Parliament in the statement by President Malvestiti on May 8, 1961, the legal action concerning the French official regulations governing purchases of coal from other Community countries was settled privately between the High Authority and the French Government early in 1961.

The French Government then introduced the following changes in the regulations (Decree of February 14, 1961, and

E.C.S.C. Official Notice No. 31, both published on February 15, 1961):

(a) the prohibition on the placing of orders direct by French purchasers with non-French dealers in the Community was lifted;

(b) the function as buying agent of the Association Technique de l'Importation Charbonnière (A.T.I.C.) was abolished: consequently, since A.T.I.C. will in future act only as the statutory official representative of the actual purchasers, it will no longer be able to consolidate their reference tonnages for the purposes of compliance with the trading regulations of non-French producers.

In addition, the French Government proposed that the High Authority should exercise supervision over A.T.I.C.s' activities in connection with coal from other Community countries.

In view of the new position resulting from the French Government's action, the High Authority on February 14, 1961, rescinded its Decision of December 18, 1957, while reserving judgment as to the compatibility of the revised regulations with the Treaty until such time as the results of its supervision of A.T.I.C.'s activities could be seen.

The way was thus now clear for the withdrawal of the appeal brought by the French Government against the Decision in question.

It was specifically stated that the High Authority in adopting its Decision of December 18, 1957, had not intended to give a ruling on the question of the movement of coal from third countries within the Community, and that it was also not the intention of the French Government to raise this issue in this connection. Both parties therefore reserved their respective positions on this point.

Similar reservations were made in respect of A.T.I.C.'s functions in the matter of transport.

The case having been settled out of court, the position in regard to purchase of coal from other Community countries now stands as follows.

(a) French consumers and dealers fulfilling the tonnage requirements listed in the French regulations will be entitled to buy direct tonnages (*i*) offered by producers and available at pits, coking-plants or briquetting-plants in another Community country or (*ii*) offered by dealers and available either at pits, coking-plants or briquetting-plants or on dealers' premises in such a country.

French buyers must also fulfil the requirements laid down in the trading regulations of the non-French producers.[1])

(b) In order to procure coal from other Community countries, French buyers must employ A.T.I.C. as their official representative for the conclusion and implementation of the contracts, including payment and transport.

The supervision arrangement will enable the High Authority to ascertain whether A.T.I.C. is observing the revised French regulations concerning purchases of coal from other Community countries, and whether the operation of the system as a whole poses any practical problems in relation to the rules of operation of the Common Market. The work of supervision has been entrusted to M. Léon Daum, former Member of the High Authority.

THE BELGIAN COAL BOARD

283. By an Act of Parliament of November 16, 1961, the Belgian Government established a Board to be known as the Directoire de l'Industrie Charbonnière.[2])

In its account to the Senate[3]) of its reasons for introducing the Bill, the Belgian Government argued that the state of the coalmining industry called for a structural remodelling which was bound to entail the scaling-down of

[1]) See Decision No. 3/61, *Journal Officiel des Communautés Européennes*, February 18, 1961 (fourth year, No. 14), and No. 271 above.

[2]) See *Moniteur Belge*, November 23, 1961 (131st year, No. 280).

[3]) 1961 Extraordinary Session, July 6, 1961.

production. To cushion the economic and social impact, it would be necessary to phase the closures of capacity over a period while at the same time conducting a redevelopment programme. If transitional adjustments were not introduced at a very early date, the phasing would perpetuate the imbalance between production and sales to the extent of making it doubtful whether even that capacity which was still economic could be retained. The Belgian Government felt that the best way to ensure that these adjustments were made was to set up a joint Board (*Directoire*) with powers of decision and supervision, to which the collieries would be answerable.

284. The powers of the Directoire are set forth in Article 4 of the Act of November 16, 1961 which runs as follows.

Article 4

Within the framework of the energy policy laid down by the Government, the Directoire shall be required, in so far as is compatible with the implementation of the Treaty establishing the European Coal and Steel Community,

(1) to record, approve and where necessary fix the price schedules and conditions of sale for coal and for all products and residues obtained by the cleaning and processing thereof, and price alignments authorized under Chapter Five of the Treaty establishing the European Coal and Steel Community, and to register long-term sales contracts;

(2) to draw up production schedules, relating both to tonnages and to grades, for the industry as a whole, to arrange if necessary for the allocation of production and sales as among enterprises, and to regulate the sale and utilization of carbonaceous rejects obtained in the cleaning of coal and from the spoil-tips;

(3) to assist in the framing of import and export policy in respect of solid mineral fuels. and to propose appropriate action to the Government;

(4) to co-ordinate the investment programmes to be carried out by the coalmining industry, to examine and channel applications for financial assistance submitted by the enterprises to the financing institutions and make recommendations to the latter concerning the allocation of the funds available, and to take decisions with regard to the installation of one or more plants or services to be jointly operated by several collieries;

(5) to ascertain and check the collieries' production costs, to analyze cost items and follow the movement of these, and to

compute the effects of the level of selling prices on the volume of possible production;

(6) to assess the financial sums required to carry out the production programmes, and inform the Government accordingly;

(7) to give instructions for the closure of pits whose production is permanently impairing the balance of the market or whose costs are higher than is compatible with a satisfactory price level;

(8) to submit proposals to the Government regarding State participation in existing or future enterprises in mining areas, the object of which is to work, valorize or help valorize hard coal and derivates thereof;

(9) to give instructions for such sub-leasing, assignment or merger of mining concessions as may be deemed necessary for the purpose of improving output and costs, and to lay down the procedure therefor;

(10) to promote the institution of one or more selling agencies operating on behalf of several collieries, or if necessary itself to organize such agencies;

(11) to furnish to the Commission National Mixte des Mines all details concerning the improvement of miners' status and terms of employment and of their standard of living;

(12) to lay down, by agreement with the appropriate Government departments, the social policy to be pursued by enterprises with regard to recruitment, training, housing, health, personnel transport and, in general, all social matters other than those dealt with by the employers' and workers' joint committees;

(13) to furnish to the Advisory Board of the Coalmining Industry and the provincial Advisory Boards provided for by the terms of Title II hereof such information as they may need in the performance of their duties;

(14) to draw up standard regulations with regard to accounting, and more especially with regard to the establishment of the cost-accounting plan, the rates of depreciation, the balance-sheet and the profit and loss account, and to see to it that these regulations are observed by all the enterprises answerable to it;

(15) to promote all efforts to work out appropriate ways and means of increasing the market value of coal or of extracting by-products and derivates therefrom, and to cause certain projects in these connections to be carried out by research centres;

(16) to keep a watch on the collieries' activities, and to bring to the Government's notice any situation the continuance or further development of which would be contrary to the general interest.

285. Clearly, there can be no question of the Directoire's enjoying powers not in line with the requirements of the Treaty. Talks are in progress between the High Authority and

the Belgian Government, with the object of defining the exact bounds of the respective competences involved. The High Authority considers it essential that the matter should be settled at an early date.

Section 4: Transport

GENERAL OBSERVATIONS

286. Although the High Authority's work in the transport field during the first few years of the Common Market was effective in certain sectors, and in particular produced major results with regard to rail transport, more recently, despite its unremitting efforts, no overall solution has been secured to the problem of publication of rates and conditions of carriage.

This state of affairs is making it impossible to achieve the objectives of the Treaty either in the inland water-transport or in the road-haulage sector (a steadily-increasing proportion of Treaty products is, incidentally, coming to be hauled by road,[1]) and is moreover liable to impair the usefulness of the results already achieved in the case of rail transport.

Up to now, for lack of adequate data on the other modes of transport, the published railway tariffs have had to be used as a reference basis for much of the traffic within the Community. There now seems to be a definite trend towards the conclusion of individual secret contracts, in respect not only of internal but also, recently, of international traffic, in which field the only rates and conditions of carriage really known are those of the railways.

MARKET TRANSPARENCY IN RESPECT OF TRANSPORT

Background

287. When its lengthy negotiations with the Governments respecting road haulage finally came to nothing, the High

[1]) See No. 306 below.

Authority found itself obliged in February 1959 to issue its Decision No. 18/59 concerning publication or notification to it of road-haulage rates and conditions.[1])

The Decision was subsequently reversed by the Court's judgments of July 15, 1960, which defined the High Authority's powers in the matter and the procedure to be followed by it *vis-à-vis* the Governments to induce them to ensure the achievement of the objectives of the Treaty, but did not clarify the basic problem of the Treaty's actual requirements as to publication of rates and conditions of carriage having a bearing on the proper operation of the Common Market. It was thus left to the High Authority to work out a new approach for itself.[2])

The problem of ensuring that prices and conditions of carriage were made known was not confined purely to the road-haulage sector: various important points in connection with either modes of transport had to be left open pending the Court's judgments, since any action taken to deal with them would of course have to be in line with the ruling given. An increasing proportion of rail traffic in certain Community countries is being effected under unpublished contracts: in the case of the Netherlands, indeed, this has latterly been so for most consignments of Treaty products travelling by rail within the country. Furthermore, the High Authority has been unable to secure a satisfactory position with regard to international transport on the Rhine and on waterways west of the Rhine.

Failure to dispose of the publication problem has in its turn made it impossible to deal with other outstanding difficulties, such as the elimination of discriminations in rates and conditions of carriage in the inland-water-transport and road-haulage sectors, and the substantial reductions made in their rates by the railways of the Community in order to meet competition from other carriers, and particularly from the road hauliers.

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[1]) See *Journal Officiel des Communautés Européennes*, March 7, 1959 (second year, No. 14).

[2]) See *Ninth General Report*, Nos. 39 and 298.

The High Authority has therefore had to concentrate on working out an overall solution to the problem as a whole.

Recommendation No. 1/61

288. In accordance with its new approach, the High Authority on March 1, 1961, addressed to the Governments of the member States its Recommendation No. 1/61[1]) concerning the publication or notification to it of all rate schedules, charges and regulations in respect of transport of coal and steel.

In conformity with Article 14 of the Treaty, and having due regard to the rulings of the Court, the Recommendation laid down definite compulsory objectives to be achieved, but left the methods adopted for the purpose to the discretion of the Governments.

As regards the objectives, the Recommendation required the Governments "to take all appropriate action, general or individual, to ensure that rate schedules, charges and regulations of every description respecting transport of coal and steel within the Community are published or notified to the High Authority, publication or notification to be effected in a measure, manner and form calculated to conduce to the application by carriers of rate schedules, charges and regulations such as to offer comparable price conditions to consumers in comparable positions, and to the implementations of measures instituted or to be instituted for the introduction of international through-rates and the harmonization of rates and conditions of carriage."

The action in question, it was specified, must be taken in such a way as to promote the proper operation of the Common Market as indicated by the Treaty (in particular by Articles 2-5 and Article 60) and by the High Authority's Decisions issued in implementation of these Articles.

The Governments were further required "to take all appropriate action, general or individual, to ensure that a

[1]) See *Journal Officiel des Communautés Européennes*, March 9 and 25, 1961 (fourth year, Nos. 18 and 19).

check can be kept on compliance with present and future enactmens and regulations relevant to the objectives defined in the Recommendation, and disciplinary measures be taken in respect of any infringements."

Unlike Decision No. 18/59, Recommendation No. 1/61 related not to one mode of transport only, but to all, though allowing account to be taken of the special features of each.

289. The Recommendation indicated that the Governments must take the action specified by December 31, 1961, at latest or should it be necessary to pass an Act of Parliament or adopt any other procedure involving a certain delay before the action itself could be taken, that the procedure in question must be put in hand not later than that date.

To enable the High Authority to examine beforehand whether and to what extent the action the member States planned to take was in fact adequate to achieve the objectives, the Recommendation stipulated that the Governments must submit an outline of that action by October 31, 1961.

The Governments submitted by December 31, their proposals as to the steps they intended to take to fulfil the various obligations incumbent on them under the Recommendation. The High Authority is now studying these to see how far they measure up to the Recommendation's requirements.

The same two Governments as had earlier appealed to the Court against Decision No. 18/59, these of Italy and the Netherlands, lodged a further appeal asking the Court to reverse Recommendation No. 1/61.

290. On July 19, 1961, the Charbonnages de France adducing various points showing them to have a definite interest in the outcome of the dispute, applied to the Court for permission to intervene as a third party in Case No. 9/61, the Netherlands Government's appeal requesting the reversal of Recommendation No. 1/61. The object of the intervention is to secure the rejection of the conclusions advanced in the Netherlands Government's appeal.

The application was granted by a Court Ordinance of September 26, 1961.

The proceedings in respect of the two appeals and the French coalmining industry's intervention are still in progress.

291. The High Authority has been particularly concerned in its efforts to ensure market transparency in the transport field, to work in line with the bases of common transport policy as so far established by the E.E.C. Commission. It has been observed at meetings of the Inter-Executive Working Party on Transport that the High Authority's activities are in all respects in harmony with the development of common transport policy.

RAIL TRANSPORT

The High Authority continued its work to ensure observance of the spirit and letter of the Treaty in the rail sector.

Discriminations

292. In its examination, under Article 70,4 of the Treaty, of special domestic tariff measures in force, the High Authority found that certain special tariffs allowed in Germany for the carriage of solid mineral fuels (AT 6 B 11, 14, 41 and 42) were discriminatory inasmuch as they applied only to consignments from German collieries. It therefore requested by its Decisions of February 9, 1958,[1]) that, where the reduced freight rates were not warranted by the state of competition, the tariffs in question should be extended to all Community collieries.

The Federal Government, disagreeing with the construction placed by the High Authority on the term *utilisateur*, in Article 70 of the Treaty, as covering not only consumers in the strict sense but also producers, had initially not taken the necessary action to implement the Decision referred to; however, in view of the clarification furnished by the Court in the preamble to its judgment on

[1]) See *Journal Officiel de la C.E.C.A.*, March 3, 1958 (seventh year, No. 8).

Cases Nos. 3-19/58 and 24-26/58, by which it upheld the High Authority's interpretation, the Government took steps at the beginning of 1961 to eliminate the discriminations complained of.

Supporting tariffs

293. German State Railways supporting tariffs 7 B 3 and 7 B 35 (carriage of ore from the mines in the Harz foothills to the Ruhr) and 6 B 14,II (exports of brown coal and brown-coal briquettes from the Helmstedt coalfield).

In view of the special geographical position of the enterprises favoured by these tariffs, in the neighbourhood of the zonal border, the High Authority had not been able to give a definite ruling on their case in its Decision of February 9, 1958,[1] and had planned to go into the matter further with the Federal Government. This reexamination, however, had to be deferred pending the outcome of various appeals lodged at the time in connection with certain special tariffs and pending clarification by the Court of a number of points of law regarding supporting tariffs.

The Court finally ruled that the authorization of supporting measures in favour of enterprises in the neighbourhood of the zonal border was allowable in principle. In the light of the Court's observations, the High Authority then subjected tariffs 7 B 3 and 7 B 35 to further careful examination, and ultimately granted authorization by Decision No. 11/62.[2]

Tariff 6 B 14 is still under examination.

294. German State Railways supporting tariff 6 B 31 (carriage of fuels from the Ruhr to certain iron and steel works in Bavaria).

The High Authority by its Decision of February 9, 1958, had required the reductions allowed under this tariff to be

[1] See *Journal Officiel de la C.E.C.A.*, March 3, 1958, (seventh year, No.8).

[2] See *Journal Officiel des Communautés Européennes*, December 19, 1961 (fourth year, No. 82).

progressively eliminated; it had, however, stated its willingness, in the event of the enterprises concerned facing intolerable economic and social complications after the revision of July 1, 1960, to examine the new situation with the Federal Government and the Government of Land Bavaria, and if necessary defer the final abolition of the remaining reductions.

Subsequently, the Federal Government asked the High Authority to act on this, and to defer the final upward revision, which was due to take place on July 1, 1961.

In order to obtain a full picture of developments at the works concerned following the Decision of February 9, 1958, the High Authority recently requested the Federal Government to furnish certain additional details.

295. French State Railways supporting clauses in Tariff No. 13, sections 3,1 and 12,1 (carriage of ore from mines in the Pyrenees).

The High Authority by its Decision of February 9, 1958, had required the clauses in question to be progressively eliminated: the French Government had taken the necessary steps, but wrote on June 30, 1961, asking for authorization to defer for two years the revision scheduled for July 1, 1961, since the mines had run into difficulties which could not have been foreseen at the time when the Decision had been taken.

The High Authority examined the matter carefully, and finally granted the authorization by its Decision No. 12/61.[1])

Traffic-maintenance tariffs

296. In the preamble to its judgments of May 10 and July 15, 1960, concerning certain French and German special domestic tariffs (Cases Nos. 3-19/58 and 24-26/58), the Court made the following points:

[1]) See *Journal Officiel des Communautés Européennes*, December 19, 1961 (fourth year, No. 82).

(a) Article 70,4 of the Treaty covers not only special tariffs introduced specifically in the interest of enterprises ("subjective criterion"), but all special tariffs benefiting on or more enterprises, for whatever reason introduced ("objective criterion"), so that even where a special tariff has been introduced for reasons entirely unconnected with the interests of the enterprise benefited thereby, this in no way detracts from the obligation to observe Article 70,4 and hence to obtain the High Authority's prior approval of the tariff;

(b) the High Authority must give its approval if the special tariff is in conformity with the principles of the Treaty;

(c) the special tariff must be taken as being in conformity with the principles of the Treaty if it can be shown to be warranted by the particular conditions prevailing in the transport market.

The High Authority is engaged in working out basic criteria to be taken into consideration in examining tariff reductions of this kind which have been granted in some member countries since the Court delivered judgment.

Simplification of Customs formalities for E.C.S.C. products

297. The High Authority has been having investigations conducted at a number of major frontier stations in the six countries in order to obtain an objective picture of the financial charges still incurred as a result of Customs formalities in respect of the carriage of E.C.S.C. products. It has been impelled to do so by repeated representations from the railway executives (endorsed by the Transport Committee) urging that the member Governments carry out their undertakings under Article 3 of the agreement of March 21, 1955, concerning the introduction of international through-rates.

The data so assembled have revealed that so far little progress has been made in this matter over the Community as a whole. This being so, the High Authority, in agreement with the Governments, on March 1, 1961 set up a working party to study whether Customs formalities in respect of

E.C.S.C. products could be simplified, particularly those concerning products carried by rail.

On the basis of the inquiries conducted, the working party (on which E.C.S.C. was also represented) examined the present position, from which it emerged that E.C.S.C. products traded between one Community country and another, although not liable to duty, were still subject to Customs clearance formalities.

The working party took the view that the Customs authorities should be in a position to allow these to be simplified, and submitted proposals accordingly. One suggestion was that consignments of E.C.S.C. products carried in full trainloads or single-cargo lifts of trucks should be cleared forthwith on production of the relevant international Customs declaration, the administrative details to be completed afterwards: this would speed up the transport of E.C.S.C. products and reduce the turnround period for rolling-stock.

The measures proposed represent an initial stage only: work on a final solution to the problem is to be resumed shortly.

The High Authority endorsed the working party's proposals, and submitted them to the Council of Ministers with a view to obtaining agreement among the member States.

At the Council's meeting on January 23, 1962, the representatives of the member States agreed that the measures proposed should be adopted with effect from April 1.

International through-rates

298. Agreement with Austria. — The supplemental agreement concluded on November 29, 1960, concerning details of the procedure to be followed in implementing the agreement introducing international rail through-rates in respect of consignments of coal and steel passing in transit through Austrian territory, came into force on November 6, 1961.[1])

[1]) See *Journal Officiel des Communautés Européennes*, October 19, 1961 (fourth year, No. 68).

The amounts of the reductions provided for in Annex I to the supplemental agreement had to be changed as a result of alterations introduced meantime in the tariffs of the Austrian State Railways. The new figures were published in the Official Gazette of the European Communities.[1])

299. Agreement with Switzerland. — The E.C.S.C.-Swiss Transport Committee met several times to discuss the potential effects on the Swiss transit freight-portions in E.C.S.C. Tariff No. 1001 of the changes in the Swiss internal rates scheduled for January 1, 1962. The Committee finally agreed that as from that date the Swiss State Railways should also reduce the Swiss freight-portions in the E.C.S.C. transit tariff as follows:

for iron and steel finished products, by Sfr.0.80 per metric ton;

for iron and steel semi-finished products, by Sfr.0.70 per metric ton;

for fuels and ores, by Sfr.0.70 per metric ton.

This arrangement may be revised should experience lead one of the contracting parties to the agreement to consider it necessary.

In addition, for the purpose of ensuring closer and more effective co-operation with the Community in the field of rail transport, an undertaking was given on the Swiss side to follow the consultation procedure provided for in Article 8 of the agreement prior to any future alteration of the Swiss internal rates affecting E.C.S.C. products.

Unpublished rate agreements

300. The High Authority examined a number of rate agreements which had not been actually published but had been duly notified to it. However, since it will not be possible to verify certain points in these (parity of competition, etc.)

[1]) See *Journal Officiel des Communautés Européennes*, November 11, 1961 (fourth year, No. 72).

until Recommendation No. 1/61 has been implemented, detailed examination of all the agreements notified was postponed until a later date.

It should be noted in this connection that when the Common Market was first introduced there were only a handful of unpublished agreements by a few railways, relating exclusively to traffic within the countries concerned: the position has, however, altered considerably, and the number of such agreements now runs into several thousands.

Moreover, the International Convention concerning the Carriage of Goods by Rail (C.I.M.) was recently amended to permit unpublished reductions on international carriage, and two of the six Community railway executives have already introduced the system of secret contracts for such traffic.

As a result, the market transparency which was secured for the rail sector by the introduction in March 1955 of the E.C.S.C. through tariff (Tariff No. 1001) in respect of traffic between country and country will be jeopardized unless the Community succeeds in establishing a proper system for all modes of transport.

Indeed, a number of users have pointed out to the High Authority that the non-publication of transport charges is preventing them from availing themselves of their right of alignment as provided for in Article 60 of the Treaty.

Thus some French collieries asked the High Authority to inform them what rates were charged for certain shipments of coal and coke in the Netherlands. The High Authority referred them to an official notice of the Netherlands Government of January 31, 1958, stating that all producers were entitled to apply to the Netherlands railways for non-discriminatory quotations of rates and conditions of carriage in respect of the transport of coal and steel by rail in Netherlands territory and of the rates and conditions for the transport of the tonnages concerned from a different basing point to the point of destination; it therefore suggested that the Charbonnages de France should make use of the facility so offered, and then get into touch with it again. At the same time, it reserved its judgment as to whether this procedure was or was not calculated to achieve the objectives of the Treaty.

The Charbonnages de France then entered into correspondence with the Netherlands railway authorities, but have not so far succeeded in obtaining the information desired.

Competitive tariffs

301. The question of the reductions in rates granted by Community railways in order to meet competition from other carriers is of considerable importance for the operation of the Common Market, as both the reductions themselves and the volume of traffic affected are quite substantial. Quite apart from actual secret contracts, there are now some hundreds of published competitive tariffs in force in the Community.

The High Authority has not so far been able to judge as to the justifiability of reductions granted by the railways to meet competition from other carriers not required to publish their terms. It will not be possible to deal with the problem until Recommendation No. 1/61 has been implemented for all modes of transport.

INLAND WATER TRANSPORT

Rhine river transport

302. Following several years' work by the High Authority to secure the elimination of disparities between the internal and international freight-rates for Rhine shipping, the member States on July 9, 1957, concluded the so-called Petersberg agreement providing for the adjustment of the regulated internal rates to a level fairly representing the free international rates.

The agreement further provided that a procedure should be worked out to enable the High Authority to gain a full and accurate picture of the freight-rates and conditions quoted for Rhine transport. This picture is, however, proving

so difficult to obtain — partly owing to the attitude of the Rhine shipping companies — that the agreement has so far remained largely a dead letter.

On July 25, 1960, the Federal German Government requested that consultations be begun under Article 4 of the agreement, but subsequently consented to hold the matter over until the possibilities for implementing the agreement had been further discussed.

303. An *ad hoc* committee with wide terms of reference is engaged in assembling fairly detailed and comparable facts and figures on the main flows of Rhine transport and the rates and conditions actually applied. Its findings are to be submitted to the Council of Ministers in the near future.

Rhine shipping comes within the purview of the High Authority's Recommendation No. 1/61, since this covers all modes of transport. Whatever methods the Governments concerned may decide to adopt, they are all required to take action to ensure the achievement of the objectives laid down in the Treaty and in the Recommendation.

Waterways west of the Rhine

304. The *ad hoc* Committee on Shipping Questions, which had been instructed in November 1959 to continue its studies in connection with the elimination of disparities between internal and international freight-rates on waterways other than the Rine, in 1960 submitted to the Council of Ministers a draft intergovernmental agreement providing only for the registration of rates charged in international traffic on these waterways, and making no reference whatever to their publication. The Council at its meeting on November 29, 1960, examined and rejected the draft, and requested the High Authority to submit a statement of its position as resulting from this rejection and from the Court's judgments of July 15, 1960, reversing its (the High Authority's) Decision No. 18/59 concerning publication of road-haulage rates and conditions.

The High Authority duly made known its position and views, sending the Governments its Recommendation No. 1/61 and emphasizing that the measures to be taken by them thereunder must cover all modes of transport.

Accordingly, the problem of transport on waterways west of the Rhine must now be dealt with by the Governments as part of the comprehensive action required of them by the Recommendation.

ROAD HAULAGE

305. Although full statistics are not available regarding the total tonnages hauled by road in the Community, these are known to be steadily and rapidly increasing.

The share of road haulage in transport as a whole varies considerably according to the type of goods concerned. As regards E.C.S.C. products, the proportion is highest for steel, and in particular for finished products: indeed for some products such as sheet many flows are mainly by road.

The only detailled figures at present available for road haulage are those for Germany. These show that long-haul shipments of rolled products by road within Germany in 1960 totalled 7 million metric tons, an increase of 2,500,000 over 1958.

Germany is also the only member country for which the road hauliers' rates and conditions are accurately known, as publication of tariffs is compulsory. It was in view of this state of affairs that the High Authority, after endeavouring for several years to induce the Governments to take action in accordance with the Treaty, finally issued its Decision No. 18/59, referred to above; when the Court reversed the Decision it then issued its Recommendation No. 1/61. As we have seen, two fresh appeals against the Recommendation have been lodged with the Court.

TRANSPORT STATISTICS

306. As has been its annual practice since 1956, the High Authority in 1961 published a highly detailed report on transport of Treaty products by rail, sea and inland waterway during 1960, studied from the point of view not only of freight-rates and conditions of carriage, but also of the tonnages carried between different economic areas of the Community and to and from third countries.[1]) For the first time, it was also possible to include some data on the road-haulage sector.

[1]) See *Informations Statistiques* No. 4/61 (October-December)

CHAPTER IV

THE LONG-TERM DEVELOPMENT OF THE COMMUNITY INDUSTRIES

Section 1: Technical and Economic Research

GENERAL OBSERVATIONS

307. The European Parliament, the Consultative Committee and the Council of Ministers have repeatedly urged that the High Authority should outline and explain its technical research policy in writing. Although the High Authority has always furnished all relevant details in connection with its grants of financial assistance for technical research projects, it recognized this to be a reasonable request, and duly prepared a memorandum setting forth the principles and criteria adopted by it in this field. The memorandum, which is reproduced in full in the pages which follow,[1]) is subdivided as follows:

The Importance of Research and the Role of the High Authority

Principles and Aims of Technical Research:

- General Principles and Criteria
- Research in the Coalmining Industry
- Research in the Iron-Ore Industry
- Research in the Iron and Steel Industry

[1]) No. 312 at 331.

Promotion of Requisite Co-operation among Existing Research Organizations.

Means Employed to Make Results of High Authority-Aided Research Available to the Circles Concerned in the Community.

308. It is explained that the field of technical research policy proper does not include the research promoted by the High Authority on industrial health and medicine, industrial safety, workers' housing or general economic subjects. Obviously, assessment of the value or necessity of these latter types of research must be based on special criteria which are likely to differ radically from those for the purely technical side.

309. The memorandum on High Authority technical research policy was issued in the late summer of 1961 and passed to the European Parliament, the Consultative Committee, the Council of Ministers and all the research centres concerned. It was examined by the Parliament's Research and Cultural Affairs Committee at its meeting on November 13, 1961; the views of the Consultative Committee were heard on January 11, 1962; and the memorandum is now before the Council's Co-ordination Committee, which is to examine it at a further meeting prior to its consideration by the full Council. The document is at present provisional only, and there will be opportunities later for the High Authority to work it over taking into account as far as possible the various points made in the course of these meetings and the comments sent in by outside experts and bodies.

In addition, directives are to be issued concerning application for and approval of technical research grants, together with an *aide-mémoire* on recipients' obligations as regards making the results of the research generally available. The directives are to appear at as early a date as possible, while the handling of applications and projects within the High Authority department responsible is to be accelerated.

310. To enable all interested parties in the Community to be kept abreast of developments, the High Authority intends

in future to publish every six months a loose-leaf bulletin describing the results of the different technical research projects aided. This system is to be adopted as from the beginning of 1962, and will provide a quick picture of projects completed and progress on projects in hand at any given moment.

311. By taking these steps, the High Authority has, generally speaking, fullfilled the undertakings which it gave to the Research and Cultural Affairs Committee on December 13, 1960, when the practical implementation of the Parliament's Resolution of July 1, 1960, concerning E.C.S.C. technical and economic research was discussed. In doing so it has largely followed the terms of the Resolution, and has also based itself to a considerable extent on the report on technical and economic research submitted to the Parliament in June 1961 on behalf of what was to become the Research and Cultural Affairs Committee.

The High Authority's research promotion activities have made notable progress since the adoption of the Parliament's Resolution of July 1, 1960. Further considerable sums have been set aside for assistance to projects, and, as the Resolution urged, co-operation among existing research centres has been intensified. This latter aspect is brought out in the portions of the memorandum dealing with progress to date in research in the coalmining and iron and steel industries. In quite a number of instances projects are being handled jointly by centres in different countries, the objectives and methods having been first established at Community level — a very happy division of labour. The work of the High Authority's expert committees is also serving to ensure co-ordination of activities in a number of fields.

Thus the written outline of policy pressed for by the Parliament has been duly produced; directives concerning application for and approval of financial grants are shortly to be issued; the High Authority departments' procedure for handling applications is to be streamlined; the arrangements for keeping those concerned properly in touch with developments are being improved all the time; scientific documentation is being built up. The question of the setting-up of a

European Coal Research Council — a measure suggested by the Parliament in its Resolution of May 14, 1959 — is to be further explored in detail at a later date. The function of the Council would be to promote research and development work in the coalmining industry and co-ordinate the activities of the various research establishments run by the Western European Coal Producers' with those of the High Authority.

THE HIGH AUTHORITY'S TECHNICAL RESEARCH POLICY

The Importance of Research and the Role of the High Authority

312. The importance of technical and economic research to the improvement and expansion of production and consumption in the industries of all countries has been increasing steadily for a good many years, and particularly since the end of the war. As a result of the faster pace of technical progress, industrial development is becoming more and more dependent on the acquisition of new scientific knowledge, with the economic prosperity and competitive capacity of whole sectors hinging on the amount of attention devoted to research.

This trend is very clearly apparent in the Community industries. There are, of course, other industries with higher rates of research expenditure, whether because they are still only in their infancy *(e.g.* electronics, nuclear-energy production) or because they are to a great extent scientifically angled in themselves *(e.g.* the chemical industry), but nevertheless the coalmining and iron and steel industries are just as much under the necessity of giving concentrated attention to research.

Their major competitors, the United States and the Soviet Union, have the advantage, for purposes of international competition, of more favourable production conditions as regards geological factors and raw-material supplies.

Being thus relatively handicapped in the matter of raw materials, the Community industries are compelled to be constantly introducing improvements, and even complete

innovations, in their production methods, to make every possible saving in input, and to ensure maximum efficiency at every stage of production. Where it is especially necessary to find some means of offsetting the incidence of raw-material costs is in connection with coal valorization and processing and with the quality improvement of iron and steel. This is becoming all the more vital inasmuch as new competitors have recently been coming forward. The precarious position of coal in the energy market is due not only to cempetition from third-country coal, but also to the advance of fuel oil and natural gas and the prospect of a future influx of nuclear energy. The big oil companies are currently conducting research and prospection operation running into thousand of millions of dollars a year.

New competitors for steel are the light metals and plastics, which are obliging the steel industry to turn out higher-grade metal and lighter sections and thinner flats.

Even in two "middle-aged" industries such as coal and steel, enterprises cannot hope to maintain or increase their competitive capacity — and in particular to lower their production costs (which they must do if they are to be able to quote really economic prices) and to keep up a steady improvement in the quality of their production — unless more attention is paid to research and development.

313. In recognition of the fact that research is indispensable to the basic objectives of "the expansion of the economy, the development of employment and the improvement of the standard of living in the participating countries," Article 55 of the E.C.S.C. Treaty lays down that "the High Authority must encourage technical and economic research concerning the production and the development of consumption of coal and steel, as well as workers' safety in these industries," and that "to this end, it shall organize all appropriate contacts among existing research organizations."

The Article goes on to provide that "after consultation with the Consultative Committee, the High Authority may initiate and facilitate the development of such research work

(a) by encouraging joint financing by the enterprise concerned;

(b) by earmarking for that purpose any grants it may receive; or

(c) (with the agreement of the Council) by earmarking for that purpose funds derived from the levies provided for in Article 50."

Thus the High Authority can itself cause research to be carried out, and it can also receive applications for assistance (especially financial assistance) in respect of research projects, to be assessed with reference to certain criteria listed in the following pages.

The general conditions required for the High Authority to make grants in aid of research projects are described in the directives which it is about to publish.

314. The High Authority's role in connection with research is thus of two kinds: in the first place it plays a supporting part, by granting assistance for projects carried out by others, and in the second place it acts on its own initiative, as a co-ordinator, as well as being empowered by the Treaty to "initiate" research.

Accordingly, the High Authority promotes both applied research, aimed at objectives of definite practical and economic interest, and such fundamental research as is directly relevant to the practical side.

Although most of the projects submitted to the High Authority come under the heading of "applied research," it is undoubtedly a fact that no hard-and-fast line can be drawn between the two categories. Applied research should not relate purely to the short and medium-term development of production and consumption: on the contrary, in the case of highly capital-intensive industries such as those of E.C.S.C., it should also have a real bearing on long-term development. The objectives of technical research must therefore be in line with the "General Objectives with respect to modernization, the long-term planning of production and the expansion of production capacity" issued at intervals by the High Authority under Article 46,3 of the Treaty.

The following outline of the High Authority's research policy, like the General Objectives themselves, is subject to alteration should the need arise.

Principles and Aims of Technical Research

315. The aims of the High Authority's research policy are governed by the provisions of Articles 2, 3 and 5 of the Treaty, and by the General Objectives, at present in process of revision.

Accordingly, it has to observe a number of basic principles with regard to its activities in the research field.

Article 55 requires it to promote technical research, not to lay down a cut-and-dried programme. On the contrary, both enterprises and research centres and associations are to be left perfectly at liberty in the matter. On the other hand, to promote research — to initiate and facilitate it and to organize co-operation among research centres, as the Article requires — it is necessary to establish objectives.

These must be neither too narrow in scope nor too rigid. Rather, they must be sufficiently elastic to leave the High Authority free to take any necessary decisions according to circumstances, including such circumstances as revolutionary new inventions, sharp changes in demand, or other sudden developments necessitating rapid adjustment. This being so, it is important that the aims should not be formulated in too specific terms. Like the General Objectives, they can be subsequently revised as and when necessary: meantime, they must not debar the High Authority from adapting its policy to unforeseen changes in the situation. The terms of the Treaty clearly require that in such cases as in others no research grants may be made until the High Authority has heard the views of the Consultative Committee, and if necessary obtained the agreement of the Council of Ministers.

In describing the principles and aims of the High Authority's research policy, we have to distinguish between the principles and criteria adopted for the E.C.S.C. sphere as a whole and the research objectives for the coalmining and iron and steel industries respectively, the latter in their turn differing from one another as coal policy differs from steel policy.

General Principles and Criteria

316. The High Authority's principle in granting financial assistance or otherwise aiding applied-research projects is that the technical improvement aimed at should serve increase profitability, and hence competitive capacity.

Technical innovations not yielding or expected to yield an economic return represent a waste of effort which should be avoided.

Subject to this overall principle, the following criteria are applied.

(a) The purpose of the research planned must be in line with the General Objectives required by Article 46, and with the objectives of the High Authority's research policy.

(b) The project must redound to the general interest of all, or at any rate most, of the enterprises in the sector concerned.

(c) Every effort must be made to lay out the High Authority's financial assistance to the best advantage, *i.e.* in the manner involving least risk and most prospect of success.

The research should preferably be undertaken, and part-financed jointly by enterprises research centres and/or technical and scientific associations in the Community countries. The High Authority is, however, also prepared to assist important projects in the general interest carried out by individual enterprises, research centres or associations on their own, including any by medium and small enterprises, or by researchers working independently.

As a general rule, research intended mainly for the benefit of a particular industrial area or enterprise (except in cases of industrial redevelopment or adjustment) is left to be conducted by the organizations or enterprises immediately concerned. However, in view of the high costs and considerable risks incurred in applying the results of research in actual production, assistance may be furnished in respect of projects of general interest planned by individual enter-

prises for experiments at pilot plants with a view to perfecting the results of laboratory research for regular operational use.

Projects satisfying these various requirements are eligible for grants irrespective of whether they are proposed by enterprises or research centres or launched by the High Authority on its own initiatives.

To be eligible, a project need not be in the interest of all enterprises in the Community. Should it seem likely to involve a clash of interests, it must be assessed with special minuteness, care being taken to ensure that nothing is done to impede technical progress.

Research in the Coalmining Industry

317. The coalmining industry's research projects are drawn up in the knowledge that coal no longer enjoys its old undisputed pre-eminence in the energy market. In allocating its grants, the High Authority has therefore to bear in mind that that industry is in the throes of a structural crisis and having difficulty in marketing its production, whereas the iron and steel industry has substantially increased its production and sales and seems likely to increase them further. If coal is to retain a reasonable share of the energy market, it is essential that, with the aid of research and development work, the collieries should be enabled to reduce their production costs, in order that the industry's production can be offered at competitive prices and in a form tailored to market requirements.

A further important field for research is the working out of ways whereby coal can be made to offer all the advantages of efficiency and convenience which the modern consumer demands.

Research has therefore a part to play in three fields, coal extraction, coal valorization and coal utilization.

318. As regards coal extraction, and coalmining techniques generally, there are all kinds of openings for research.

On the fundamental-research side, there is still much to be done on the scientifically accurate elucidation of rock-

pressure conditions, mine gases and other potential dangers: on the basis of such studies, the applied researchers can then work out new possibilities for providing against underground hazards, and thereby incidentally facilitate operational arrangements generally.

Aside from this aspect, applied research is faced with an enormous range of practical problems. Rather than pick out individual points more or less at random, we here enumerate the main items in general terms:

(a) evolvement of new or improved fully-mechanized methods of stone and coal development, coal-winning and support, with a view to gradually going over to automation;

(b) research and development work in connection with the necessary mechanical and electrical equipment;

(c) scientific study and analysis of all cycles and flows of operations and jobs with a view to establishing the necessary conditions for thoroughly efficient work organization and smoothness of operations generally;

(d) investigation of the possibility of applying new methods and devices recently evolved in other technical fields, *e.g.* radioactive isotopes, supersonics, remote control, hydraulics (in machinery and support), and where appropriate arranging for the early introduction of these in mining operations, *e.g.* to enable information on conditions below ground to be quickly transmitted to the surface so that appropriate instructions could be given from a central control post, or operations controlled automatically.

Research along these lines opens up new possibilities for further rationalization of operations. It should not only help the collieries to achieve their aim of lowering certain costs items, but also lead to improvements in working by accelerating the transition from manual to mechanical winning and loading, and by raising the standard of safety. It is therefore of outstanding importance.

319. The main aims in connection with *coal valorization* are

(a) to improve coal-preparation methods and equipment;

(b) to extend thermal valorization by developing new methods, installations and appliances for coking, manufacture of low-temperature coke and complete gasification, and by using low-grade products for electricity generation;

(c) to improve or evolve methods for the chemical valorization of coal and its by-products.

320. If the consumption of coal is to be maintained and increased, a great deal of research will need to be devoted to *coal utilization.* Aspects requiring attention include

(a) devising of new, improved and where possible fully-automatic heating appliances, with the object of making coal more economic and convenient to use;

(b) extension and improvement of block-heating and remote-heating systems, and evolvement of more rational methods of heat transmission;

(c) further exploration of the possibility of pipelining coal over long distances;

(d) systematic development of new uses and applications for coal, as well as fostering and improvement of existing ones wherever possible;

(e) investigation of the technical and economic factors operative in the substitution process as between coal and other fuels.

Research in the Iron-Ore Industry

321. Research in the Community iron-ore industry is assuming particular importance owing to the fact that the expansion of extraction is not keeping pace with the rapid increase in the iron and steel industry's demand for ferrous materials. Every effort is therefore having to be made to enable it to be stopped up faster: this necessitates making the extraction and metallurgical treatment of ore so much more economic as to allow even low-grade deposits to be profitably worked.

However, in the interests of economic pig-iron production, the blast-furnaces should be preferably supplied with ores having as high a ferrous content and as low a proportion of undesirable matter as possible. The Community iron-ore industry is not able to meet requirements, as regards either tonnage, grade or price in a sufficiently satisfactory manner.

322. The aims in technical research in this sector must therefore be

(a) to explore the possibilities for expanding ore extraction in the Community by the economic working of at present untapped deposits;

(b) to lay the foundations for increased mechanization of operations below ground;

(c) if indicated, to prospect for workable iron and/or manganese-ore deposits outside the Community and, should favourable results be obtained, to arrange for the ores to be made available to the iron and steel industry of the Community;

(d) to improve the processes and installations used to prepare iron ore (where appropriate along with other ferrous raw materials) for metallurgical treatment, in order to enhance the quality of the burden and reduce the cost of processing it. (Ore preparation may be done either at the mines or at the blast-furnaces.)

Research in the Iron and Steel Industry

323. Unlike the coalmining industry, the Community iron and steel industry is undergoing an unprecedented expansion, and is introducing revolutionary changes, themselves the outcome of long and painstaking research. Common prudence demands that it should press ahead vigorously with its research, since, firstly, technical development outside the Common Market is also proceeding at a tremendous rate, and secondly, it is always possible that a turnround in the economic situation may cause Community works once again to become painfully conscious of the inherently unfavourable

nature of certain of their basic circumstances. Relatively high costs of raw materials — coal, coke and ore, — are a serious matter, since these items represent no less than 50-60% of the industry's overall production costs.

This aspect calls for careful research; so equally, however, do the steelmaking side proper and the rolling-mill sector.

324. Promising investigations are in train on

(a) more efficient preparation of raw materials for pig-iron production, notably by the improvement of mechanical and thermal preparation operations and by the development of new processes for increasing the ferrous content of the burden, extracting most of the undesirable matter, and ensuring appropriate particle size, thus reducing the amount of energy needed in melting and processing and making for smoother running and easier operation of the blast furnaces;

(b) improvements in blast-furnace design, to facilitate operation and increase thermal efficiency;

(c) the possibility of direct reduction of ores, thereby obtaining highly concentrated ferrous matter which can be charged into the steelmelting furnaces forthwith, without passing through the blast-furnaces;

(d) various recently-evolved steelmaking processes not yet brought to the pitch of perfection;

(e) further improvements to the increasingly popular oxygen-blown converter process;

(f) reduction of heat consumption, and shortening of the melting period in the open-hearth steelmaking process, and more extensive employment of oxygen-enriched blast;

(g) perfecting of an absolutely efficient and not unduly costly (and hence really economic) method for extracting dust from the ever-increasing quantities of smoke being produced today as a result of recourse to oxygen-blowing in blast-furnace and steelworks practice;

(h) extension of continuous rolling to include not only flat products but also sections;

(i) new methods and installations for turning out better-quality rolled products;

(j) introduction, where appropriate, of continuous casting in place of the roughing process, and of other changes to permit "single-heat" production (*i. e.* with the metal passing from the furnace straight through all the stages until it finally emerges from the finishing mills);

(k) all possible ways and means of reducing the still extremely wide range of different sections (a good initial basis is offered by standardization);

(l) better methods for the recovery and utilization of scrap arisings, rejects and residues (*e.g.* blast-furnace and steelworks slag);

(m) improvements in fuel efficiency and in the utilization of linked products such as blast-furnace gas;

(n) rationalization of works' own and inter-works transport systems, an aspect of more importance than is commonly realized, owing to the very large tonnages so carried;

(o) measures with a view to the automation of production or of particular production operations.

In view of the radical technical changes now in progress, high priority must be assigned to the last item, research on automation, on which large sums are currently being spent in the United States and the Soviet Union. All work on the metallurgical side is also vitally important. But in the final analysis the industry cannot afford to neglect any form of research likely to lead to an increase in the use of steel, however slight its apparent urgency.

Promotion of Requisite Co-operation among Existing Research Organizations

325. Article 55,1 of the Treaty requires the High Authority "to organize all appropriate contacts among existing research organizations." It has done so by setting up expert committees on which it is itself represented: as a result, close and con-

structive intra-Community co-operation has developed over the years, which the High Authority will continue to foster by every means in its power.

The committees' main functions are to enable their members to exchange views and experiences, to co-ordinate as far as possible the work of the different research centres represented, and where appropriate to initiate or facilitate joint research.

Coalmining industry

326. Two committees have been in existence since 1953, the International Committee of experts on Mining Techniques and the International Committee on Coal Valorization. Both are made up of experts from the Community coalmining industries (chiefly from the central coal research stations) and staff members of the High Authority, each having a High Authority chairman and a High Authority secretary and secretariat; the British industry is also represented on both by officials of the National Coal Board, and on the Coal Valorization Committee in addition by the chief chemist of the Fuel Research Station in London.

The Mining Techniques Committee exchanges information and experience in connection with recent research findings, new equipment and methods, the testing of practical results obtained with these and the best ways of applying them under different geological conditions.

The Coal Valorization Committee similarly prevents duplication of effort by co-ordinating research and development work designed to improve the quality of the industry's production and to enable a higher proportion of it to be convertered into higher-grade energy.

Both committees advise the High Authority in its assessment of applications for research grants, and discuss in advance any suggestions which the High Authority is thinking of making with regard to coal research.

Iron-ore industry

327. Co-operation among existing research bodies in the iron-ore sector is organised through the Technical Research Committee (Steel) (see below), in view of the fact that in the major producer areas certain projects are undertaken by the research organizations and centres of the iron and steel industry. We would here mention only that the decision has been taken to start joint High Authority-aided research on the flotation of crude ores. Similar joint work will also need to be undertaken in other fields, including for instance the mechanization of preparatory work in the rock and in the seam, and of the extraction operations proper. However, geological conditions differ so widely from one Community orefield to another that joint research is practicable only up to a point.

In connection with an important iron-ore prospection programme which it is helping to finance in Africa, the High Authority in September 1958 discussed the progress and problems of the prospecting operations with a committee of experts from the six Community countries specializing in research on the extraction and enrichment of iron ore.

Iron and steel industry

328. The Technical Research Committee (Steel), which was set up in April 1953, consists of experts most of whom are heads of iron and steel research centres or scientific and technical associations in the member countries; staff members of the High Authority are responsible for the secretarial side. An observer from the British Iron and Steel Research Association also attends its meetings, and in return the Community sends an observer to meetings of B.I.S.R.A.

The fact that the committee is so composed serves in itself to ensure some degree of co-ordination as among the research programmes of the centres and enterprises, and between them and the programme of the High Authority.

The committee also advises the High Authority in its assessment of applications for research grants, and affords it

a valued opportunity to have suggestions it is planning to make regarding iron and steel research subjected to advance discussion. The committee can in addition put forward suggestions of its own for research projects considered to be in the interests of the Community, and it co-operates in making the results of research known in the industry.

Means Employed to Make Results of High Authority-Aided Research Available to the Circles Concerned in the Community

329. In accordance with Article 55,2 of the Treaty, the High Authority makes the results of the research which it helps to finance available to all interested parties in the Community, using various means according to the nature and importance of the work in question: thus the results themselves may be published, either by the researchers or research centres or, sometimes, by the High Authority, or patents or other protective rights obtained and licences granted to the firms or bodies concerned in the Community.

The results may appear either in leading technical journals or as separate publications. Where researchers or research centres publish their results independently, the High Authority reserves the right to secure reprints and make them available to the Community circles concerned, if necessary accompanied by summaries and translations. Also, results are often described verbally at conferences, seminars and other meetings of specialists in the particular line in question.

330. Where research results are to be protected by patents or other devices, the High Authority specifies in making its research grant that all interested parties in the Community must be allowed to obtain licences.

In order to ensure that those concerned are kept even more fully informed than before, the High Authority is planning in future to bring out at intervals a compendium of research results.

331. In all reports, published and in catalogues in which the purpose of the research and the names of the researchers and of those commissioning them are indicated, a point is to be made of mentioning the organization or firm in possession of full documentation on the project and results, to which any requests for further details should be addressed. Particulars must also be given of any relevant patents or other protective rights granted or applied for, with an indication of the address to which applications for licences should be directed.

The High Authority is also promoting the building-up of as complete as possible a technical and scientific documentation for the benefit of Community researchers and research centres and of technicians and engineers in industry, and is arranging for the translation and abstracting of technical literature from all over the world and the exchange of documents emanating from the Community countries.

TECHNICAL RESEARCH: COAL

332. In accordance with the general principles adopted in regard to research,[1]) the High Authority is at present promoting in particular work on

(a) machanization of operations above and below ground;
(b) improvement of safety standards;
(c) improvement of coal valorization;
(d) efficient utilization of coal in solid form.

As well as giving direct assistance to research, it is seeing to it that those on the job in the industry are kept fully and promptly informed of all technical and scientific advances and innovations and of practical operational improvements.

Details have been given regularly in the past[2]) concerning the various projects of long standing, their objectives, the assistance granted and the progress registered to date.

[1]) See Nos. 312 ff. above.

[2]) See *Fifth General Report*, Nos. 381 and 382; *Sixth General Report*, Nos. 327-337; *Seventh General Report*, Nos. 161-166; *Eighth General Report*, Nos. 129-131; *Ninth General Report*, Nos. 350-355.

We here record only the work done on these in the past year and the new projects initiated during that time. It should be added that no project has yet been completed and no conclusive results have been obtained: the results described are thus only partial and provisional in character.

Mechanization

Projects in hand in the field of mechanization are five in number; the third, fourth and fifth were launched during 1961.

Development of a fully-mechanical roadway tunneller

333. This project is being conducted jointly by the Steinkohlenbergbauverein, Essen, the Houillères du Bassin de Lorraine and a German firm specializing in large-hole drilling equipment. The aim is to develop a fully-mechanical roadway-tunnelling machine which will cut a 12.5 sq.m. circular section road and simultaneously evacuate the rock drillings. In addition to devising appropriate drilling tools, it was necessary to deal with a number of incidental problems of design and technology. The prototype was ready by the beginning of the year, and was examined by the Study Committee in February. Further technical improvements were made in the course of the following six months before the machine was finally put into practical operation. The construction of the second machine, destined for use in Lorraine, is proceeding according to schedule, all modifications in design being duly incorporated; it is planned to conduct the practical trials below ground in Lorraine in the summer of 1962.

The High Authority has granted for this project assistance amounting to 856,000 dollar units of account.

Project on rock pressure

334. This project is being conducted jointly by the central research stations of the four coal-bearing countries of the

Community. Its object is the scientific investigation and accurate measurement of strata movements, pressures and stresses produced in roadways in the coal and rock as a result of coal-winning operations, with a view to establishing the shape of roadway cross-sections and the methods and types of roadway support best suited to the particular geological and stratigraphical conditions concerned. The first results (some of which are provisional only) include the following: methods have been worked out for calculating the necessary load-bearing capacity of the supports and for assessing the movements within the solid rock mass and the pressures, stresses and strains in the strata; it has been established that stability and convergence of the roadways are governed primarily by geological structure and by whether other coal-winning operations are being or have earlier been conducted in the neighbourhood, and only in a comparatively minor degree by prop density; various points have been noted with regard to the effects of the bolting of the floor and side walls on roadway stability, and to the effects of different support layouts on floor-lift; it is now recognized that convergence is not the only aspect to be considered in judging the effectiveness of face support; new knowledge has been gained concerning the influence of support resistance on the improvement of the roof.

For this project, the High Authority has made available the sum of 1,694,000 units of account.

Development of a coal-winning machine for use in faulty seams

335. This new project, which is being undertaken by the Staatsmijnen in Limburg, is aimed at the development of a coal-getting machine which by combining the cutting and stripping winning methods will permit the machanization of coal-winning operations even in technically faulted seams.

The High Authority has furnished a grant of 386,000 units of account.

Development of fully-mechanical face support suited to the special geological conditions in Community mines

336. This is a further new project planned by the Steinkohlenbergbauverein, Essen, for the study of new types of mechanical support on test benches and in models built to a 1:10 scale for both dimensions and strength and giving a faithful reproduction of strata and face conditions as actually occurring, in order to observe the behaviour and suitability of the new support elements before bringing them into service below ground.

The High Authority has granted assistance amounting to 550,000 units of account.

Project on presence and emission of mathane in coal measures

337. The third of the three new projects in connection with mechanization, which is being undertaken jointly by the four central coal research stations of the Community countries, is of comparable scope to that on rock pressure, consisting of fundamental research on the presence of methane in coal-bearing strata and the natural laws governing its emission and infiltration into the mine workings as a result of coal-winning operations. The aim is to enable the firedamp problem, which is of such far-reaching importance both from the economic and from the safety angle, to be better understood and dealt with, thereby facilitating the extension of mechanization and electrification, and, of course, at the same time making for greater safety below ground.

For this major project the High Authority has made available the large sum of 1,288,000 units of account.

Safety in Mines[1])

Two projects are under way in the field of mine safety.

338. In view of its importance to safety, we should also mention the research on methane emission just referred to.

[1]) See Nos. 586 ff. and Nos. 606 ff.

Project on measures to deal with sudden outbursts of firedamp

339. Research on the prompt detection of any danger of sudden outbursts, and on effective preventive measures to reduce the risk of accident and the economic burden involved, is being conducted by the Belgian Institut National de l'Industrie Charbonnière ("Inichar") in Liège and the French Centre d'Études et de Recherches des Charbonnages de France ("Cerchar") in Paris. Trials have been carried out below ground in a number of mines subject to sudden outbursts with two new forms of preventive action, bottom slushing of seams and large-hole drilling for destressing purposes: the former has proved effective when driving cross-cuts through gassy seams, and the latter method of drilling 115mm. destressing holes in connection with both roadway and cross-cut drivage and coal-winning in longwall workings. In two pits where the hazard was known to be considerable the use of this second method made it possible to precipate the degassing and distressing of the coal with the result that it was possible to dispense with the usual precaution of inducer shotfiring. In consequence, not only was the work made safer, but since no shotfiring was necessary, the coal was obtained in better size distribution, the cost of preventive action against sudden outburst was reduced, and mechanized winning, which would have been out of the question had the hazard not been thus eliminated became a practical proposition.

Constant checks have been maintained on the effect and value of the various preventive measures. It has been accurately established how far sudden outbursts and normal emission of gas are governed by variations of the barometric pressure, and also to what extent gas emission and destressing are affected by winning from neighbouring seams. Information of considerable importance for purposes of ventilation, and of work organization generally, has been obtained by recording over a long period the amounts of gas present in a working where the gas emission varied from 20 to 120 cu.m. per metric ton of coal, taking into account cycles of operation, prolonged stoppages, atmospheric pressure and whether the seam or part of the deposit concerned had been worked

for some considerable time or for only a short time, or had not yet been worked at all.

The High Authority has granted assistance amounting to 546,000 units of account.

Competition to develop safety devices

340. Of the various designs for portable gas-recording and detecting appliances and fully-protective self-rescuers submitted to the High Authority's panel of judges, four types of apparatus successfully passed all laboratory tests; they were then subjected to six months of trials below ground, now also completed. The results of the trials are now being analysed to enable the panel to make its awards, following which the price-giving ceremony will take place early in 1962. None of the designs submitted for an oxygen-deficiency indicator proved satisfactory, and fresh conditions were therefore worked out whereby the closing date for this category was deferred.

The total sum granted by the High Authority for the competition was 200,000 units of account.

Coal valorization

The two projects launched two years ago in connection with coal valorization are continuing according to plan; another project (not described here) is in preparation.

Development of a new two-stage coking process

341. This project is being conducted by Cerchar at its experimental plant at Marienau, Lorraine; the object is to study ways and means of preheating the coking mixture and the effects of this on the throughput performance of the coke ovens, the properties of the coke produced, the heat consumption involved, and the possibility of using larger quantities of weakly-coking coal in the charge. Preheating was

effected by the fluidizing method. Experiments to date have yielded indications as to the optimum preheating temperatures for the different types of coal and the usual coking blends. Attention has also been given in the optimum velocity of gas and the correct thickness for the fluidized bed, and to the effects on the preheating process of the dust content of the recycled gases and the form of the fluidized bed. Experiments have been carried out concerning the effects produced by the storage and cooling of the preheated mixtures, and by the particular coolant used, (air, inert gases), on the coking capacity of the coal and the properties of the coke. Lastly, efforts are being made to determine how far the throughput performance of the ovens is affected by the preheating temperature.

The High Authority has granted assistance to the value of 709,000 units of account.

Project on optimum operating conditions for standard coking-plants

342. The Steinkohlenbergbauverein, of Essen, which is in charge of this project, having completed expensive laboratory and semi-industrial tests, went on to engage in full-scale trials at its experimental-sized ovens and various ancillary installations, including coke-screening and raw-gas condensation plant. The object of the first series of industrial-scale tests was to determine more accurately the effects of the coking temperature on the properties of the coke (proportion of large coke, Micum index) and on the yield and quality of gas and other by-products: for these, as resulting from several different temperatures (1100°, 1150°, 1200°, 1250°, 1300° and 1350°C.), exact figures were obtained, which are of considerable technical and economic importance to the calculation of optimum operating conditions and control of the coking process. A special study was also made of the rate of degasification in the carbonization of hard coal in industrial-sized ovens.

For this project the High Authority granted approximately 545,000 units of account.

Fuel efficiency

343. The High Authority devoted special attention in 1961 to the subject of efficiency in the use of coal. It approved a programme to be carried out by the central coal research stations of the Community countries, in systematically subdivided co-operation with technical institutes and specialized firms, with the object of bolstering sales of coal and coke in solid-fuels form by making these more economic and efficient and by making coal-fired plant and appliances simpler and more convenient in operation and maintenance by the introduction of automatic controls. The programme is a comprehensive one, including fundamental research on combustion processes, the development of up-to-date boiler systems of various sizes and for various uses, and the designing or improvement of firing and heating installations for private households and for medium and small industry. The individual projects, eleven in number, are as follows:

Fundamental research on combustion of solid fuels
Fundamental research on combustion in small-sized fireboxes

343/1. The first of these two projects is being carried out by Cerchar, in Paris, and the second by the Staatsmijnen in Limburg. The aim is to obtain additional theoretical knowledge in connection with the design of grates and fireboxes, the suitability of the different types and grades of fuel for particular purposes, and the thermal and economic efficiency of the different types of firing and heating equipment under varying operating conditions. The research covers combustion in fixed grates in households and small industry, combustion in movable grates as used in medium industry for steam-raising purposes, and combustion in pulverized-fuel firing equipment for energy production by large units.

343/2. Technical progress in the large-consumer and public-utilities sectors has been satisfactory: firing and boiler plant in medium and small industry, on the other hand, after the war, and especially during the coal shortage, offered a partic-

ularly exposed front to the substitution of oil for coal, and the industry and the High Authority are consequently devoting special attention to this field. Ruhrkohlen-Beratung G.m.B.H., Essen, is engaged in developing three largely automatic boiler installations with different steam ratings, *viz.*

Development of a packaged p.f.-fired water-tube boiler with a steam rating of from 1 to 25 metric tons/hour

343/3. The aim is to develop a system of automatic stoking and combustion control suitable for use in small plants; at the same time, a service is being instituted for the delivery of ready-prepared pulverized fuel direct to the consumer's bunkers, and if desired for the removal of ash at the same time.

Development of a packaged water-tube boiler with shaking-grate for a steam-rating of from 2 to 25 metric tons/hour

343/4. This boiler is intended to offer the same advantages as its existing oil-fired equivalents, namely to be simple, inexpensive, fully automatic and space-saving.

Development of a fully-automatic grate appliance for fitting to large-capacity boilers with a steam-rating of from 2 to 25 metric tons/hour

343/5. The object is to develop a competitive, fully-automatic coal-fired appliance, designed in particular to burn the caking grades, for fitting both to the numerous large-capacity boilers now in use in the Community and to new boilers of the same type to be constructed in the future.

Development of a fully automatic monobloc steam heating installation with a steam rating of 1-8 metric tons/hour

343/6. Cerchar is working on the development of a fully-automatic solid-fuelled installation with the comparatively

low steam rating of 1-8 metric tons/hour, as a counterpart to the existing oil-fired monobloc equipment. The fuel used will be mainly gas coal and long-flame coal.

Development of an automatic firing appliance using bituminous and/or gas coal for fixed or moveable warm-air-circulation heating systems in the agricultural sector

343/7. This further project undertaken by Cerchar is intended to meet a felt want in the agricultural sector with regard to seasonal difficulties encountered in drying grain for animal food-stuffs, etc., and thus help to maintain sales of solid fuels to this sector.

Development of automatic firing equipment for private houses and small buildings

343/8. This project, which is also being conducted by Cerchar, relates to a particularly important aspect, the safeguarding of coal sales to the exceptionally exposed household sector.

Development of a coal- and coke-fired central-heating boiler for private houses and small buildings

343/9. Another project intended to sustain sales to the household sector has been undertaken by the Staatsmijnen in Limburg: here the aim is to develop from the extremely successful fully-automatic high-rating "Emma" boiler a similar appliance with a lower steam rating, which will be comparatively inexpensive to install and ultra-simple to operate. The fuels used will be coke, anthracite and low-volatile coal nuts.

Development of automatic ash-removal devices for various types of fireboxes and grates — Automation of slotting and ash removal in small firing installations

343/10. Both projects are being conducted by the Centre de Documentation sur les Combustibles Solides ("Cedocos"), Brussels.

343/11. The High Authority has made available for the purposes of these various projects the sum of 790,000 units of account. A number of further projects in connection with fuel efficiency are in preparation.

Information work

344. The High Authority is also working to keep mining-engineers and others on the spot in the industry informed concerning technical and scientific advances both inside and outside the Community. It provides financial assistance to facilitate the publication and dissimination of research reports, the translation and abstracting of technical literature from Eastern countries, and the publication of papers contributed at meetings and conferences and of the full or partial results of projects which it has helped to finance.

Symposium on Mining Geology

345. The High Authority in 1961 made a grant of 7,500 units of account to help defray the cost of printing and publishing a Symposium on Mining Geology, briefly describing for the benefit of specialists and collieries the latest research being conducted on the subject in the Ruhr and Aachen coalfields.

Translation and abstracting of technical literature on coalmining from Eastern countries

346. The two centres which have made the most use of the facility of obtaining grants out of the 100,000 units of account

set aside by the High Authority for this purpose have been the Steinkohlenbergbauverein in Essen and Cerchar in Paris. Scientific and technical articles translated under this scheme now total 560. The central research establishments of the four Community coal-bearing countries are sent lists of the title stranslated, which they forward to the collieries, specialized institutes and other quarters likely to be interested; the latter can then obtain photocopies of the full translations on payment of a small fee through the central research establishments.

General information work

347. Mining engineers and others in the industry are kept informed of the results of the High Authority-aided research not only through the specialized Press, but also through special study committees set up by the High Authority for each individual project. The members of the committees, who are experts from the four Community coal-producing countries, are enabled by means of tours of inspection and detailed reports to acquire a thorough knowledge of all research in progress and results achieved, which they can then pass on to all concerned in their own countries, including the employers' and workers' organizations. The strictest secrecy is, however, of course preserved with regard to any patentable inventions or other results covered by protective rights.

International Committee of Experts on Mining Techniques[1])

348. Mention should also be made in this connection of the work of the International Committee of Exports on Mining Techniques set up by the High Authority. Its members include representatives not only of the Community coalmining industries but also of the British. Its main function is to co-

[1]) See *Sixth General Report*, Vol. II, Nos. 328-336; *Seventh General Report*, No. 167; *Eighth General Report*, No. 128.

ordinate mining research in the Community countries, but it is also active in disseminating research results and keeping the collieries in touch with all technical developments of note.

At the committee's meetings, which are held each time in a different coalfield, a comprehensive account is given of developments in each country, with the research centres and the most progressive enterprises from the individual coalfields reporting on the latest research results, operational advances and new methods and equipment, and thus contributing towards getting these local-level improvements also introduced elsewhere.

Over and above this system whereby the employers' organizations and professional bodies (associations of mining engineers, etc.) in the different countries are kept informed direct by the members of the committee, there is a further arrangement under which comprehensive written information, in the form of detailed monographs drawn up by the High Authority, is sent not only to the employers' associations but also to all mining research centres, mining colleges and collieries in the Community.

Eleventh Meeting of the Mining Techniques Committee

349. The committee held its eleventh meeting in June 1961 in Luxembourg and Lorraine. This was devoted, as the tenth had been, to the discussion of the central problem facing the coalmining industry today, namely the lowering of production costs by means of rationalization. During the first part of the meeting, in Luxembourg, representatives of the four E.C.S.C. coalmining industries and the British industry gave detailed accounts of the various rationalization measures introduced above and below ground, the methods and equipment employed, the experience gained and the results achieved during the past eighteen months.

Special points emphasized included

(a) increasingly comprehensive concentration of underground and surface operations, together with a further rise in specific production per working place and/or daily average output per pit;

(b) substantial increases in the degree of mechanization of coal-winning operations and in daily rates of advance of the coalface;

(c) increasing use of mechanized supports, on the Continent as well as in Britain;

(d) increasing mechanization of roadway drivage;

(e) increasing use of remote control;

(f) consequent increase in underground o.m.s. and absolute decrease in labour costs despite a steady upward trend in wages.

The second part of the meeting was spent in studying the rationalization measures introduced in the Lorraine coalfield. Lorraine has for some years had the highest output figures in the Community, its underground o.m.s. in the first half year 1961 reaching 2,718 kg. The members of the committee were given detailed descriptions and taken on tours of inspection above and below ground in order to enable them to form a picture of the constant efforts in progress to improve the competitive capacity of coal still further.

Finally, the committee visited the Lorraine orefield, where members were able to tour a number of particularly up-to-date mines, and to note various useful points concerning concentration of extraction at a few coal-winning points, full mechanization of these, and haulage first to the main loading point by diesel-electric shuttle cars and thereafter by large-capacity bunker-type mine cars of up to 12 tons, drawn by extremely powerful electric locomotives of 600-800 kW. The committee was also shown some of the recent organizational arrangements which have done much to make the orefield a really economic one to work, such as the installation of a central engineering and development establishment, central spare-parts stores, and so on.

Twelfth meeting of the Mining Techniques Committee

350. The committee met again in July 1961 for one day of comprehensive discussions on various sub-problems which had been touched on at the two previous meetings in connection

with the overall problem of rationalization in the coalmining industry. These related in the main to the many possible ways of improving output by mechanization and automation, and the effects of such measures on costs in the industry (effects of mechanization on labour and material costs, problem of optimum production per workpoint and the limits to the room still existing for improvement in this respect, possibility of continuous mining, etc.).

As on previous occasions, the High Authority department responsible is now drawing up a fresh monograph on the results of the committee's eleventh and twelfth meetings, to be entitled *Les Mesures de Rationalisation dans l'Industrie Charbonnière (Volume II)*.

A special working party was set up at Community level, with British participation, to study the subject of *automation in the coalmining industry*.

TECHNICAL RESEARCH: STEEL (INCLUDING IRON ORE)

351. In accordance with its research objectives for the iron-ore and iron and steel sectors, the High Authority is now assisting projects in connection with

(a) possibilities for extending Community ore production;

(b) prospecting for workable ore deposits outside the Community countries;

(c) improvement of pig-iron production methods;

(d) direct reduction of iron ore;

(e) extraction of dust from brown smoke;

(f) improvement of thermal efficiency;

(g) partial, and ultimately full, automation of production operations;

(h) dissemination of technical and scientific knowledge acquired.

Details concerning research already completed or in hand for some time have been given in earlier General

Reports.[1]) The following are descriptions of new and recent projects.

Possibilities for extending Community ore production

Enrichment of low-grade Community ores

352. Very considerable reserves of such ores exist, but they are difficult to enrich owing to their exceptionally complex mineralogical structure, and little attempt has hitherto been made to do so. The High Authority has now decided to set aside the sum of 330,000 units of account to assist research on the use of flotation methods to enrich complex silicaceous ores with a low ferrous content. The main aim is to increase the Community's reserves of workable ore; the research covers both minette and Salzgitter ore, and is being conducted in close co-operation by the French Institut de Recherches de la Sidérurgie and the German Studiengesellschaft für Eisenerzaufbereitung.

Prospecting for workable ore deposits outside the Community countries

Prospecting for iron and manganese-ore deposits in various African countries and territories

353. The work of prospecting for iron and manganese ore, for which a grant of five million units of account was made, went ahead, within the terms of reference initially laid down, in Guinea and other African countries.[2]) In Guinea, a preliminary series of comparatively brief surveying operations confirmed the presence of extensive iron-ore deposit. The operations in question were carried out under a provisional contract which was to have been succeeded by an agreement with the Guinean Government: however, the negotiations fell through in consequence of the desiderata put

[1]) See *Fifth General Report*, Nos. 383 and 384; *Sixth General Report*, Nos. 339-343; *Seventh General Report*, Nos. 171 and 172; *Eighth General Report*, Nos. 125 and 126; *Ninth General Report*, Nos. 357-370.

[2]) See *Eighth General Report*, No. 125.

forward by the latter, particularly with regard to the terms on which the deposit was to be worked and the arrangements for transporting the ore to the coast. The High Authority-aided prospection programme was then suspended.

In Ivory Coast, large reserves of iron ore were found along the seaboard, but these are not of sufficiently high grade to justify mining in the immediate future. In the hinterland further considerable reserves were discovered, but here too there can be no thought of working them at present, as the ore is of low ferrous content and located too far from the sea.

In Cameroun, a deposit of low-grade ore was found near the coast; it is, however, too small to be worth opening up at any foreseeable date. The prospecting teams are now at work in the adjacent hinterland.

In Gaboon, the operations effected during the period under review yielded encouraging results: aerial surveys showed several further deposits of low-grade ore to exist, the extent of which was then ascertained by ground-level investigation. One deposit was found to contain small quantities of high-grade ore.

In the Congo (Brazzaville), a start has been made on aerial surveying.

Improvement of pig-iron production processes

Research under this head relates mainly to the use of hydro-carbons in the blast-furnace.

Industrial-scale research on the injection of liquid fuel oil

354. Trials were conducted in 1961 at the Liège low-shaft furnace with the object of determining more accurately the most suitable conditions for injecting liquid fuel oil through the main tuyères, while at the same time using oxygen-enriched blast. The High Authority had made available for this purpose a grant of 850,000 units of account. The 24% enrichment

with which the trials had been begun in 1960 was in 1961 stepped up to 27%, the aim being to arrive at a minimum coke rate and maximum productivity. The trials planned for the end of 1961 and beginning of 1962 are to be effected with a higher blast temperature as well as with oxygen enrichment; before the end of 1961 the plant will be equipped with Cowper stoves enabling the temperature of the blast to be raised to over 1000°C. The trials are being conducted by the Association Internationale pour les Recherches au Bas Fourneau d'Ougrée ("AIRBO") in which Belgian and French research centres are represented.

355. Projects are now under study for tests with injections of pulverized coal, to be financed out of the High Authority's second grant of 2,100,000 units of account for research at the Liège low-shaft furnace.

356. The experiments with injections of liquid fuel oil into a blast-furnace of the Société Cockerill-Ougrée, operating with prepared burdens containing 40-90% of sinter, were completed at the end of March 1961, after lasting one year.[1]) The High Authority had granted 180,000 units of account for this purpose. In May 1961 the High Authority issued an interim report on the first results,[2]) and the final report is to appear shortly. In the light of the results of the various tests carried out at the Liège low-shaft furnace and at plants of the Société de Pompey[3]) and the Société Cockerill-Ougrée, many iron and steel enterprises have now equipped their blast-furnaces for tuyère injection of fuel oil, or are planning to do so. The most striking advantage of the new method is the substantial improvement in the productivity of the blast-furnaces; it also makes for smoother running of the blast-furnaces, while the pig-iron produced is more consistent in its characteristics. Furthermore, there is a considerable reduction in the coke rate, which may conduce to a lowering

[1]) See *Ninth General Report,* No. 363.

[2]) Doc. No. 7626/61 of the Publications Departments of the European Communities.

[3]) See *Ninth General Report,* No. 362.

of production costs, according to the prices paid by the works for fuel oil and coke respectively.

Lastly, the method represents a possible saving on peak coking-plant capacity.

Fuel oil injection requires very little in the way of either capital expenditure or maintenance and supervision, and is therefore certain to be adopted more and more widely in the Community.

Industrial-scale research on introduction of gasified fuel oil

357. The tests begun by the Société de Pompey in 1960 with gasified fuel oil had to be suspended after a few days owing to technical complications. They were resumed at the beginning of June 1961, and completed early in July. It was found that the introduction of pre-gasified fuel oil into the blast-furnace gave less satisfactory results than the use of liquid fuel oil. The sum granted by the High Authority for this project was 173,000 units of account.

In contrast to the injection of liquid fuel oil, which is extremely simple, the introduction of gasified oil is complicated, under present operating conditions, by serious technical difficulties. The process is tricky to conduct, and offers no economic advantage owing to the price of the oxygen needed for the gasification. The High Authority therefore decided, in agreement with the Steering Committee on Research, to discontinue the experiments in this connection.

Direct reduction of iron ore

Direct reduction of iron ore in the rotary furnace

358. The experiments carried out by Friedrich Krupps in their existing plant at Rheinhausen with the direct reduction of rich hematite ores in the rotary furnace yielded a largely desulphurized sponge iron suitable for direct utilization in the steelworks; by employing rich ore in 5-30mm. lumps it was

possible to simplify considerably the preparation of the sponge iron prior to its charging into the steelmaking furnaces. An interim report on these results was issued in June 1961.[1]) The High Authority in July granted a further 80,000 units of account (bringing the total to 200,700) for tests with magnetite ores using special reducing agents such as low-temperature coke, and experiments in the production of partially-reduced sponge iron to serve as a coolant in oxygen steelworks.

Direct reduction of iron ore in the shaft furnace

359. The Finsider research establishment's new pilote plant for direct reduction in the shaft furnace has now been completed, and practical work is to begin there in January 1962. The sum of 1,000,000 units of account has been granted for this project, which is to consist principally of fundamental research into reactions in blast-furnace shafts at temperatures below 1000-1200°C.

Extraction of dust from brown smoke[2])

360. Tests continued on the extraction of dust from the brown smoke given off by basic Bessemer converters operating with oxygen-enriched bottom-blown blast. With the supplementary assistance furnished by the High Authority[3]) (562,000 units of account in all), the installations required for the economic utilization of steam were constructed. Testing was resumed in August 1961, and completed in November; the final report, which is to be issued in 1962, will contain details as to how this technically feasible process can be economically applied for de-dusting purposes.

[1]) Doc. No. 7838/61 of the Publications Departments of the European Communities.

[2]) See No. 587 below.

[3]) See *Ninth General Report*, No. 367.

Improvement of thermal efficiency

Flame radiation of different fuels

361. Work is proceeding satisfactorily under the five-year programme at the experimental plant which the International Flame Research Foundation (representing Belgian, French, Netherland, British and American interests) operates in IJmuiden. Research is at the moment concentrated particularly on the flames of pulverized coal. Measuring instruments developed at the plant were used in supplementary tests in the combustion chambers and firing equipment of thermal power-stations. Experiments with gas and fuel-oil flames obtained by means of high-pressure oxygen pulverizers, and with possible uses for them in open-hearth furnaces, went ahead steadily.

The High Authority is assisting the five-year programme with a grant of 260,000 units of account.

Combustion of semi-scrubbed blast-furnace gas

362. Research was begun on October 1, 1960, in an experimental plant at the Rheinhausen works. Blast-furnace gas still containing dust was burned in a melting cyclone in order to melt the dust. Melting was secured by admixing coke-oven gas or pulverized coal with the blast-furnace gas; to ensure that the dust is melted purely by blast-furnace gas, a blast-furnace gas preheater and a Cowper stove, preheating to 800-900°C., are being installed.

Testing is continuing. The High Authority has provided a grant of 352,000 units of account.

Automation

363. The High Authority in June 1961 agreed in principle to set aside a total of five million units of account for research on the introduction of automation in the iron and steel

industry, thereby demonstrating its anxiety to help solve a problem of incalculable importance to the future competitive capacity of the Community iron and steel industry.

Sintering line

364. As a first step in this connection, the High Authority in November 1961 approved a grant of 527,000 units of account for experiments with the automation of the sintering line, organized by the Société des Forges de la Providence, Marchienne-au-Pont, Belgium. These are being conducted at a plant with the very latest type of equipment, the aim being progressively to automate the different parts of the sintering line until ultimately it is practically entirely automatic. The company is to have the co-operation of specialized laboratories, and the research is to be steered and co-ordinated by groups of Community experts with specialized knowledge of the various fields of engineering and science involved in automation. The research centres of the Belgian and French iron and steel industries are taking part in the work.

365. As the next step, projects are now being worked out in connection with the automation of reversing rolling mills, and more particularly blooming mills and four-high stands for heavy plates.

One of the projects, the largest, emanates from Germany, the other two from Belgium and France respectively.

Dissemination of technical and scientific knowledge acquired

Metallographical atlas

366. The preparatory research was carried out by specialized establishments in Belgium, France, Germany, Italy and the Netherlands, the High Authority furnishing a grant of 204,100 units of account. The working party responsible for the actual compilation is continuing its activities: Volume I, on steel, is almost completed, and should be out by the end of 1962 or beginning of 1963.

Translation and abstracting of technical literature on iron and steel from Eastern countries

367. The number of technical articles from Eastern countries translated and disseminated with High Authority assistance increased considerably, the total for the Community rising from about 500 in 1959 to over 700 in 1961. The amount made available by the High Authority to finance this work was 100,000 units of account. In view of these developments, the High Authority in November 1961 decided to renew its contract with the European Association for the Exchange of Technical Iron and Steel Literature (A.S.E.L.T.) for a further three years, subject to the approval of the Council of Ministers.

Euronorms

368. The co-ordination committee on the nomenclature of iron and steel products continued its work on the establishment of the European standards known as "Euronorm." The preparation of Euronorms for chemical analyses is making excellent progress. Euronorm for the determination of the carbon, manganese and silicon content of steel and pig-iron have been finally adopted and are to be published early in 1962; work is continuing on those for the determination of the phosphorus and sulphur content; and studies have now been started on standards for determining the nitrogen and aluminium content. In addition to the series on mechanical tests already published, another Euronorm is to appear shortly concerning the impact test on a notched steel bar supported at both ends. Standards relating to rationalization of broard-flanged beams, and to the rolling tolerances for these products and for ordinary beams and channel irons, have been adopted by the co-ordination committee and will also be published early in 1962. The standard concerning the tolerances for merchant bars of the normal type is to follow shortly. The rationalization of merchant steels, on which some steps have already been taken at national level in various countries, is now to be tackled at Community level. The publication of the Euronorm concerning packing,

inspection and delivery was postponed to enable it to be brought into line as far as possible with the resolutions of the International Standardization Organization; the fresh version is now on the point of completion.

369. The co-ordination committee decided to set up a special working party to study a number of difficult problems encountered by the regular working party in dealing with steel grades for the purposes of certain product standards. Detailed memoranda on the subject have already been submitted by several of the national delegations. Further studies are going on and comparison of the results of these various activities may be expected to yield constructive conclusions.

The Euronorms are to be periodically revised in order to ensure that they remain fully in line with technical advances. The first such revision is now in progress on the classification of pig-iron and ferro-alloys.

Section 2: Investment

370. Article 54 of the E.C.S.C. Treaty requires the High Authority to "encourage the co-ordinated development of investment."

With this end in view, the High Authority each year carries out a survey of the capital schemes shown as assets in the enterprises' balance-sheets; the results of this survey are widely publicized. In addition, it receives advance declarations of all major schemes projected, the pros and cons of which it evaluates at regular intervals.

Alongside its information work, it helps directly, as Article 54 also empowers it to do, by issuing reasoned opinions on particular schemes, and by making available financial assistance for operations of special value to the Community.

RESULTS OF THE 1961 SURVEY

371. The facts and figures assembled were published in July 1961 in a report tracing the movement of capital expenditure

and production potential over the preceding years, and giving particulars of enterprises' forecasts for the years ahead up to 1964,[1]) or, in the case of steel, production potential (following consultations with the Community iron and steel industries), up to 1965. The latter figures are shown under the heading "Production Potential" in the Memorandum on the General Objectives reproduced in Section 5 following.

Over the seven years 1954-61, capital expenditure by Community enterprises has totalled 7,560 million dollar units of account, of which 40% has been invested in the coalmining industry, 4% in the iron-ore mines and 56% in the iron and steel industry.

Capital expenditure in 1960 amounted to 1,210 million units, not far short of the record 1957 figure of 1.230 million. Against the vigorous investment drive in progress in the iron and steel and iron-ore industries must, however, be set a definite falling-off in the case of the coalmining industry, where investment in 1960 reached a particularly low level.

TABLE 36

($ 000,000)

Industry	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Coalmining industry	450	416	409	473	474	411	379	464
Iron-ore mines	30	31	44	50	41	40	44	62
Iron and steel industry	453	524	570	708	644	587	785	1,256
Total	933	971	1,023	1,231	1,159	1,038	1,208	1,782

[1]) Corrections made to figures in the *Ninth General Report.*

[2]) Forecasts for 1961 as indicated by enterprises in their replies to the survey questionnaire.

[1]) See *Investment in the Community Coalmining and Iron and Steel Industries*, Report on the 1961 Survey, July 1961.

The forecasts for 1961, which work out more than one-third as high again as the expenditure actually recorded for 1960, indicate a further increase in investment activity in the iron and steel and iron-ore industries, and a certain revival in the coal sector.

The results of the 1961 survey may be summarized, so far as capital expenditure is concerned, as follows (See Table No. 36 above).

372. Actual and estimated expenditure in the coalmining industry as at January 1, 1961, may be broken down by sectors as follows.

TABLE 37

($ '000,000)

Sector	Actual expenditure as per acccounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Pits	242	257	249	281	268	227	226	290
Coking-plants, mine-owned and independent	87	64	57	68	72	61	34	55
Hard-coal briquetting-plants	4	7	4	5	4	5	7	5
Pithead power-stations and other power-generating-plant	112	80	94	117	125	113	107	107
Plants producing B.K.B. and low-temperature brown-coal coke	5	8	5	2	5	5	5	7
Total	450	416	409	473	474	411	379	464

[1]) Corrections made to figures in the *Ninth General Report.*

373. Capital expenditure on the *pits* in 1960 was lower than in 1959, a further decline occurring in Belgium. The forecasts for 1961 work out slightly higher than those for 1960, owing to planned increases in investment by the German collieries.

The estimates of production protential are also lower, than last year's, in consequence of cutbacks in some Belgian

and French coalfields: the figure for 1964 is now put at 252 million metric tons, about the same as in 1960. Of this total, Southern Belgium will still account for over 14 million.

374. Expenditure on the *coking-plants* (mine-owned, independent and steelworks-owned) was low in 1960, but should show a rise in 1961 und 1962, chiefly owing to a higher rate of investment in the steelworks-owned plants in Italy.

TABLE 38

($ '000,000)

Type of coking-plant	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Mine-owned and independent	87.3	64.5	57.3	68.0	72.2	60.5	34.0	54.1
Steelworks-owned	18.0	19.9	22.3	28.0	24.6	24.9	11.5	19.0
All plants	105.3	84.4	79.6	96.0	96.8	85.4	45.5	73.1

[1]) Corrections made to figures in the *Ninth General Report.*

The coke production capacity forecast for 1964 is 90 million metric tons, which with the plants operating at 96% of capacity would give a maximum production of some 87 million. The coke rate at the blast-furnaces is falling; though coke consumption at the sintering-plants is increasing, this tonnage should amply suffice to cover the foreseeable requirements both of the iron and steel industry and of the other consumer sectors.

375. Large sums continued to be spent in efforts to expand the sales outlets, for coal by stepping up the production of electric current, with the result that the level of capital expenditure in this connection remained high. The maximum electric capacity of the *pithead power-stations* and other mine-

owned generating plant is expected to be up by the beginning of 1965 to 10,705 MW, approximately double the figure recorded at the beginning of 1957, and production of current from this source to rise, at the present utilization rate of 3,965 load-hours per annum, from 32,000 million kWh in 1960 to 42,000 million in 1964. A marked improvement in operating conditions is resulting from the installation of large new single-boiler generating-sets: the older power-stations with a consumption of over 4,000 calories per kWh, which in 1955 accounted for over 25% of the total output of current by the pithead power-stations, now contribute only 11%.

A similar drive is in progress in respect of the power-generating plant of the iron and steel industry, capital expenditure on which in 1960 reached the highest level since 1952.

376. For the *iron-ore mines* the survey shows a higher level of investment in 1960 than in 1959, and suggests a further substantial increase in 1961.

TABLE 39

($ '000,000)

Installations	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Mining of ore	14.8	16.3	22.3	29.4	22.7	22.5	26.3	32.0
Preparation of ore at surface	7.3	5.9	10.6	10.9	9.6	9.2	7.8	15.4
Various surface installations	7.4	8.5	11.0	9.5	8.9	8.6	9.5	14.2
Total	29.5	30.7	43.9	49.8	41.2	40.3	43.6	61.6

[1]) Corrections made to figures in the *Ninth General Report.*

Overall, production potential is steadily expanding, and may be expected to increase from 101,300,000 metric tons in 1960 to 118,500,000 in 1964. However, even this will not be sufficient to meet the rising demand from the blast-furnaces, so that imports of high-grade overseas ore will continue to increase.

377. Capital expenditure in the *iron and steel industry,* after sagging somewhat in 1958 and 1959, rose sharply in 1960, as the forecasts given in the survey of January 1, 1960, had suggested it would; it worked out 34% above the previous year's figure, and 11% above the earlier record level of 1957. The forecasts of expenditure for 1961 indicate a further increase of 60% over 1960.

TABLE 40

($ '000,000)

Type of plant	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Plant for production of:								
pig-iron[2])	70	83	130	184	206	187	171	241
steel	44	63	102	128	95	73	95	188
rolled products	265	301	245	282	207	199	360	588
General services	74	77	93	114	136	128	159	239
Total	453	524	570	708	644	587	785	1,256

[1]) Corrections made to figures in the *Ninth General Report.*

[2]) Inclusive of steelworks-owned coking-plants and burden-preparation installations (crushing, screening, sintering).

378. In spite of the very high overall total of investment, expenditure on plant for *pig-iron* production was slightly lower in 1960 than in the three preceding years, accounting for only 22% of the industry's aggregate investment, as against 32% in 1958 and 1959. In the case of the steelworks-

owned coking-plants the drop was a considerable one; expenditure on the burden-preparation installations and blast-furnaces, on the other hand, was only a little below the 1959 level, and the forecasts indicate increases of close on 40% during 1961.

Production potential is expected to have moved by 1964 to index 111 (against 1960 = 100) for coke, 200 for sintered ore and 128 for pig-iron.

379. Expenditure in 1960 on the traditional categories of *steelworks* — basic Bessemer, open-hearth and electric-furnace — remained at about the same overall level as in 1959, a decrease in the case of basic Bessemer being offset by increases for the other two. The 1961 forecasts indicate increases for all categories over the actual figures recorded in 1960. Expenditure on oxygen-blown steelmaking plant is soaring: in 1960 it showed an increase of 160% over 1959, and the forecasts suggest a similar leap in 1961.

TABLE 41

($ *000,000*)

Type of plant	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Basic Bessemer	44	17	23	45	50	34	23	31
Open-hearth	20	31	54	52	27	18	29	47
Electric-furnace			17	16	11	8	10	23
L/D, Rotor and others	10	15	8	15	7	13	33	87
Total	44	63	102	128	95	73	95	188

[1]) Corrections made to figures in the *Ninth General Report.*

This trend is expected to result by 1964 in an increase of 17 million metric tons in production potential for oxygen-blown steel and of 1,500,000 for electric-furnace steel, with

basic Bessemer and open-hearth potential remaining more or less unchanged, This will mean an appreciable alteration in the distribution of production potential as among the different processes; thus over the four years the share of basic Bessemer will contract from 48·8% to 38·1%, of open-hearth from 37·6% to 31·8%, and of electric-furnaces from 11·0% to 10·3%, while that of oxygen-blown steel will grow from 2·6% to 19·8%.

Since the estimated rise in total steel production potential, from 76,250,000 metric tons in 1960, to 95,600,000 in 1964, is somewhat less steep than the corresponding increase for pig-iron, a further improvement in the pig-iron/crude steel ratio may be expected.

380. Investment in *rolling-mill* capacity, which had been declining during the three previous years, shot up in 1960 to a level 20% above the 1955 record, with the share of this sector in the total capital expenditure of the industry, which had dropped from 58% in 1954-55 to 33% in 1958-59, now rising again to 46%. The turnround was more sharply apparent in respect of flat products (and more especially of wide strip) than of section. The new trend seems likely to persist in 1961.

TABLE 42

($ '000,000)

Type of mill	Actual expenditure as per accounts at January 1, 1961							Estimated expenditure as at 1. 1. 61
	1954	1955	1956	1957	1958	1959[1])	1960	1961
Section mills	74	87	81	79	61	64	98	125
Flats mills	140	144	107	111	78	68	172	320
Blooming and slabbing mills	23	41	31	45	32	40	47	80
Other mills	28	29	26	47	36	26	43	63
Total	265	301	245	282	207	198	360	588

[1]) Corrections made to figures in the *Ninth General Report.*

The indications are that the proportion of total-rolled products potential represented by flat products, which in 1952 was only 37%, will increase from 45·7% in 1960 to 47·7% in 1964.

SPECIFIC CAPITAL EXPENDITURE

381. To permit a country-by-country comparison of investment in modernization and extension of plant, it may be of interest to list side by side the figures for capital expenditure and actual production in the main industrial sectors, *viz.*

(a) the coalmining industry (pits);

(b) the carbonization sector (mine-owned, steelworks-owned and independent coking-plants);

(c) the iron-ore industry (ore extraction, preparation at the surface, various surface installations);

(d) pig-iron production (blast-furnaces and burden preparation);[1])

(e) crude-steel production (steelworks proper);

(f) production of rolled products (rolling-mills and ancillary plant).

Specific expenditure in these sectors over the years 1954-59 and in 1960 is shown in Table 43 following. For purposes of evaluation, these figures have to be treated with some reserve: the sectors concerned vary in structure and operating conditions from one country to another, in each one the incidence of replacement and extension operations is different, and the prices of capital goods in units of account are not fully intercomparable. Sources of error of this kind do have to be taken into account; nevertheless, they are not in themselves sufficient to explain the disparities within the individual sectors between one part of the Community and another.

[1]) Exclusive of expenditure on steelworks-owned coking-plants.

TABLE 43

Specific Capital Expenditure

($ per metric ton produced)

Sector	Germany (F. R.)	Belgium	France	Italy	Luxembourg	Netherlands	Community
Coal							
average 1954-59	0.91	1.33	1.18	1.24	—	1.20	1.04
1960	0.99	0.73	1.05	1.33	—	0.81	0.97
Cokes (all types of coking-plant)							
average 1954-59	1.06	1.08[1])	2.36	1.48	—	—[1])	1.29
1960	0.56	0.44[1])	1.15	0.48	—	—[1])	0.63
Iron-ore							
average 1954-59	0.54	0.18	0.48	1.20	0.15	—	0.48
1960	0.46	0.25	0.48	0.65	0.13	—	0.46
Pig-iron[2])							
average 1954-59	2.54	2.72	3.52	2.73	2.34	4.34	2.85
1960	2.16	4.21	3.94	1.83	2.03	6.21	2.95
Crude steel							
average 1954-59	1.72	1.32	1.19	1.17	1.43	3.31	1.51
1960	1.24	1.67	1.47	0.78	0.67	3.34	1.31
Rolled products							
average 1954-59	7.15	4.78	6.27	8.36	3.21	7.26	6.54
1960	5.34	16.77	7.30	5.03	5.43	15.76	7.18

[1]) Coke figures for Belgium and the Netherlands have been amalgamated.
[2]) Expenditure on burden-preparation installations and blast-furnaces only.

382. In the *coalmining industry*, specific expenditure on the pits remained remarkably stable, but, as can be seen from the accompanying table, in most countries (with the one major exception of Germany) the 1960 rate was below the average for the previous years.

In the case of the *coking-plants* the drop was a much sharper one and affected every country: in France and Germany the rate was only half the earlier average, and elsewhere not even that.

In the *iron-ore industry*, capital expenditure per metric ton produced was about the same as before.

In the *iron and steel industry*, despite the striking increase in investment in 1960, the specific-expenditure figures for

pig-iron and crude steel, and even for rolled products, still work out fairly close to the 1954-55 average.

DECLARATION OF CAPITAL SCHEMES

383. By the terms of two High Authority Decisions[1]) under Article 54,3 of the Treaty, enterprises are required to declare, not less than three months prior to the conclusion of the first contracts or the commencement of operations, all investment projects relating to

(a) entirely new plant, where the total estimated expenditure exceeds 500,000 dollar units of account;

(b) replacement or conversion of existing plants where total estimated expenditure exceeds 1,000,000 units of account; and

(c) construction of or alterations to steelmaking furnaces and hot-blast cupolas, irrespective of the estimated expenditure.

The particulars emerging from the declarations received in the course of a given year do not tally with the figures assembled in the course of the annual survey. The survey covers all capital expenditure planned, whether embarked on, approved or (except in the case of the iron and steel industry) merely contemplated. The declarations, on the other hand, are required only in respect of projects representing complete schemes definitely scheduled to be carried out by the enterprises; the operations concerned for the most part, especially in the coalmining industry, extend over a period going beyond that covered by the annual survey, and, moreover, schemes involving an estimated expenditure below the figure mentioned are not declarable.

Between January 1, 1956, and December 31, 1961, 638 declarations in all, relating to 1,051 capital schemes, were submitted to the High Authority.

[1]) See *Journal Officiel de la C.E.C.A.*, July 26, 1955 (fourth year, No. 18), and July 19, 1956 (fifth year, No. 17).

Period	Declarations	Projects
1st six months, 1956	73	109
2nd six months 1956	50	100
1st six months, 1957	57	82
2nd six months, 1957	44	49
1st six months, 1958	61	95
2nd six months, 1958	35	55
1st six months, 1959	34	43
2nd six months, 1959	39	74
1st six months, 1960	80	166
2nd six months, 1960	55	91
1st six months, 1961	65	105
2nd six months, 1961	45	82
Total	638	1,051

384. From the declarations received in the course of 1961, it emerged that the high rate of investment activity recorded for 1960 continued practically unabated throughout the first ten months of the year, but suddenly fell off in November and December, declarations received in these two months representing a total value of only 25 million units of account as against a monthly average of 132 million for January-October inclusive. However, even so the level of expenditure planned was well above the pre-1960 average, as may be seen from Tables 44-46 following.

The aggregate value of projects declared by enterprises in the *coalmining-industry* in respect of pits rose to 58 million units of account, as against 20 million in 1960. Most of these were for rationalization measures of various kinds, such as mechanization of coal-winning operations and of haulage and winding, and extensions to washeries and other surface installations, by means of which coal production potential is to be increased by some 900,000 metric tons. On the coal valorization side, no new schemes were declared in respect of coking-plants, but more declarations were received than in the previous year concerning new pithead power-stations, in many cases very large and up-to-date ones. The projects in question represent an increase of 990 MW in the total installed capacity of the pithead power-stations.

In the *iron-ore industry*, one project was declared, for the extension of a mine in Lorraine, representing an increase of 2,800,000 metric tons in ore extraction potential.

In the *iron and steel industry*, there was 25% drop from the enormously high level recorded in the previous year, the aggregate value of the projects declared in 1961 working out at 1,361 million units of account, as against 1,802 million in 1960.

Also, a distinct change in pattern was observable; whereas in 1960 direct capital expenditure in connection with crude-steel production, blast-furnace and steelworks proper) accounted for 38% of the aggregate value and expenditure on the rolling-mill sector for 51% (the remainder going on energy production and other items), in 1961 the proportions were 28% and 59% respectively. This is no doubt partly due to the fact, that no new products at all were declared in 1961 in respect of steelworks-owned coking-plants, but principally to the further fact that most projects for the installation of oxygen steelmaking plant had already been declared in 1960.

The net increase in crude-steel production potential represented by the 1961 declarations amounted to only 6,500,000 metric tons, as against 13,200,000 in 1960; on the other hand, for pig-iron an increase of 4,400,000 metric tons is in prospect, and there is to be a further appreciable expansion in sintering potential.[1])

The net planned increase in production potential for finished-rolled products was also a good deal smaller than in 1960, *viz.* 3,900,000 metric tons as against 8,300,000, with flat-products capacity accounting for 2,500,000 tons as against 5,300,000. The falling-off in the flats sector is particularly surprising inasmuch as the aggregate value of the projects declared in this connection was even higher in 1961 than in 1960. It may be ascribed to various factors. Thus, firstly, the projects declared related to several large and costly mills which, though they will certainly push up theoretical capacity quite considerably, will have little or no effect on potential, since bottlenecks will persist for some years to

[1]) See Statistical Annex, Table No. 49.

TABLE 44

Aggregate Value of Capital Schemes Declared

($ '000,000)

Industry	1956		1957		1958		1959		1960		1961	
	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months
Coalmining industry[1])	133	72	98	79	229[2])	22	23	144	118	28	70	103
Iron-ore mines	7	2	2	23	15	1	8	—	6	—	10	—
Iron and steel industry	243	395	165	87	256	154	116	379	1,092	710	833	528
Total	383	469	265	189	500	177	147	523	1,216	738	913	631
Aggregate value per year	852		454		677		670		1,954		1,544	

[1]) Including plants producing B.K.B. and low-temperature brown-coal coke and independent coking-plants.
[2]) This exceptionally high figure includes expenditure in connection with special schemes carried out under the Franco-German Warndt Agreement of October 27, 1956.

TABLE 45

Aggregate Value of Capital Schemes Declared by the Iron and Steel Industry

($ '000,000)

Industry	1956		1957		1958		1959		1960		1961	
	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months	1st six months	2nd six months
Steelworks-owned coking-plants	20	22	10	10	5	3	2	10	35	6	—1	—
Burden-preparation installations	9	49	21	16	39	49	1	59	72	60	52	46
Blast-furnaces	56	84	38	15	59	18	6	37	112	37	80	37
Steelworks	63	72	26	[1]	41	6	4	13	184	173	82	84
(of which: L/D and similar)	(2)	(—)	(9)	(3)	(16)	(2)	(1)	(5)	(148)	(139)	(66)	(58)
Rolling mills	83	106	43	42	81	44	92	210	550	380	479	320
(of which: flat-products mills)	(36)	(41)	(5)	(41)	(59)	(7)	(58)	(146)	(358)	(162)	(355)	(204)
Power-generating plant and miscellaneous	12	62	27	4	31	33	11	50	139	54	141	41
Total	243	395	165	87	256	155	116	379	1,092	710	833	528

[1]) Schemes dropped and new schemes declared cancel out (7 million units of account in each case).

come in the stages immediately preceding them (crude steel) or following them.[1]) Secondly, it is planned to spend much larger sums on capacity for quality products: thus 105 million units of account are to go on mills turning out a mere 200,000 metric tons a year, of flat products from high-grade special steels (dynamo and transformer sheet, etc.), and 50 million on tinplate and galvanized-sheet capacity

TABLE 46

Production Potentials in 1964

('000,000 metric tons)

Product	Potential suggested by 1961 survey	Potential suggested by 1961 survey plus projects declared during the year
Sinter	72·68	75·58
Pig-iron	73·34	73·89
Basic Bessemer steel	36·41	37·73
Oxygen-blown and other steels	18·89	17·71
Open hearth steel	30·36	30·30
Electric-furnace steel	9·90	10·21
Total crude steel	95·56	95·95
Light and heavy sections	28·25	28·63
Wire-rod	8·08	8·08
Hot-rolled strip and tube strip	5·92	5·92
Plate	10·57	10·57
Hot-rolled sheet	3·20	3·20
Cold-rolled sheet	13·37	13·72
Total, rolled products	69·39	70·12
Hot-rolled wide strip (coils, etc.)	18·51	18·51

[1]) The difference between "production potential" and "theoretical capacity" is explained in Section 5 below (No. 445), containing the 1962 Memorandum on the General Objectives for Steel.

totalling 725,000 metric tons, whereas in 1960 the figures were 21 million units for 50,000 tons a year of special-steel sheet and 20 million units for 250,000 tons of tinplate and galvanized sheet.

385. Many of the projects declared in 1961 will not begin to make their effects felt on production potential until after 1964, the reference year for the investment survey of January 1, 1961.

Table 46 above compares the probable production potential of the iron and steel industry in 1964 as indicated by the survey plus subsequent declarations received during 1961 itself.

The fact that the 1964 potential for basic Bessemer shows an increase and that for L/D steels a decrease is due to the decision to postpone for one year the commencement of operations under a number of major projects for the installation of new L/D plant and simultaneous scrapping of old basic Bessemer plant ultimately, however, production will be even higher than was originally planned, with larger converters or alternatively a larger number of them. In general, 1964 may be regarded as a transition year during which many important projects will be completed. Accordingly, 1965 should see further expansions in production potential, that for L/D steel, for instance, reaching something like 26 million metric tons. The next survey, showing the investment position as at January 1, 1962, and hence, roughly, production potential as it is expected to work out in 1965, will therefore be of exceptional interest.

HIGH AUTHORITY OPINIONS ON CAPITAL SCHEMES

386. Under Article 54,4 of the Treaty, the High Authority may issue reasoned opinions on capital schemes of particular importance for the purposes of the General Objectives. These opinions show the enterprises exactly how the merits of their individual projects must be appraised in the light of the general situation prevailing in the Common Market. They are purely advisory in character, and in no way binding on

the enterprises to which they are addressed.[1]) Copies are, however, forwarded to the Governments concerned, and lists of opinions issued are published regularly in the *Journal Officiel*.[2])

The Governments, and also the banks and other credit institutions if they specially request a prospective borrower enterprise to let them see the High Authority's opinion, can draw whatever conclusions are relevant to their particular interest in the project in question.

387. In 1961, the High Authority listed in the *Journal Officiel* 54 opinions issued by it on investment programmes submitted (some of which included two or more separate projects). In the case of 22 out of the 24 projects for the installation of additional electric-furnace or open-hearth steelmaking capacity, which would result in an increase in the demand for bought scrap, it was obliged to point out that restraint was still necessary even though the scrap market had eased of late. Favourable opinions were issued concerning 22 projects in connection with steelmaking from pig-iron, some for the installation of sintering and blast-furnace plant, others for increasing the production of oxygen-blown steel, and others again for extensions to major integrated iron and steel works. The High Authority also expressed approval of projects to construct two continous-casting installations and a blooming and slabbing mill to produce partly for rerolling firms.

One enterprise which had declared a project for installing a wire-rod mill was referred to a High Authority study of December 1960 on wire-rod production in the Community. With regard to projects for hot and cold wide-strip mills, the High Authority drew attention to its Memorandum No. 3681/2/60, of July 1960, concerning the state of the sheet

[1]) See the judgment delivered by the Court of Justice on December 10, 1957, in the two consolidated cases Nos. 1 and 14/57 (*Recueil de la Jurisprudence de la Cour*, Vol. III, 1957, p. 223).

[2]) See *Journal Officiel des Communautés Européennes* of 14.2, 25.3, 8.4, 30.5, 24.6, 1.8, 19.10, 25.11 and 30.12 - 1961 (fourth year, Nos. 12, 21, 25, 36, 42, 52, 68, 76 and 85).

market in 1965, and mentioned that since issuing the Memorandum it had received declarations of several further major schemes in the same category. In view of this fact, it felt it advisable to bring out a supplementary survey on the subject, which it issued on July 1, 1961, to the steel producers' associations in the member countries; in its opinions on all projects relating to sheet production declared after that date, it emphasized that the enterprises would do well to consult this publication.

The Memorandum on the General Objectives for Steel (see Section 5 following) contains the latest forecasts as to the state of the sheet market in 1965, and it is to these that reference will be made in future High Authority opinions.

388. In accordance with established practice, we have devoted this Section to an analysis of the results of the 1961 survey, the declarations submitted by enterprises and the opinions issued by the High Authority. As was noted at the beginning of the Section, the figures given either relate to the past or, where they concern the future, go only up to 1964: the General Objectives, dealt with in Sections 4 and 5 following, relate on the other hand to 1965.

Section 3: Financing of Investment

BORROWING AND LENDING OPERATIONS OF THE HIGH AUTHORITY

389. At December 31, 1961, the total value of the loans raised by the High Authority amounted to 274,300,000 units of account. These loans are of two main kinds: some are raised to provide the funds needed to aid industrial investment, and some for the purpose of helping to finance schemes for the building of workers' houses.

Loans of the first type are floated in whichever capital markets are deemed most promising at the time, and the proceeds are then re-lent at cost in the original currency.

Loans of the second type, on the other hand, are practically always floated in the country in which the building

operations are to take place, so that the funds can be made available in the national currency, since there is so little possibility of variation in the returns on such houses that they cannot economically be financed by loans involving an exchange risk. In view of the social purpose served, the problem of interest is solved by pooling these loans with others out of the High Authority's Special Reserve (mainly made up from the interest received on its own investments), on which such low interest is charged as to make the average interest rate on the total exceptionally attractive. Sometimes these Special-Reserve loans are pooled not with funds from the High Authority's borrowings, but with loans granted direct by the banks at the High Authority's request.

390. At December 31, 1961, the total value of the loans raised by the High Authority for building purposes amounted to 23,700,000 units of account, and that of its borrowings in the international money markets for the purpose of financing industrial investment projects to 250,600,000 units, of which 234 million came from markets outside the Community. This very high proportion of outside borrowings is due to the fact that until recently there was a relative shortage of capital in the Community generally, while the interest rates charged in such countries as the United States and Switzerland were the most attractive then obtainable. However, since by and large the position in the Community money markets is improving all the time, the High Authority is naturally anxious to adapt its procedure to this welcome development. Following the opening-up of the Netherlands capital market in 1961, it floated a public issue there, the terms of which (20 years at 4½%) are discussed in greater detail in the following subsection on the financing of investment.

It is clear that the High Authority's credit standing is now so firmly established as to rank among the best in existence, and has stood the test in the majority of the international money markets.

391. The loans granted to enterprises out of these various borrowings have played a very important role in recent years.

With regard to workers' housing, the High Authority has by this means provided assistance on exceptionally favourable terms, for the building of over 56,000 housing units, including a number part-financed by it for research purposes.

With regard to industrial investment, High Authority loans have helped to finance capital schemes to a total value of approximately 1,200 million units of account, representing 13% of all investment in the Community industries since 1954. It should be added that the High Authority has always given its financial support to projects deemed to merit priority on grounds of general interest, and has consequently been able to exercise a decisive influence on the chanelling of investment to essential sectors. In the case of certain major new projects, the High Authority's contribution forms a vital element in the financing arrangements.

392. As well as granting loans direct, the High Authority has assisted the financing of enterprises' investment schemes by concluding special agreements with banks in the six countries, under which the banks then granted Community enterprises' supplemental medium-term loans in the national currencies at reduced rates of interest. These arrangements were made possible by the High Authority's judicious investment of its own funds, which enabled it to combine care for its own requirements as to liquidity and yield with action to secure additional credit facilities for Community enterprises.

THE HIGH AUTHORITY'S CONTRIBUTION TO THE FINANCING OF INVESTMENT

By the terms of Article 54,1 of the Treaty, "the High Authority may facilitate the carrying-out of investment programmes by granting loans to enterprises or by giving guarantee to other loans which they obtain."

393. During the period running from April 1954 (when the first loan was raised in the United States) to the end of 1961,

the High Authority had available for lending operations in connection with the financing of capital schemes and other projects a total of 336.77 million E.M.A. units of account.[1]) These funds were derived from various sources as follows.

('000,000 E.M.A. units of account)

1) *Borrowings*		
— Proceeds of loans	274.34	
Prepayments of instalments and anticipatory redemption of loans granted to enterprises. The lifetime of the original loans enabled the High Authority to relend these amounts for terms of up to 20 years	10.73	285.07
2) *Interest on bank deposits and investments*		
These revenues, for which the Treaty does not prescribe any particular use, are accumulated in the Special Reserve, and are at present being employed to help finance the building of workers' houses.		
Revenues under this head up to December 31, 1961 aggregated		42.17
3) *Proceeds of the levy*		
Out of the allocations for readaptation assistance and research projects, various sums were disbursed, with the approval of the Council of Ministers, in the form of loans instead of non-repayable grants (*e.g.* for experimental workers' housing schemes and for the financing of pithead stocks). The amounts so authorized up to December 31, 1961 aggregated		9.53
Total		336.77

Out of these available funds of 336,770,000 units of account, 313,200,000 were disbursed up to the end of 1961, leaving 440,000 still to be drawn down and 23,130,000 in hand for the granting of further loans. Redemption payments amounted to 38,420,000, so that loans outstanding at December 31, 1961, amounted to only 274,780,000 units of account, made up as follows.

[1]) One E.M.A. unit of account equals 0.88867088 gr. fine gold or one U.S. dollar.

TABLE 47

('000,000 units of account)

Project	Loans outstanding from borrowed funds	Loans outstanding from own resources	Total
Industrial investment	219·46	—	219·46
Workers' housing schemes[1])	19·60	26·66	46·26
Readaptation assistance[1])	—	5·58	5·58
Research (experimental housing schemes)[1])	—	3·19	3·19
Miscellaneous (European School)	—	0·29	0·29
	239·06	35·72	274·78

[1]) For further particulars of these operations, see Chapter Five, Part I, Section 4 (Readaptation) and Part II, Section 2 (Housing), as well as the various tables in the Annex on Finance.

394. During the period under review, the following loans were floated by the High Authority:

January 1961: *Hfl.10,000,000*, at the rate of 4½% p.a. in the form of negotiable Notes with a term of five years; these Notes were purchased at par by a Netherlands banking syndicate under the leadership of the Amsterdamsche Bank;

January 1961: *Sfr.11,300,000*, at the rate of 4 3/4% as bank loans at par with a term of five years from Swiss and Luxembourg banks;

January 1961: *Lfr.100,000,000*, at the rate of 5 1/4% p.a. in the form of Notes with a term of 25 years, purchased by the Établissement Luxembourgeois d'Assurance contre la Vieillesse et l'Invalidité;

July 1961: *Hfl.50,000,000*, at the rate of 4½% p.a. in the form of Bonds with a term of 20 years; these Bonds were purchased at par by a Netherlands banking syndicate under the leadership of the Amsterdamsche Bank and the Nederlandsche Handel-Maatschappij;

October 1961: *Lfr.100,000,000*, at the rate of 5% p.a. in the form of Notes with a term of 25 years, purchased by the

Établissement Luxembourgeois d'Assurance contre la Vieillesse et l'Invalidité.

The total equivalent of all these borrowings amounts to *23,200,000* units of account. The proceeds of the Guilder and Swiss franc issues, representing 19,200,000 units of account, were used to finance industrial investment, and the proceeds of the Luxembourg loans to finance workers' housing schemes.

395. To facilitate the examination of applications for industrial loans, the High Authority in May 1961 published a series of directives[1]) concerning the procedure to be followed in applying, and at the same time specified the scale of priorities which it intended to observe, until further notice, in granting such loans. The priorities are based on the indications arrived at in the studies for the General Objectives, as the aim of the High Authority in granting industrial loans is to promote expansion in line with the desiderata outlined in the General Objectives.

The following at present rank as priority items:

(a) iron and steel: projects relating to installations for ore extraction, blast-furnace burden preparation and pig-iron production, to oxygen steelmaking plant, and to rationalization and specialization of production;

(b) coal: projects relating to installations principally designed to increase output and lower production costs, projects for thermal power-stations.

396. Applications received by the High Authority for industrial loans under Article 54 out of loans contracted during the year under review[2]) represented a total value of 64 million units of account, of which German applications made up 50 million.

Basing itself on the considerations just mentioned, the High Authority granted loans to the following enterprises:

[1]) See *Journal Officiel des Communautés Européennes*, May 20, 1961 (fourth year, No. 35).

[2]) See No. 394 above.

Klöckner Werke AG., Duisburg;
Dillinger Hüttenwerke AG., Dillingen;
Hessische Berg- und Hüttenwerke AG., Wetzlar;
Ilseder Hütte, Peine;
Steinkohlenbergwerke Mathias Stinnes AG., Essen;
Phenix Works S.A., Flémalle-Haute;[1])
Acciaieria e Ferriera di Bolzaneto S.p.A., Genoa;
Vereinigte Deutsche Metallwerke AG., Frankfurt-am-Main/Heddernheim;
Stahlwerk Mark Wengern AG., Wengern;
Theodor Wuppermann G.m.b.H., Leverkusen;
Erkenzweig und Schwemann, Edelstahlwerke, Hagen, Westphalia.

The amounts of these various loans, which were granted at interest rates of 4 7/8% and 5% per annum, added up to Sfr.11,300,000 and Hfl.35,500,000, or a total of 12,400,000 units of account (about 20% of the aggregate amount applied for); a balance of Hfl.1,500,000 is now being allocated.

Only one of the projects aided was in the coal sector: this was for the completion of shaft-sinking operations by a colliery in one of the highest-output coalfields of the Community. All the other loans went to the iron and steel industry, the proceeds of the long-term loan in particular being used to assist schemes for increasing pig-iron production capacity and for introducing the new oxygen steelmaking processes. Medium-term loans were allocated mainly to small and medium-sized enterprises for modernization and rationalization programmes.

All the projects aided were for the expansion of existing enterprises.

397. Out of the long-term of Hfl.50 million, the sum of Hfl.30 million was held in reserve for allocation to industrial-

[1]) In granting this loan, the High Authority took into account considerations of regional and redevelopment policy as well as the industrial-investment aspect proper.

redevelopment schemes in certain coalmining areas: of this, Hfl.7 million was later paid out (see above), while the remainder was retained until the beginning of 1962, the High Authority laying down that should no redevelopment projects be notified to it by the Governments within the time-limit fixed, it might decide to allocate part or all of the funds thus reserved to industrial projects proper in the coal and steel sectors.

398. Loans granted by the High Authority up to December 31, 1961, including those just mentioned, may be broken down by sectors and countries as follows (initial amounts of loans, including 10,730,000 units of account lent out of funds constituted by prepayments of instalments and anticipatory redemptions of earlier loans).

TABLE 48

($'*000,000* and %)

	Germany (F. R.)	France	Italy	Benelux	Community	
Coalmining industry	93.60	27.00	1.00	14.00	135.60	43·3%
Iron-ore mines	7.55	8.00	5.70	1.00	22.25	7·1%
Iron and steel industry	32.16	21.57	33.05	8.93[1])	95.71[1])	30·6%
Sub-total	133.31	56.57	39.75	23.93	253.56	81·0%
Workers' housing	32.52	4.05	1.81	11.62	50.00	16·0%
Readaptation	5.33	0.32	—	—	5.65	1·8%
Research[2])	1.40	0.76	0.33	0.78	3.27	1·0%
Miscellaneous (European School)	—	—	—	0.72	0.72	0·2%
Total	172.56	61.70	41.89	37.05	313.20	100·0%

[1]) Including sums lent for reasons partly connected with the redevelopment of coalmining areas.
[2]) Experimental Workers' Housing Scheme II.

399. Details of operations to date in connection with workers' housing, readaptation and research, will be found in Chapter Five following.

With regard to industrial investment, the position as emerging from the latest of the half-yearly reports submitted by the High Authority's banking agents in the member countries is as follows.

At June 30, 1961, a number of High Authority-aided schemes had been fully carried out within the time-limits specified in the loan contracts. The total contribution of the High Authority in respect of the schemes in question amounted to 144 million units of account: they included all the projects assisted out of the first American loan, and practically all those assisted out of the first Swiss loan.

Progress to date with the projects aided out of the second American loan is in accordance with the terms of the contracts. For information, it may be added that at June 30, 1961, disbursements on the various projects scheduled for completion by the end of 1961 amounted to at least 67% of the total expenditure planned.

As regards schemes assisted out of the third American loan, the proportion of actual present disbursements to total estimated cost is in most cases of little practical significance, since operations are not expected to be completed until the end of 1967. The same of course applies even more strongly to projects for which loans were granted more recently still.

In all cases, however, the High Authority's departments and its banking agents in the different countries are following with attention the progress of operations under the schemes which are not yet completed.

400. As well as itself granting loans (for full details of which see the Tables in the Financial Annex), the High Authority has been instrumental in inducing various banks to grant substantial credit facilities to Community enterprises. By depositing its own funds with banks in accordance with its liquidity requirements, it has enabled the latter on their responsibility to make available considerable sums to such enterprises in the form of medium-term loans *(viz.* 4-8 years). At the end of 1961 the total amount of bank loans outstanding was 85,300,000 units of account. The breakdown by countries is shown in Table XI of the Financial Annex.

401. At the end of 1961, guarantees granted by the High Authority in respect of loans raised by enterprises from other sources represented a total of 10,700,000 units of account.

Further guarantees to the value of 25 million units of account had been approved in principle, but had not yet become effective at the end of the year.

All the guarantees in question had been applied for by enterprises in the iron and steel industry.

Section 4: Definition of the General Objectives

402. Last year's General Report recorded that the High Authority's departments were continuing their work, in co-operation with experts in the six countries, on the definition of fresh General Objectives. So far as the steel sector was concerned, these studies were subsequently completed and the results embodied in a Memorandum which was submitted to the Consultative Committee on January 10, 1962; in the case of coal, progress has been slower, for various reasons explained on a later page.

The following account briefly runs over the hypotheses of general expansion adopted, describes the methods used in preparing the objectives for steel and coal, and summarizes the findings with regard to steel.

HYPOTHESES OF GENERAL EXPANSION

403. The work on the outlook as to general expansion is the responsibility of the European Economic Community in Brussels; a working party of experts, including staff members of the High Authority, is engaged in studying the structure and long-term development of the economies of the Common Market countries.

These studies relate to the period up to 1970. A first interim report was drawn up in 1960, but on re-examining the methods and figures adopted the working party decided that it would be necessary to modify the findings. No final document has as yet been produced; however, thanks to their

participation in the experts' work and to various contacts with the national Government departments concerned, and basing themselves where possible on the national programmes, the High Authority's departments were able to put forward hypotheses of general expansion which were used in defining the General Objectives.

The gross-national-product indices forecast for 1965 in relation to 1960 are very close to those published in the

TABLE 49

Trends in Economic Expansion

Gross national product

Country	Cumulative annual rates of growth in %			Indices
	1950-1955	1955-1960	1960-1965	(1955=100) 1965
Germany (Fed. Rep.)	9·0	6·1	4·6	168
Belgium	3·2	2·4	3·7	135
France	4·4	4·2	5·0	157
Italy	6·0	5·9	5·2	171
Netherlands	5·6	4·2	4·0	150
Community	6·2	5·1	4·7	161

Industrial production

Country	Cumulative annual rates of growth in %			Indices
	1950-1955	1955-1960	1960-1965	(1955=100) 1965
Germany (Fed. Rep.)	12·4	6·9	5·3	181
Belgium	4·6	1·8	5·0	139
France	5·7	7·6	6·2	194
Italy	8·6	8·9	8·1	226
Netherlands	6·2	5·7	5·1	169
Community	8·6	6·9	6·1	188

Eighth General Report; the industrial-production indices, on the other hand, are appreciably higher. For 1970, the most likely hypothesis on present evidence assumes that growth between 1965 and 1970 will continue at the average rates forecast for the period 1960-65. The trend after 1970, some estimate of which is needed for the work on energy and coal, is still being studied from various angles.

METHOD EMPLOYED IN DEFINING THE GENERAL OBJECTIVES FOR STEEL

404. As soon as the work on the last set of General Objectives had been completed, the High Authority's departments put in train a series of further studies for the purpose of providing the basic documents for the next General Objectives. Most of the work was done by the departments themselves, but there was close and frequent consultation with experts in the member countries. Also, certain studies concerning five steel-consuming industries were conducted through the Consultative Committee.

The work was mainly concerned with the assessment of demand for iron and steel products. First, a thorough review was made of the traditional method of relating overall steel consumption to an overall economic variable such as the national product or industrial production: numerous statistical adjustments were tried out, using different types of variable, different definitions of steel consumption, and chronological series relating to different periods (some including and some excluding the pre-war years).

The most original and valuable work done, however, was in connection with the sector-by-sector and product-by-product analyses, the object being, firstly, to cross-check the results arrived at by the overall method, taking into account all available data on the trend in the pattern of consumer industries, changes in specific consumption and processes of substitution, and secondly, to secure sufficiently detailed information to serve as a basis for a rough breakdown of steel consumption by main categories of iron and steel products. Thus for each Community country the steel consumers as a whole were divided into twenty sectors, and a systematic

analysis was made of the trend in activity in each sector and the corresponding movements in steel consumption.

A fairly detailed analysis was also made of the position in the external markets, taking each of the principal steel-consuming regions of the world and assessing the probable trends in home demand, production, import requirements, and the share of Community products in total imports.

With regard to raw-material supplies, thorough studies were carried out concerning scrap and coke. A scientific evaluation was made of the outlook regarding availabilities of scrap, and in particular of salvage scrap. In the case of coke the main problem was the trend in the coke rate at the blast-furnaces as resulting from the introduction on a general scale of various new techniques, including improved burden preparation and injection of fuel oil.

Examination of the declarations of capital schemes submitted to the High Authority showed that many iron and steel enterprises were planning to adopt the new oxygen steelmaking processes on a major scale as soon as possible. It was therefore necessary to establish exactly what advantages these processes afforded in comparison with those they were to supersede.

Lastly, an examination was made of probable trends in labour productivity and manpower requirements in the iron and steel industry given several alternative hypotheses regarding production and working hours.

405. When these various preparatory documents were ready, an active start was made on the consultations with the national experts in the different specialized fields. First, four main committees were set up, consisting respectively of producers, consumers, trade-union representatives and Government officials, who were asked to assist by discussing the broad general problem of the iron and steel industry and indicating the lines along which they felt the work could most usefully be conducted. In agreement with the committees, the High Authority then decided that a number of expert working parties should be set up, the committees suggesting the names of particularly qualified specialists.

The studies were then carried on by the working parties. The first, which consisted of experts on matters of general economic development and specialists from the different steel-consuming sectors, and was assisted by a number of sub-working parties for specific industries, was required to study the probable trend in internal steel requirements, on the basis of preparatory documents supplied by the High Authority, describing both the overall and the sector-by-sector method.

The second working party studies export prospects; its members included some of the foremost experts on the external markets for Community iron and steel products.

The third working party was instructed to study developments in iron and steelmaking techniques, to give some indication of the extent to which the latest techniques might be expected to be in use in 1965, and to examine the whole field of raw-material supplies, *i. e.* pig-iron, scrap, coke and iron ore.

The fourth working party studied economic problems in connection with the labour aspect.

The High Authority thus had the benefit of the expert opinion of something like 300 highly-qualified specialists. The working parties and sub-working parties drew up reports giving for each question the main conclusions arrived at in their discussions and the reasons on which they had based these.

On the basis of these studies, the High Authority then on its own responsability drafted the Memorandum on the General Objectives for Steel which is reproduced in Section 5 following.

METHOD EMPLOYED IN DEFINING THE GENERAL OBJECTIVES FOR COAL

406. In outline, the procedure followed was the same as that adopted in defining the General Objectives for Steel: first the High Authority's departments carried out a series of preparatory studies, where necessary in co-operation with specialists

in the member countries, and then meetings were held with representatives of the producers, workers, consumers and Governments to discuss the documentation thus built up.

Progress was slower than on the General Objectives for Steel, for two reasons. Firstly, the range of problems involved is broader, and probably rather more complex: thus for instance it is essential to study the comparative costs of Community coal from the various coalfields and of the competing products, namely imported coal, petroleum products, natural gas and nuclear energy. Secondly, definite General Objectives can only be laid down for coal as part of some kind of energy policy: Chapter Two of this Report describes how the basic studies are being dovetailed with the work of framing such a policy. For these reasons, the High Authority is unable to submit its General Objectives for Coal at the same time as those for steel. A very thorough study has, however, been made of the trend in demand and the outlook regarding supply.

407. The development of the enrgy position over the past ten years has been systematically analysed in order to pinpoint the connections between energy consumption and economic activity. Energy consumption is increasing at the same time as industrial production and gross national product, but not at the same pace as either, and it is essential to ascertain how far this fact is due to a change in the share of total economic activity represented by the big energy-consuming sectors, and how far to technical progress resulting in a smaller specific consumption of energy to obtain the same performance. This problem can be effectively investigated only by studying separately the main energy-consuming sectors and, if possible, the main uses to which energy is put. This is the more necessary inasmuch as some consumer sectors offer much more scope than others for the use of substitute fuels. Studies were accordingly made of the iron and steel industry, other industries generally, the transport sector and the household sector.

408. In the case of the iron and steel industry, the main development in this regard is the reduction in the coke input

rate, which has become more and more marked in recent years; the points requiring to be investigated in detail are the ultimate full extent of the reduction and the annual rate at which it may be expected to continue. The fall in the specific consumption of coke is resulting in a reduction in the amount and the calorific value of the blast-furnace gas produced; if we further note the upward trend in consumption of fuel oil at the rolling-mills, it is clear that a considerable change is taking place in the respective shares of the various fuels employed to meet the industry's demand for energy other than coke.

409. In industry other than iron and steel, the outstanding developments in the course of the past ten years have been the major reduction in specific-consumption rates and the progressive replacement of coal by other fuels. The incidence of these processes has, however, varied very much from one Community country to another. Elucidation of the disparities in trend would be a notable step towards a proper understanding of the factors affecting energy consumption in industry generally.

410. In the transport sector, it is of course necessary to take rail, road and inland water transport separately. The main change in the case of railways is the steady advance of electrification and dieselization: in another fifteen years or so the consumption of coal will be negligible. As regards road traffic, consumption of motor fuel by commercial vehicles moves pretty well in line with general economic growth; consumption of gasoline by private cars, on the other hand, follows a curve of its own, which makes it particularly difficult to arrive at long-term forecasts. Such forecasts are nevertheless essential, since the motor fuels and the liquid fuels which are in competition with coal are linked products.

411. In the household sector energy consumption moves to some extent independently, or at any rate not so obviously in line with overall indicators such as gross national product. Moreover, there is the possibility that at some future date saturation point will be reached, at least so far as certain

uses are concerned. In the study of these questions, country-by-country comparisons are sometimes very helpful. As for the substitution of one form of energy for another, households in general are likely to be less prompt than industry in making the change, so that the process is slower but may be expected to extend over a longer period.

412. In any case, the scale of the substitution processes, and ultimately the division of the market as among the main sources of energy, must principally depend on the comparative prices of the different forms of energy, and on the energy policy followed by the Community countries. With regard to the first point, some rough indications have been worked out from a study of various items liable to affect production costs in respect of the different forms of energy.

So far as coal is concerned, the two main factors are miners' wages and miners' output. The level of wages is largely governed by the movement of industrial workers' wages generally, and, in the final analysis, the rise in real income per gainfully-employed person in the economy as a whole. Consequently, the real problem is the uncertain trend in productivity. Studies have been begun, in co-operation with a number of Community collieries, to work out the probable and possible movement of production potential and output in the different coalfields. The subject is a highly complex one, since the trend in output depends on the level of production and on the technical methods employed, which might in certain cases be appreciably different from those used at present if the industry were prepared to concentrate all out on its best seams much more than it is willing to do at this juncture.

The European market price of petroleum products depends on the cost of the crude, the maritime freight charges (in the case of imported oil) and the cost of refining. The two latter items can be fairly accurately calculated; the cost of crude oil, on the other hand, is a much more uncertain factor, partly because prospecting and production conditions vary enormously from one region to another. The average cost of the Community's supplies therefore depends on the price structure in the world market and the relative importance

of each possible supplier areas; the geographical distribution of procurements is part and parcel of the whole question of security of supply and long-term price stability.

The various preparatory studies thus briefly outlined are on the point of completion; work will then begin on the second stage.

Section 5: The General Objectives for Steel[1])

GENERAL OUTLINE

413. If the Community iron and steel enterprises implement in full their present investment plans, which are calculated to raise their production potential by 1965 to 99 million metric tons of crude steel, they should be able to cover the probable requirements of the internal and export markets, which are estimated at 89 million metric tons if 1965 is an average year for business, and at 94 million if it is a particularly active one.

With an important reservation as regards the flat-products sector, where an imbalance may develop inasmuch as estimated capacity is several years ahead of the probable consumption trend, there seems likely to be little difficulty in ensuring a quantitative balance between production and demand. The production supply balance also appears to present no problem.

It is clear, therefore, that the problems with which the iron and steel industry has to do are coming to be of a different nature. Instead of concentrating simply on how to produce the tonnages required and to secure the necessary raw materials, the industry is now having to devote its attention to more specifically economic aspects, including in particular, firstly, which production techniques to employ and, from a more general angle, how quickly to adapt its plant in line with technical progress, and secondly, which qualities of product best meet consumers' requirements, due account being taken of the relative prices. Finally, there is the possi-

[1]) This is the final text of the General Objectives for Steel, as adopted by the High Authority at its meeting on March 14, 1962.

bility that, with easier conditions in the steel market, and some products in particular in plentiful supply, the price level may move in a manner which will to some extent affect the financing of the capital schemes planned.

Reasons for drawing up fresh General Objectives for steel

414. The 1957 General Objectives for steel can now be seen to have been satisfactorly attained: in 1960, a year of extremely vigorous business activity, Community crude-steel production reached the record level of 72,800,000 metric tons, which is very close to the "upper limit" of demand, 73,500,000, mentioned in the 1957 Objectives.[1] The industry was able to cope with this prodigious expansion in demand without prolonged or widespread tightness developing either in the market for iron and steel products, in coke and ore supplies, or in manpower.

The general background to developments in the iron and steel industry during the next few years may be expected to be one of far-reaching changes both in general economic conditions and in production techniques.

As regards the *rate of economic expansion*, the outstanding point is the change in psychological attitude: whereas in the 1957 Objectives an annual growth of 4·1% in gross national product from 1955 to 1965 was described as "a very definite prospect of rapid expansion," now all the estimates, whether from national sources (official or private) or from the Community Institutions, indicate considerably higher figures for the Community. It is true that in some countries the manpower reserve has shrunk — and even shrunk to nil — but thanks to the introduction of the Common Market enterprises are now better able to specialize and to take advantage without delay of the many possibilities offered by technical progress. The national product in the Community is therefore expected to grow in the next few years by 4·7% per annum, and industrial production by 6·1%. These forecasts may be

[1]) See *Fifth General Report*, pp. 260 ff., or *Journal Officiel de la C.E.C.A.*, May 20, 1957 (sixth year, No. 16).

compared with the figures actually recorded over the past five years, which work out, from 1955 to 1960, at 5·1% and 6·9% respectively: thus the high rates of growth of the post-war years, which represented a period of reconstruction of the economies, have been substantially maintained.

TABLE 50

General Economic Expansion of the Community

	Cumultative annual rate of increase in %		Indices	
	1955-1960	1960-1965	1960 (1955=100)	1965 (1960=100)
Gross national product	5·1	4·7	128	126
Industrial production	6·9	6·1	140	134

The iron and steel industry appears to share this assessment of general economic expansion. In 1960 its actual capital expenditure was 30% higher than the average for the five preceding years, while expenditure for 1961 and 1962 as estimated at January 1, 1961, was double that average. These high rates of growth are made possible by the process of drastic *change in techniques of all kinds*. In the iron and steel industry the present expansion of production capacity is proceeding against a background of radical technical innovation. Thus at the blast-furnaces, a number of major improvements, including in particular better burden-preparation methods and the injection of fuel oil, have for some years enabled the coke rate to be very considerably reduced and the capacity of the existing furnaces increased, with a resulting drop in production costs. At the steelworks, the most striking development has been the advance of the oxygen steelmaking processes, which yield metal of much better quality than the traditional basic Bessemer converter; there have, however, been a number of other improvements, as for instance the development of oxygen-blowing devices which can be fitted to most types of existing plant. In conjunction with these

technical changes, a steep rise is now observable in the proportion of high-grade products.

415. The outlook being thus now altered in two respects, it seems worth while to examine how far individual producers' present plans accord with the probable trend in the steel market, and perhaps to indicate tentatively some new lines of approach for economic study and technical research.

The General Objectives with which we are here concerned relate essentially to 1965, for which year it is possible to assemble sufficient data regarding both demand and production capacity to reach valid and detailed conclusions; the much sketchier indications for 1970 are intended only as background.

They are calculated for the Community of the Six as at present constituted. Should Great Britain become a member, major changes would, of course, be likely to supervene between now and 1965; however, since it is not possible at present to form any real idea as to either the manner or the effects of Britain's entry, the present General Objectives have been drawn up assuming the continuance of the organizational *status quo* — particularly inasmuch as all the preparatory work was conducted on this hypothesis. Naturally, further more broadly-based studies will be necessary if and when the time comes.

Such, then, were the main points borne in mind in working on the General Objectives. More than on previous occasions, the focus was on comparing the principal factors determining supply and demand, and on examining how far it is possible to ensure the smooth operation of all the forces involved in the flow of supplies to the Common Market for steel.

At the same time, the studies highlighted a number of factors of uncertainty, economic rather than technical in character, which had hitherto called for little attention.

Demand and supply

It is proposed to examine

(a) what balance may be expected between production

of and demand for steel, both overall and by types of product;

(b) what problems arise with regard to the future flow of raw materials;

(c) what problems are likely to develop with regard to manpower.

416. One method of estimating *internal demand* for steel in 1965 is to assume the persistence during the next few years of the ratio previously observed between steel requirements and an overall economic indicator, either national product or industrial production. In the course of the last ten years Community internal demand has risen at approximately the same rate as industrial production. In order to examine in detail the developments behind the movement of steel consumption and the breakdown as among the different types of rolled product, recourse has also been had to a sector-by-sector method, *i. e.* to working out the prospects for the different steel-consuming industries separately. This method has the advantage that all available data can be utilized, so that account can be taken, firstly, of the fairly substantial disparities between the rates of growth of the different sectors of industry, and secondly, of the changes in the proportions represented by the different types of rolled product and of the processes of substitution going on as between steel and various other products. There are, however, certain difficulties in its use which have not as yet been entirely overcome: the chief problem is to check the consistency of the levels of activity forecast for the different steel-consuming sectors.

The results arrived at for the Community by the two methods have been very similar, so that it has been possible to put total internal demand for Treaty iron and steel products at 76 million metric tons crude-steel equivalent. The increase from 1960 to 1965 thus works out at 5·2% per annum: its incidence will vary from one type of product to another, since some can count on more readily-expanding markets than others, and from one quality to another, being comparatively small in the case of sections and of hoop and strip, and larger in that of plate and sheet. Demand for special steels

may be expected to continue to expand rather faster than that for ordinary steels.

The level of *exports* is of course much more difficult to assess, since it is necessary to take into account the trend in the demand from the emergent countries, these countries' programmes for steelworks construction, the development programmes and commercial policies of the traditional exporter countries, the advent in the world steel market of new countries such as the Soviet Union and Japan, and lastly the ability of the Community enterprises to withstand competition. In general, except where there were definite reasons to suppose the contrary, we have gone on the assumption that there will be no change in the competitive capacity of Community and non-Community enterprises. Accordingly, it is estimated that net exports will show a slight rise, and may reach 13 million metric tons crude-steel equivalent

TABLE 51

Crude-Steel Requirements

(*'000,000 metric tons*)

	1955[1])	1960[1])	1965		Indices		
			Trend	Upper limit[2])	1960 (1955=100)	1965 (1960=100) Trend	1965 (1960=100) Upper limit
Internal demand	43·8	59·0	76·0	80·0	135	129	135
Net exports	8·4	11·8	13·0	14·0	140	110	119
Total	52·2	70·8	89·0	94·0	136	126	133
of which: special steels	4·1	6·0	7·8	8·3	146	130	138

[1]) Exclusive of change in producers' and dealers' stocks.
[2]) Trend + 5·5%.

by 1965. The increment will probably show a higher proportion of heavy sections, of sheet and of ingots and semis, and a corresponding shrinkage in the share of plate and wire rod.

In all, it will be necessary to produce 89 million metric tons crude-steel equivalent to cover probable demand in 1965. This figure is based on the hypotheses as to general economic expansion indicated above, and is therefore valid in relation to one particular trend; it is naturally possible that 1965 may be a poor year, or on the other hand it may equally well turn out to be a year of particularly marked economic activity, in which case a production of 94 million metric tons will be needed to meet demand.

In the steelmaking sector proper, the sum total of the capital schemes at present planned by the producers indicates a maximum production potential of 99 million metric tons of crude steel in 1965. If all the investment now planned is in fact carried out, there should be a satisfactory balance in 1965 between production potential and probable demand. On present information, however it is not certain that the age and production-process structure of the Community's steelmaking potential, as indicated in the declarations, will be fully satisfactory. It is not yet altogether clear how much of the older plant still in service will need to be scrapped, nor how quickly it is desirable that new plant working with the recently-developed oxygen converter processes should be installed. The following breakdown of probable production, based on the replies to an inquiry among producer enterprises, is therefore to be taken as a rough approximation only.

	1960		1965	
	'000,000 metric tons	%	'000,000 metric tons	%
Basic Bessemer	35·9	49	30	34
Open-hearth	27·5	37·5	27	30
Electric-furnace	7·6	11	9	10
Oxygen-blown, etc.	1·8	2·5	23	26
Total	72·8	100	89	100

The two problems — the rate at which obsolescent plant should be scrapped and the rate at which oxygen steel-

making will progress — are closely linked, since practically the whole of the projected increase in capacity will consist of oxygen converters, which incidentally can be brought into operation comparatively quickly.

In the rolling-mill sector, it is difficult to compare production potential and probable requirements inasmuch as most mills are multi-purpose in character. This is particularly so in the case of flat products. In addition, the estimates of production potential based on the annual investment surveys and on the investment declarations submitted to the High Authority contain various elements of uncertainty. Both the actual capacity of a particular mill and the distribution of the crude steel among the different mills — and consequently the production potential of these — may be modified either in accordance with the state of the market, or as a result of miscellaneous factors (such as changes in working hours, or decisions to discontinue operations on older mills) difficult to know correctly in advance. A detailed account of the difficulties encountered in comparing production potential, capacity and demand will be found in the section of the General Objectives entitled "Production-Capacity Targets; Raw-Material Supplies."[1])

TABLE 52

Requirements of Iron and Steel Products

('000,000 metric tons)

	1955	1960	1965	
			Trend	Upper limit[1])
Wire rod	17·6	21·9	26·5	29·2
Flat products	3·6	5·4	6·5	7·2
Flat products	15·0	23·5	29·6	32·6
Steel for castings, ingots, semis	4·6	5·5	6·9	7·6
Total	40·8	56·3	69·5	76·6

[1]) Trend + 10 %.

[1]) See Nos. 444 ff. below.

It is, however, possible to advance a number of conclusions which may be summed up under the two following heads:

(a) except in the case of flat products, and with due regard to the elements of uncertainty just noted, production potential and capacity for 1965, as indicated by the producers' current declared plants, are to a great extent in accordance with expected demand;

(b) on the other hand, it should be emphasized here and now that a marked imbalance may be expected to develop in the flat-products sector.[1])

The High Authority has already twice had occasion to draw the producers' attention to this point. Even though, owing to bottlenecks either higher up or lower down the production line, it may not be possible in 1965 to utilize to the full the theoretical potential of the new wide-strip capacity installed, the fact remains that that capacity in there, or will be there: it appears to be several years ahead of the probable trend in consumption.

417. Given the breakdown of steelmaking processes just described, it remains to examine how the flow of *raw materials* is to be assured.

Taking as a basis the most probable rate of operation of the various installations, we may reckon *demand for pig-iron* at 66 million metric tons (or 69 million if 1965 is a particularly active year). Provided the investment programmes at present planned are fully carried out, these requirements should be met satisfactorily: the potential now declared for 1965 works out at 75 million metric tons, which would enable certain obsolete and uneconomic plant to be scrapped.

As regards *scrap*, the earlier tightness in the market has been successfully eliminated, thanks to the exertions made over some years in accordance with the principles laid down in the previous General Objectives, and unless there is a very considerable deviation from the steelworks operating rates forecast in the present Objectives no serious difficulties are to be expected: if we take into account the reserve of

[1]) See No. 452 and Table 64 below.

blast-furnace capacity, the shortfall works out at between 1 and 2 million metric tons.

As regards *iron ore*, there will be a substantial increase in the tonnages to be imported, from 32,600,000 metric tons in 1960 to 42 million in 1965. Since there is still some room for stepping up Community production, however, the percentage of total demand requiring to be covered from imports will rise only slightly, at any rate up to 1965.

As regards *coke*, the technical improvements of recent years will be further pursued, with the result that the input rate at the blast-furnaces will continue to fall steeply, decreasing from 880 kg. per metric ton of pig-iron in 1960 to 780, or even 750, in 1965. There is therefore no overall problem; on the other hand (a point which will be discussed in the General Objectives for coal), it is not yet known how much of the coke will be from Community sources and how much imported, and this factor is likely to weigh to some extent in the location of new iron and steel production units.

418. Finally, as regards *manpower*, the industry would need some 30,000 extra workers (an increase of 5%) if present working hours were maintained; since, however, the trend is towards a shorter working week, it seems likely that a larger increase will be required, say 70,000. Except in a few cases where there is a local shortage, it will probably be not too difficult to find the necessary numbers, as such, but very special attention will have to be devoted to the matter of skills, since the men will have to adapt themselves to the changes in techniques.

New problems

419. All in all, in consequence of the iron and steel enterprises' policy in recent years, their present investment projects and the rapid rate of technical progress, most of the principal equilibria should be satisfactorily established in 1965. On the other hand, a number of somewhat different problems may be expected to come to the fore.

420. The many improvements introduced in steelmaking in recent years have broadened the range of *qualities* available to

the consumer, while at the same time the very rapid development of certain potential competitor products, such as plastics, is obliging the industry to devote special attention to problems of quality. The use of the new types of product, reductions in the gauges, and improvements in the intrinsic properties of the metal are likely to cause a change in specific steel consumption in the various manufacturing industries; the end result need not, however, be a falling-off in steel sales, for the reduction in the cost of steel for any given purpose could enable in the better to maintain, and even expand, its competitive position.

An analysis of the main steel-consuming sectors and a tentative breakdown by main types of product consitute a first step towards an approach taking more comprehensive account of these various aspects regarding the quality of the products. By thus plotting more accurately the trend in demand, it is possible to obtain the data needed to elucidate the distribution of production as among the different types of steelworks, with due regard for the differences in quality of the products so obtained and for the differences in price which the consumers are prepared to accept for the sake of getting better-quality products. Nevertheless, a good deal of further study is required.

421. Linked with, but going well beyond, this problem of quality is the general problem of the *rate* at which it is desirable, from the point of view of the balance and profitability of the iron and steel industry as a whole, to incorporate into its plant all the latest technical discoveries and developments. The figures we mention in this connection, as regards both the adoption of particular production techniques and the improvement of particular input rates, are mainly calculated on the basis of what is considered most likely by the producers as a whole. But although it is reasonable to assume that each individual producer's plans are the upshot of in many cases elaborate study, it is far from certain that they are fully compatible. Thus the overall trend given for basic Bessemer and for oxygen-steel production represents the sum total of the planned figures of the different producers, but there is no guarantee that these forecasts have been drawn up on iden-

tical hypotheses as to the price trend for the two types of steel, nor that the hypotheses themselves are compatible with the actual market trend which would result from the implementation of the plans in full. Admittedly the producers can at any time alter their investment schemes in the light of new information on the state of the market, but it is nevertheless fair to feel that the provision of fuller and more accurate intelligence in the Community could make matters easier for heads of enterprises, and lessen the risk of ill-judged investment.

422. A third important point concerns the *size* of production units. One of the consequences of technical progress is the increase — sometimes a very marked one — in the size of the individual machines used. This was first seen, very strikingly, in the case of the hot flat-products mills; the trend then also began to affect various other types of rolling-mill, and has since spread to the blast-furnaces and, finally, to the steelmaking sector, where the new oxygen-blown converters enable several times as much metal a year to be turned out as the traditional basic Bessemer converter. As a result, enterprises are finding it difficult to bring into operation simultaneously the whole connected series of installations all with high rates of utilization: it often happens that a machine has to be left partly idle for some time owing to insufficient capacity at other points in the production chain. This problem is likely to come increasingly to the fore as time goes on, in which case it will be necessary to work out arrangements for ensuring that all equipment in existence in the Community at any particular juncture is turned to the best account, without impairing competition.

423. Finally, technical progress is raising new problems with regard to the training of *personnel.* Electronic devices, remote control, the increasingly widespread automation of a number of operations, are leading to fairly sweeping changes in the skills required of the steel industry's labour force. To benefit to the full by the new discoveries and the latest equipment, it is essential to have all the skilled workers necessary available in time, and hence to calculate how many will be needed, in order to organize training courses for them.

424. The expansion of production capacity will necessitate the establishment of increasing numbers of new, and for the most part very large, production units. Consequently, careful thought will have to be given to their *siting*. A great many factors are involved in this connection, perhaps the most important being the starting-point of the flow of raw-material supplies and the location of the expected markets. It is therefore vital to have long-term forecasts as to the requirements and potential supplies of iron ore. Also, the siting of iron and steel plants is likely to be appreciably influenced by the energy policy adopted in the Community, and more especially by its effects on the level of Community coal production and the level of energy imports. Finally, the siting question is, of course, of the greatest importance to the labour force, both from the occupational and from the more general social angle.

425. We conclude this enumeration of the main problems now emerging that the studies and calculations in these Objectives are in considerable part based on the investment projects declared by the enterprises. The conclusions arrived at, especially with regard to quantitative equilibrium, are of course valid only to the extent that the capital schemes in question are in fact carried out, which presupposes, *inter alia*, that the necessary funds can be raised for their *financing*.

426. As is apparent from the foregoing, it has not been possible up to now to devote equally intensive study to all the different problems involved. It was necessary to examine the quantitative equilibria first, since the achievement of these is a *sine qua non* of smooth and satisfactory expansion. The studies conducted in this connection are not intended to supersede those which are being carried on in the individual countries: on the contrary, the desire is that they should embody them. At the same time, within the broader framework of the Common Market, it is possible to obtain a better grasp of certain developments, and to ensure fuller consistency as among the forecasts drawn up at national level: this is particularly clearly seen in the case of exports to third countries. It can fairly be said that the conclusions reached are highly

probable, and that the study work that preceded them produced a whole corpus of methods and calculations which can be drawn upon for purpose of further study in greater detail and over a longer period ahead.

For the new problems, on the other hand, few findings are as yet forthcoming. This is scarcely surprising, for it was only as the studies on the quantitative equilibria proceeded that the range of more specifically economic problems was fully brought out. It would have been a lengthy business working out the methods and procedures for an adequate examination of them. The High Authority has therefore felt in preferable to issue its first set of findings now: it realizes that these are incomplete, but considers them to be nevertheless relevant and worth-while in themselves.

427. Notwithstanding, it intends to continue its study work along three main lines:

(a) calculating in respect of a more distant date, *viz.* conducting a systematic study on 1970, with special reference to the movement of demand over the period concerned and to the bringing into operation of plants and installations already definitely planned;

(b) continuing in greater detail investigations into numerous aspects, including

(i) demand for iron and steel products, trend in specific consumption in the various steel-consuming sectors, processes of substitution likely to gain in momentum, quality of the products desired as it is affected by price differences, external trade broken down by main areas and by products;

(ii) raw-material requirements and supplies (structural and cyclical factors affecting the various input rates, problems concerning grades of scrap, trend in Community ore-production potential and ways and means of making Community ore more competitive *vis-à-vis* imported ore, better security of supply, cheaper procurements of ore from outside sources);

(iii) trend in the occupational skills required of personnel;

(c) tackling new problems, including

(i) technical and social implications of the progressive introduction of automation;

(ii) factors tending to change the sitting of iron and steel plants, and the currently observable effects of such changes on the structure of the market and the industry's economic problems in general.

It should be emphasized once more that the present General Objectives relate to the Community as now constituted. In the course of further studies it will be necessary to examine the implications of entry by Britain and others into the Community.

428. The High Authority on this occasion worked in even closer co-operation than previously with specialists from the member countries. Between 1957 and 1960 it consulted numerous experts individually, while in addition, at its request, the Consultative Committee studied five particular sectors, the motor industry, the shipbuilding industry, the building trade, and the mechanical and electrical engineering industries.

During 1961 committees were convened consisting of representatives of the main groups concerned, producers, consumers, workers and Civil Servants: the committees then designated experts who formed various working parties and subcommittees. One working party studied the outlook for internal demand, with the help of subcommittees having specialized knowledge regarding the principal steel-consuming sectors and of officials of the E.E.C. Commission very thoroughly versed in matters of general economic development and in the problems of particular sectors; the second dealt with exports to third countries; the third, assisted by five

specialist subcommittees, examined questions in connection with changes in techniques and with the flow of raw materials; the fourth concerned itself with manpower problems. Those who took part in the many meetings held numbered in all some 300: they were initially furnished with preliminary documents prepared by the departments of the High Authority; and as a result of their deliberations were able to draft several important reports.

Thanks to the high qualifications and the co-operative attitude of all concerned, a large corpus of material was assembled and many problems successfully disposed of. The present General Objectives, though drawn up by the High Authority on its own responsibility, are to a great extent the fruit of these labours.

TABLE 53

Steel Production by Processes

('000,000 metric tons)

	Production				Production potential
	1955	1960	1965		1965
			Trend	Upper limit	
Basic Bessemer	27·5	35·9	30	31	32·8
Open-hearth	20·5	27·5	27	28	29·6
Electric-furnace	4·4	7·6	9	10	10·4
Oxygen-blown, etc.	0·2	1·8	23	25	26·2
Total	52·6	72·8	89	94	99·0

TABLE 54

Raw-Material Position

('000,000 metric tons)

	1955	1960	1965	
			Trend	Upper limit
Steel production	52·6	72·8	89	94
Pig-iron				
Requirements	41·0	54·0	65·4	68·9
Production potential	42·5	57·3		75·0
Iron ore				
Requirements (Fe content)	32·0	44·5	54·0	57·2
of which: Community mined	21·6	26·0	30·2	32·0
imported	10·4	18·5	23·8	25·2
Requirements (saleable ore)	90·0	119·1	141·7	150·0
of which: Community-mined	71·3	86·8	102·0	108·0
imported	18·7	32·3	39·7	42·0
Scrap				
Requirements	26·1	34·4	41·4	44·0
Community resources	24·7	32·7	40·3	42·2
shortfall	1·4	1·7	1·1	1·8
Coke				
Iron and steel industry's requirements	41·8	51·1	54·8	58·2

FUTURE DEMAND FOR STEEL

429. The movement of the demand for steel is closely linked to general economic expansion: the rate and form of the latter — particularly as resulting from any changes in the relative importance of the different steel-consuming sectors, and from the types of goods exported — can considerably affect the growth of internal demand for iron and steel products.

To estimate exports of iron and steel products, it is not sufficient to consider only the prospects of the Community:

account has also to be taken of the economic development of the importer countries, and of the competitive capacity of the Community producers *vis-à-vis* their opposite numbers in other traditional exporter countries.

It is accordingly proposed to examine first internal demand, and second direct steel exports.

Internal demand for steel

GENERAL ECONOMIC EXPANSION

430. In the last ten years economic expansion in the Community countries has been very rapid indeed, with the rate of growth in gross national product for the Community as a whole working out at 5·6% and that in industrial production at about 7·5%. The rates have been slightly lower in the past few years, but are still above any level reached before the war: thus for the period 1955-60 (in both the first and the last year of which the markets were exceptionally active) gross national product increased by 5·1% per annum and industrial production by 6·9%.

It is understandable that the question should now be asked whether such high rates of expansion can be steadily maintained over a long period. It is undoubtedly true that the years immediately following 1950 still formed part of the stage of economic reconstruction, when rapid growth is naturally always easier to achieve; moreover, a number of countries were then able to draw upon manpower reserves which are now very much reduced. On the other hand, thanks to the introduction of the Common Market enterprises are in a better position to specialize and to take advantage of the many possibilities afforded by technical progress, while in addition all those concerned — Governments, producers and workers — have come to recognize more and more clearly the importance of keeping up a high rate of growth. We can therefore fairly conclude that reasonably high rates may well continue in the years ahead.

The study work on general economic expansion is the responsibility of the E.E.C. Commission: the Commission has set up a Working Party on Structure and Long-Term Development, which in co-operation with Government experts is conducting a very thorough study of expansion prospects up to 1970, and has worked out an upper and a lower limit of possible rates of growth for that year.

The studies have not yet been completed, and no rate of growth has been officially adopted. On the other hand, the preliminary investigations have already yielded a considerable volume of data, on the basis of which the High Authority's departments, working in conjunction with the E.E.C. studies, have been able to calculate the rates which appear most probable at present. The views of the Governments were requested with regard to the prospects for 1965, and are reflected in the figures finally adopted.

431. Gross national product for the Community as a whole may be expected to increase from 1960 to 1965 by 4·7% per annum, and industrial production by 6·1%, and it is calculated that these rates should be maintained during the period 1965-70. They are slightly lower than those recorded in previous years, but are notably high nevertheless.

The position varies considerably, however, from one country to another. In Germany, an appreciable slackening in the rate of expansion is expected, inasmuch as the yearly increase in the working population will be much smaller in the future than it has been in the past ten years. In Italy, the steady shrinkage in the manpower reserve and in the increases in mean productivity achieved by the elimination of disguised unemployment (more particularly in the agricultural sector and in certain services) is also leading to a slight falling-off in the rate of growth. In France, the 1965 targets of the Fourth Modernization and Re-equipment Plan have been readopted, and the same rate retained for the five years following. In the Netherlands, it is forecast that

the rate will continue unchanged. In Belgium, a hitherto somewhat sluggish rate of expansion is expected to quicken, and to draw closer to the Community average, thanks to the effects of the Common Market and of a reorganization of economic policy.

It should be noted that the rates quoted represent a mean trend; it is of course perfectly possible that the actual figure for any particular year may be either above or below the mean, according to the state of the market.

METHODS EMPLOYED IN FORECASTING INTERNAL DEMAND FOR STEEL

432. Since, as we have mentioned, the demand for steel moves very much in line with general economic expansion, a first method of assessing future requirements consisting in extrapolating a ratio previously observed to exist between steel consumption and an economic-expansion indicator: this traditional method was the one mainly used in drawing up the previous General Objectives, and is regularly employed in several of the member countries. It has the advantage of being easy to apply, and of referring to the future values only of those variables which are best known at present, gross national product and/or the industrial-production index. At the same time, representing essentially an *overall* approach, it fails to take account of the effects of variations in rates of growth as between one sector of the economy and another, of tendencies to use other products instead of steel, and of changes in the specific consumption of steel in manufactured products. In other words, it is based on the tacit assumption that the trend in the future will continue along the same lines as in the past years taken as the reference period.

Two important points suggest, however, that this assumption may not be altogether valid. Firstly, the rates of

growth forecast for the Community countries are, as we have seen, somewhat lower than those for the past ten years, and this falling-off may be accompanied by changes in the pattern of national production. Secondly, the experience of the United States, where the elasticity of steel consumption in

TABLE 55

Outlook Regarding Economic Expansion

A. Gross national product

Country	Cumulative annual rate of growth in %				Indices	
	1950-1955	1955-1960	1960-1965	1965-1970	1965 (1955=100)	1970 (1965=100)
Germany (Fed. Rep.)	9·0	6·1	4·6	4·6	168	125
Belgium	3·2	2·4	3·7	3·7	135	120
France	4·4	4·2	5·0	4·8	157	126
Italy	6·0	5·9	5·2	5·1	171	128
Netherlands	5·6	4·2	4·0	4·2	150	123
Community	6·2	5·1	4·7	4·7	161	126

B. Industrial production

Country	Cumulative annual rate of growth in %				Indices	
	1950-1955	1955-1960	1960-1965	1965-1970	1965 (1955=100)	1970 (1965=100)
Germany (Fed. Rep.)	12·4	6·9	5·3	5·8	181	133
Belgium	4·6	1·8	5·0	4·3	139	123
France	5·7	7·6	6·2	6·0	194	134
Italy	8·6	8·9	8·1	7·6	226	144
Netherlands	6·2	5·7	5·1	5·3	169	129
Community	8·6	6·9	6·1	6·1	188	134

relation to national product or industrial production is progressively decreasing, suggests that possibly, beyond a certain level of national per capita production, or of affluence, the expansion of demand for steel tends to slacken, consumers' requirements being for goods involving the use, direct or indirect, of smaller and smaller quantities of steel. It should be added at once that what has happened in the United States is certainly not to be expected automatically to happen in the Community countries, since foreign trade occupies a much less prominent position in the American economy than in the European, where a considerable proportion of "internal" steel deliveries are in fact used to manufacture consumer and capital goods for export. Nevertheless, in view of the very substantial disparities observed between the rates of growth for the different sectors in the Community, it is clearly advisable to investigate whether the structural changes in the economy may not by 1965 be altering the relation previously observed between steel consumption and the overall indicators.

433. Accordingly, a second, more analytical, method has also been used, the "*sector-by-sector*" method, consisting in working out the likeliest trends in the levels of activity of the steel-consuming sectors and from these calculating the corresponding steel requirements. By this means account can be taken of the changes in the different industries' shares of the market, of foreseeable substitution processes, and of probable alterations in specific consumption of steel; moreover, since the level of activity of each industry is calculated in respect of both internal and export demand, the method also allows for any changes in indirect exports of steel.

The sector-by-sector method thus offers considerable advantages for the forecasting of total demand for steel; at the same time it has the further attraction of providing the necessary data for a breakdown of this total as among the different types of rolled product. It would of course be theoretically possible simply to extrapolate the past trend for each major category of product, but the structural changes in the economy, to which reference has just been made in describing

the overall method, here assume very much greater importance, and only a sector-by-sector approach can be expected to yield valid indications. In fact, the more precisely iron and steel products are subdivided into separate types and qualities, the more necessary it becomes to analyse in detail the markets for each.

The use of the sector-by-sector method does of course involve a good many fresh difficulties — in particular, a very large corpus of material is needed both on the breakdown of economic activity into a number of sectors and on developments in steel-utilization techniques — but at least the elements of uncertainty which, in the present state of our knowledge, do inevitably exist are clearly highlighted, whereas with the overall method they remain concealed.

Various difficulties have already been disposed of thanks to the invaluable co-operation of numerous experts from the individual countries; others remain to be examined in the course of further studies, in which attention will be devoted in particular to the consistency of the levels of activity forecast for the different steel-consuming industries and to the movement of the rates of specific steel consumption, which are liable to alter as a result either of changes in the design of certain machines and installations or of changes in the relative proportions of a given industry's different production lines. The object will thus be on the one hand to cover the whole of the economy and on the other to go into greater detail.

TOTAL INTERNAL DEMAND IN 1965 AND IN 1970

434. The results arrived at by the two methods described are shown in Table 56 following.

In the case of the overall method, two types of relation have been used, firstly linear relations between the variables, and secondly relations of constant elasticity (linear between the logarithms of the variables); also, two alternative explanatory variables have been employed, namely national product and an index of industrial production.

The sector-by-sector method was applied by studying the requirements of twenty consumer sectors (listed in Table 76 at the end of this section), whose indices of increase in

steel consumption, as can be seen from Graph No. 11, vary enormously. The results suggest (and the experts confirm the conclusion) that no noteworthy displacement of steel by substitute products is to be expected by 1965.

TABLE 56

Internal steel consumption

('000,000 metric tons)

Country	Actual figures		Figures forecast for 1965				
			Overall method[1])				Sector-by-sector method
			Relations of constant elasticity		Linear relations		
	1955-1957	1960	I.P.	G.N.P.	I.P.	G.N.P.	
Germany (Fed. Rep.)	23·2	30·1	37·4	38·7	37·4	37·2	36·2
Belgium/Luxembourg	2·8	2·6	3·5	3·4	3·4	3·3	3·7
France	11·3	14·0	19·1	18·9	19·2	18·6	18·5
Italy	6·3	9·5	16·2	15·0	14·4	12·8	12·8
Netherlands	2·4	2·8	4·0	4·0	4·0	3·7	3·5
Community	46·0	59·0	80·4	80·0	78·4	75·6	74·7

[1]) I.P. = industrial production; G.N.P. = gross national product.

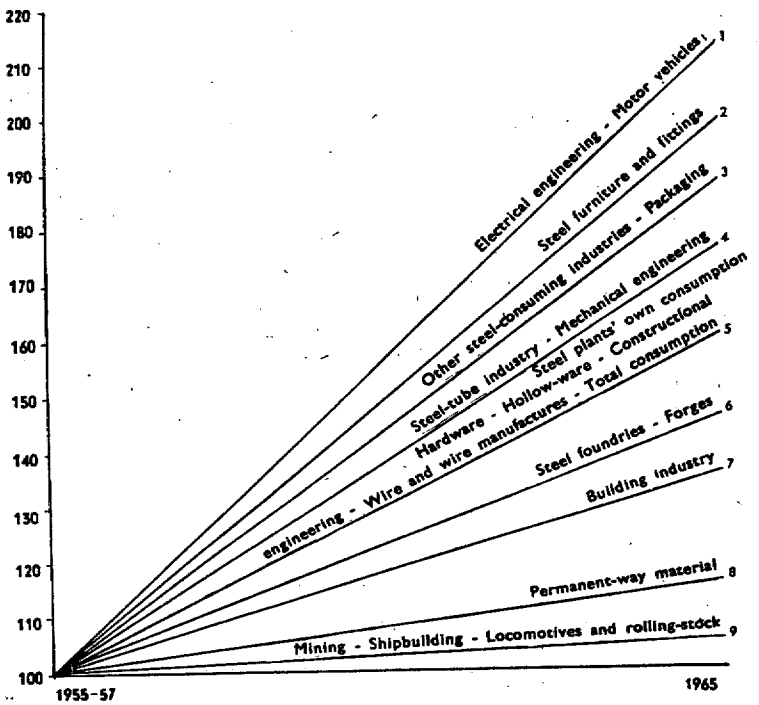
N.B.
The 1960 figures are affected by cyclical stock changes and are therefore not strictly comparable with the figures for 1955-57 and for 1965.

The various results arrived at for Germany, France and the Netherlands respectively are very similar, with the sector-by-sector figures in each case working out slightly lower than the overall; this would suggest that the saturation of demand for steel referred to earlier is unlikely to become at all apparent by 1965.

In Belgium, apparent consumption has remained largely unchanged for seven or eight years even though both gross national product and industrial production have increased. Consequently, the relation between steel consumption and the overall indicators is largely invalid. The major increase

GRAPH No. 11

Indices of Steel Consumption Forecast for 1965, by Sectors
(1955-57 = 100)



In order not to complicate this graph with too much detail, the exact indices for each sector as given in the table at the end of this section have been projected on to a single trend line where the disparity between them does not exceed 5 points.

calculated by the sector-by-sector method results from the assumption that the Belgian economy is expected to undergo much more vigorous expansion than has been the case in the last few years.

Italy is a special case: in the past ten years internal steel consumption has risen much more steeply than industrial production (elasticity approx. 1·5). For this reason, the overall constant-elasticity relations give much higher results for 1965 than do the linear relations. Italy's steel consumption in 1950 was definitely on the low side, whereas by 1965 the per capita figure is expected to be equal to that for France and Benelux around 1955, when the elasticity in these countries was about 1. In these circumstances, it would appear that the overall method, and in particular the constant-elasticity relation, is unsuitable, so that the sector-by-sector method becomes especially valuable; the latter suggests a marked diminution in the elasticity.

435. For the Community as a whole, if we exclude for the reasons just mentioned the results arrived at on the basis of the overall constant-elasticity relation, the highest and lowest figures are respectively 78,400,000 metric tons (overall method referring to industrial production) and 74,700,000 metric tons (sector-by-sector method), the difference working out at 3,700,000 tons, or 5%.

The elements of uncertainty are of several different kinds:

(a) there is a certain margin of error in respect of the statistics for past years, which automatically recurs in respect of the forecasts (in particular, very little is known concerning changes in consumers' stocks);

(b) the forecasts are based on a selected hypothesis of general economic development, which even within so short a space as four years may be to some extent falsified by events;

(c) the figures arrived at by the methods described relate to a trend line from which deviations may occur as a

result of cyclical factors. These deviations have in the past amounted to as much as 6% either way; however, in those cases (noted in the following pages) where capacity is amply sufficient to cover requirements, it seems likely that precautionary stockbuilding during peak periods of business activity will be less in evidence, and hence that the percentage will in the future be somewhat smaller.

It is of course highly unlikely that all these factors of uncertainty would operate in the same direction: in particular there could scarcely be at the same time a higher rate of expansion and major deviations from the trend.

Given the various elements of uncertainty, however, the disparity between the different figures indicated for total requirements does fall more into perspective, and can be seen to be, in fact, modest enough and smaller than any other source of error. Though these figures are not intended to be treated as absolutely accurate — in the nature of things, they could not be — we can reasonably take as the mean (representing the trend) a level of 76 million metric tons, and as the upper limit 80 million, both reckoned inclusive of changes in producers' and dealers' stock-in-trade.

As regards 1970, only the overall method could be used, as no forecasts were available for the individual consumer sectors. On the basis of the linear relation with gross national product total Community internal demand works out at 98 million metric tons, and of that with industrial production at 104 million. As was noted with reference to 1965, the overall relations — particularly in the case of industrial production — tend to yield slight overestimates: Community internal demand in 1970 may therefore, on the expansion hypotheses adopted, be put at between 95 and 100 million metric tons.

INTERNAL DEMAND FOR THE DIFFERENT TYPES OF PRODUCT

436. As we have seen, it is essential to have details of the sales possibilities for each of the main types of product before guidance can be furnished concerning investment schemes.

Accordingly, studies were begun during the preparation of the last set of General Objectives with a view to establishing the breakdown of requirements as among the different iron and steel products. However, it proved impossible at the time to obtain sufficiently accurate results, the only conclusion reached being that the share of flat products was likely to increase.

Now, thanks to the use of the sector-by-sector method, which gives a very much fuller picture of the steel market, it is possible to obtain at any rate an approximate idea of the sales possibilities for the principal types of iron and steel product. The method is simple: by taking the breakdown by products of the aggregate steel consumption of each sector in the past, and adopting certain hypotheses as to the changes to be expected in the share of each product as a result of alterations in manufacturing processes and techniques, we arrive at an assessment of the total sales possibilities for each product. The application of the method of course involves a number of difficulties, due largely to insufficient knowledge of the basic statistics and of technical developments, and also the various elements of uncertainty as to the level of activity in each sector. Nevertheless, it does yield results which may be regarded as approximations.

Since the ultimate object of these studies is to compare requirements and production potential, the types of product have been selected according to the types of rolling-mill whose production potential can be at any rate roughly worked out. The types of finished product studied are accordingly only seven in number, plus, of course, ingots and semis.

437. The 76 million metric tons of crude steel calculated to be required for internal consumption in 1965 represent 59,500,000 metric tons of rolled products.

The wide dispersion of the rates of increase on either side of the mean index 165 (1955-57=100) is due to the

TABLE 57

Internal Consumption, by Products
(ordinary and special steels)

(('000,000 m.t. and %)

Product	1955-57 actual consumption		1960 actual consumption		1965		Indices 1965 (1955-57=100)	Indices 1965 (1960=100)
Heavy sections	4·9	13·5%	5·9	13·0%	7·1	12·0%	145	120
Light sections	9·1	25·0%	11·1	24·0%	14·2	24·0%	156	128
Wire-rod	3·4	9·5%	4·7	10·0%	6·0	10·0%	177	128
Hoop and strip	2·7	7·5%	4·2	9·0%	5·2	8·5%	192	124
Plate	5·6	15·5%	6·5	14·0%	9·0	15·0%	161	130
Sheet	5·3	15·0%	7·9	17·0%	10·3	17·5%	195	130
Hot-rolled coils, finished	0·2	0·5%	0·6	1·5%	1·2	2·0%	600	200
Total rolled products	31·2	86·5%	40·9	88·5%	53·0	89·0%	170	130
Castings, ingots and semis	4·9	13·5%	5·3	11·5%	6·5	11·0%	133	123
Total steel	36·1	100 %	46·2	100 %	59·5	100 %	165	129

N.B.
The figures for 1960 are affected by cyclical stock changes and are therefore not strictly comparable with the figures for 1955-57 and for 1965.

disparate growth of the steel-consuming industries, and also, in rather lesser measure, to changes in specific consumption (which are greater for some products than for others). Thus the comparatively low index for heavy and light sections is due to the fact that a large proportion of them is sold to the building trade, to the locomotive and rolling-stock industry and the hardware industry, all three of which are expanding less rapidly than industry as a whole. The demand for heavy plate is especially affected by the stagnation in the shipbuilding industry, which is not entirely offset by the high levels of activity in the mechanical and constructional-engineering industries. Requirements of hoop and strip are likely to rise, owing to the rapid increase in the production of welded tubes. Finally, the tremendous expansion in the case of sheet is due to the fact that all the sheet-consuming sectors (furniture and fittings, packaging, electrical engineering, motor vehicules) are themselves expanding faster than industry taken as a whole; however, the falling-off in the rate of growth of the motor industry is likely to cause a certain slackening in the expansion of the demand for sheet.

This breakdown covers both ordinary and special steels. In view of the particularly marked increase in the consumption of special steels, and the range of such steels available, an attempt has been made to forecast the trend in the demand for them. The statistics available on the subject are not yet sufficient to allow of a detailed examination of the position for each separate product, so that it was only possible to make an overall assessment: the conclusion was that internal demand for special steels would amount to some 7,500,000 ingot tons, rather over two-thirds of this total being represented by alloy steels. The share of special steels in the aggregate consumption of iron and steel products, which had already risen from 9·2% in 1955 to 9·7% in 1960, is expected by 1965 to have reached 10%.

Requirements in 1970 having been calculated only by the overall method, no attempt is made in the present General Objectives to give a breakdown by products.

Exports of steel to third countries

To enable the following evaluation of the position regarding external trade in steel to be viewed in context, we first briefly run over the course of events to date in the world steel market.

THE RECORD

438. International trade in rolled products falling under the E.C.S.C. Treaty (exclusive of trade between the countries now forming the Community) in 1950 totalled 11,700,000 metric tons, and was thus almost back to the 1929 level of 12,900,000. In 1959, however, this latter figure was exceeded by 60%, the total being 20,800,000 metric tons.

The E.C.S.C. countries participated in this rapid expansion by stepping up their exports, which in 1959 and 1960 amounted to 10,600,000 and 10,800,000 metric tons of rolled products respectively, as against 5,900,000 in 1950 and 7,100,000 in 1929.

The Community iron and steel producers' share in international trade in recent years has varied considerably, mainly because when business was brisk both in the internal and in the external market E.C.S.C. capacity was not always fully sufficient to meet external demand. Consequently, the Community's share worked out at only 42% during the boom of 1955, whereas in the recessions of 1953 and 1958 it amounted to 50% and 48% respectively.

The breakdown of world trade by types of product has undergone considerable changes in course of time, with the share of sections falling from 55% in 1929 to 44% in 1959, while that of flat products rose from 36% to 42%.

The Community's share in world trade in flats is much smaller than it is in world trade in sections: in 1959 its exports accounted for 60% of the sections traded and only 43% of the flats. This is probably due to the fact that at that time neither the size nor the degree of modernization of Community flat-products capacity was sufficiently advanced.

Community imports of rolled products increased from 400,000 metric tons in 1950 to 1,100,000 in 1959. In 1960, indeed, they reached 1,900,000 metric tons, but this figure is not a valid basis for comparison, inasmuch as the additional rise was largely accounted for by the substantial stepping-up, for cyclical reasons, of imports of semis and flats.

However, the increase in Community imports was more than offset by the increase in exports, with net exports rising between 1950 and 1960 from 5,400,000 metric tons of rolled products to 8,800,000.

439. The 1957 General Objectives put net exports in 1960 at 9 million metric tons crude-steel equivalent given a normal level of trade, and 10 million given a high one. In actual fact, the figure worked out at 8,800,000 metric tons of rolled products, representing 11,800,000 tons crude-steel equivalent. However, it should be borne in mind that in consequence of the American steelworkers' strike exports to the United States and Canada in 1960 amounted to 1,300,000 metric tons of rolled products, as against 900,000 in 1958; it must also be remembered that for a time Community works were able to supply markets ordinarily supplied by the American industry. Apart from these adventitious occurrences, 1960 may nevertheless be regarded as an average year for exports. Imports too, as noted earlier, reached an unusually high level.

THE OUTLOOK

440. The forecasts concerning exports of rolled products in 1965 have been worked out on the general assumption that expansion will proceed without serious hitches and that normal political and economic relations will be maintained among the different countries and areas. In has further been assumed that the older industrialized countries will make credits available to the underdeveloped countries and thereby enable them to industrialize faster than they would otherwise be able to do.

The High Authority's departments conducted preparatory studies on the major consumer areas of the world,

taking past trends in consumption and allowing for the main factors likely to affect them. On the basis of these calculations, and also of more empirical methods, separate forecasts were then drawn up, in co-operation with highly-qualified experts, as to the import requirements of each of the receiving countries, by working out the future trend in steel consumption, the country's own probable production as indicated by steel-works-construction projects known to date, and the expected level of the exporter countries' exports. Since future levels of imports also depend on the importer country's financial position, on administrative impediments and various other factors, allowance was made as far as possible for these points in the calculations.

To determine what proportion of the imports may be expected to be procured from the Community, the forecasts studied the current trend and the changes likely to take place in the competitive relations between the Community and the other main exporter areas, particular attention being given to the increases in steel production capacity in Japan and Great Britain, and the corresponding strengthening of the two countries' competitive capacity.

The breakdown of exports by areas suggests a drop in sales to Western European countries and a rise in those to

TABLE 58

Gross Community Exports of Rolled Products

('000,000 metric tons)

Area	1955	1960	1965
Western Europe	3·1	3·9	3·3
Eastern Europe	0·3	1·3	0·9
Africa	0·9	0·9	1·5
Middle East	0·7	0·9	1·0
East Asia	0·5	1·1	1·3
North America	0·5	1·3	1·3
Latin America	1·1	1·3	1·7
Oceania	0·1	0·1	—
World	7·2	10·8	11·0

Africa and Latin America. Future exports to Eastern Europe were estimated with all due reservations, inasmuch as these depend very much on the commercial policy ultimately adopted.

Gross Community exports in 1965 are estimated as totalling 11 million metric tons of rolled products, or approximately 14 million tons crude-steel equivalent. As compared with the rapid expansion to date, the increase is a small one: this change in trend is essentially due to the fact that, with new steel plants building or in prospect in many of the traditional importer countries, the latter's aggregate import requirements are unlikely to increase further.

441. Community imports may be expected to show a substantial decline from the exceptionally high level recorded in 1960, mainly in the case of semis and flats. Owing to various considerations, however, — trade in certain particular qualities and products, liberalization of trade, international trade agreements entered into by some member Governments — imports will not fall below one million metric tons.

The trend in gross exports and in imports respectively is resulting in a rise in net exports, which in 1965 should total approximately 13 million metric tons crude-steel equivalent.

TABLE 59

External Trade in Iron and Steel Products

('000,000)

Year	Gross exports (rolled products)	Imports (rolled products)	Net exports	
			Rolled products	Crude-steel equivalent
1929	7·1	0·4	6·7	8·9
1938	3·5	0·4	3·1	4·2
1950	5·9	0·5	5·4	7·3
1955	7·2	0·9	6·3	8·4
1960	10·7	1·9	8·8	11·8
1965	11·0	1·0	10·0	13·0

BREAKDOWN OF EXTERNAL TRADE BY TYPES OF PRODUCT

442. Material subdivided by countries furnished a picture of the market in each country, from which it was possible to work out the breakdown of Community exports by types of product.

The most notable changes are in the case of coils and other semi-finished products: imports of these are expected to fall, and exports of coils to rise. Net exports of sheet are also likely to increase, owing partly to the expansion in the share of this product in world trade and partly to the improvement of the Community's competitive capacity as a result of the extension of its production capacity. Generally speaking, it seems probable that exports of special products (special sections, unusual qualities, flats, etc.) will rise; the prospects for standard-quality steel products, on the other hand, are less favourable, since the main importer countries will be producing larger quantities of their own. In consequence, net exports will rise more considerably in value than in tonnage.

TABLE 60

Net Exports of Iron and Steel Products, by Types of Product

('000,000 metric tons)

Product	1960	1965
Heavy sections	1·2	1·5
Light sections	3·3	3·7
Wire-rod	0·6	0·5
Hoop and strip	0·4	0·5
Plate	1·1	0·9
Sheet	2·2	2·4
Finished coils	—0·2	0·1
Total, rolled products	8·6	9·6
Ingots and semis	0·2	0·4
Total, steel	8·8	10·0

The 1965 figure includes some 350,000 metric tons of special steels (in crude-steel equivalent). The forecast for special steels was arrived at independently of the estimate just described, being based mainly on present trends. Net exports of high-carbon and special steels in 1960 amounted to 260,000 metric tons crude-steel equivalent.

The forecasting of future net exports is a somewhat uncertain business, for two reasons: firstly, the structural development of the steel consumption and production of many countries is difficult to foresee, so that both imports and exports can be estimated only with a fairly substantial margin of error; secondly, it is practically impossible to allow for the incidence of official measures of commercial policy. Some idea of the possible effects of cyclical fluctuations can be gained by referring to past developments. Experience to date suggests that, given a high level of economic activity, net exports might be in the region of 14 million metric tons crude-steel equivalent.

Estimated total demand for steel

443. Thus, if we put internal requirements at 76 million metric tons and net exports at 13 million, the total demand forecast works out at 89 million metric tons.

This figure represents the "trend". The upper limits calculated separately for internal and export demand add up to 94 million metric tons, 5·5% above the trend.

In the course of the past ten years, the disparity between the mean trend and the figures actually recorded at times of very brisk business has only twice exceeded this percentage, and then only by a very little. In the future, it seems probable that, with the industry's capacity so very extensive,[1]) consumers will be less concerned than in the past to build up their stocks during boom periods, as they will have more confidence in their orders being executed promptly.

In the case of individual types of product the disparity between the trend and the upper limit may be a good deal larger, since some products are mainly consumed in sectors

[1]) See Nos. 444 ff. below.

which are more sensitive than industry as a whole to the cyclical movements of the market: this is borne out by past experience, some figures recorded at periods of peak business activity working out as much as 10-15% above the mean

TABLE 61

Internal Demand and Net Exports

('000,000 metric tons crude-steel equivalent

Year	Internal consumption	Net exports	Total
1955	43·8	8·4	52·2
1960	59·0[1])	11·8	70·8[1])
1965	76·0	13·0	89·0

[1]) Exclusive of changes in producers' and dealers' stocks.

TABLE 62

Total Demand for Steel, by Products

('000,000 metric tons)

	1955	1960[1])	1965	
			Trend	Upper limit
Crude steel	52·2	70·8	89	94
Products	40·8	56·3	69·5	[2])
Castings, ingots, semis	4·6	5·5	6·9	7·6
Rolled products	36·2	50·8	62·6	[2])
Heavy sections	6·1	7·4	8·6	9·5
Light sections	11·5	14·5	17·9	19·7
Wire-rod	3·6	5·4	6·5	7·2
Hoop and strip	3·0	4·6	5·7	6·3
Plate	5·6	7·8	9·9	10·9
Sheet	6·3	10·4	12·7	14·0
Finished coils	0·1	0·7	1·3	1·4

[1]) Exclusive of changes in producers' and dealers' stocks: figures for 1960 therefore differ from the totals of those in Tables 57 and 60.

[2]) Total upper-limit figures for all products would be meaningless, as the incidence of active market conditions varies from one product to another.

trend. However, here too the fact that production capacity is so large should reduce these disparities, and it has therefore been felt reasonable to allow a margin of 10% for cyclical variations.

For 1970, as forecasts for exports are not available, no definite figure can be suggested. Very roughly, total demand may perhaps be put at between 105 and 115 million metric tons (trend); this is assuming a rate of growth of approximately 4% per annum from 1965 to 1970, as against 5% from 1955-57 to 1965.

PRODUCTION-CAPACITY TARGETS; RAW-MATERIAL SUPPLIES

444. We are concerned in this section to assess the value of the estimates of the capacities for the different stages of iron and steel production, and to examine the prerequisites for a satisfactory flow of raw materials. The two subjects are discussed in the same section because they are closely interlinked, the rapid technological changes in the production installations serving at the same time to widen the choice of possible sources of ferrous matter.

It is proposed to deal, in order, with

(a) the steelmaking and rolling capacities which will be required to cover the demand evaluated in the preceding section;
(b) the flow of pig-iron and scrap to the steelworks;
(c) blast-furnace capacity and the flow of iron ore and coke;
(d) points in connection with technical progress and its effects on the size of production units.

Steelmaking and rolling capacity

445. Crude-steel, semis and rolled-products capacities must be sufficient to enable demand, even at times of exceptional market activity, to be met in a fully satisfactory manner, that is, with the plant operating at a rate involving the lowest possible average production costs, due account being taken

of the rate at which customers' orders for the different types and qualities of steel are coming in.

To fix an absolutely definite target for production capacity, it would be necessary to know with accuracy this optimum operating rate, which may differ from one works to another according to the age of the installations, the general organization of the works and the size and nature of its market. Since full data on all these points are not available, the procedure adopted has been to make a survey of the enterprises' investment plans and probable 1965 production potential, compare the latter with the sales possibilities, and see how far they tally. In this way it is possible to take into account all the information contained in the enterprises' declarations, and at the same time to work out results furnishing guidance for decisions: comparisons between potential as at present estimated and sales possibilities give an indication whether additional installations will be needed or whether the implementation to schedule of all current plans would be liable to result in overcapacity. To be fully effective this procedure should of course be employed at fairly frequent intervals, so as to allow for changes in sales prospects and plans.

The production potential of the Community enterprises is known through the annual investment surveys,[1]) supplemented where appropriate by declarations submitted during the year under Article 54 of the Treaty.[2])

As regards steelmaking proper, the assessment of the production-potential position is a reasonably straightforward

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1) See No. 383 ff. above.

2) A precise definition of the term "production potential" is given in the annual investment survey: it means the maximum production which can actually be achieved by all the different sections of the plant together, allowing for possible bottlenecks in one section holding up all the others.
There is in practice no possibility that the total potential of a whole country, or of the whole Community, will be utilized throughout any year, so that the actual potential is rather less.
Where "capacity" is quoted, the figure represents the amount which the installation in question could theoretically produce provided there were no bottlenecks either in the preceding or in the following production stages.

matter, and comparison with the sales possibilities involves no particular difficulty. In the case of the rolling mills, on the other hand, comparisons are, as we shall see, a more complicated matter, the mills being generally multi-purpose.

STEELMAKING CAPACITY

446. The latest investment survey gives the crude-steel production potential for 1964 as 95,600,000 metric tons. Inquiries conducted among experts in the six countries suggest for 1965 an actual production potential of approximately 99 million.

This figure is in line with the enterprises' plans as declared, and it seems likely that, if no substantial fluctuations occur in the steel market meantime, these plans will duly materialize. Moreover, the potential may well be increased by rising productivity in the individual production units, in consequence of the accelaration of technical progress, while it is also possible that further declarations may add to the potential already indicated for 1965; on the other hand, it may be that certain obsolete installations will, in consequence of technical progress, be scrapped rather earlier than they otherwise would have been.

The relation between production potential and demand requires to be examined from two angles, namely the overall level of steel production and the breakdown of this total as among the different production processes.

Overall supply-and-demand position

447. The maximum possible production for 1965 is calculated at 10 million metric tons above the mean trend of demand, and 5 million above the estimated upper limit. Hence, the production potential declared will not merely cover demand, but will cover it with a good deal to spare.

The iron and steel plants have for the last few years been operating at extremely high — indeed the highest possible — rates of utilization. Now in point of fact it is not really in the

industry's interests that its production capacity should be too closely tailored to the expansion of demand: over-utilization of the installations sends up production costs and makes it difficult to supply customers promptly with the exact qualities desired. It has therefore come to be felt that greater flexibility of production would, up to a point, be desirable; with the new balance now developing, that flexibility will be assured. On the other hand, at times when business is on the slack side, rates of utilization will be relatively low.

These conclusions relate to 1965; it is, however, also necessary to view them with respect to a longer period ahead. Demand in 1970 has been estimated at some 110 million metric tons, which represents an annual rate of growth of about 4% per annum from 1965 to 1970. Thus while the investment programmes for the years immediately ahead are more than adequate, a sustained drive to increase capacity will be required later on.

Breakdown by steelmaking processes

448. The breakdown of crude-steel production capacity by processes is governed by the changes in techniques, the distribution of consumer demand among the different qualities as influenced by the comparative prices, and the need to ensure a balanced flow of raw-material supplies, and more particularly of scrap.

Striking changes have recently been taking place in steelmaking techniques, including in particular the introduction of the now widely-used oxygen-blowing process. Industrial-scale tests were begun in 1952, and were found sufficiently promising for mention to be made in the last General Objectives of this revolutionary innovation. Since then, the use of the process has been extended to different types of steel, different sizes of converter, and different kinds of pig-iron. Experience already shows that oxygen steel has properties similar to those of open-hearth, that the process works well with different kinds of charge (whether as regards the relative amounts of pig-iron and scrap or the type of pig-iron), and that the various operations and the factors

necessary to obtain the quality desired can be accurately controlled. Also, the use of oxygen makes possible improvements in productivity and quality in the other steelmaking processes.

449. In consequence, of these radical technological changes, and of the widely-recognized advantages of the new oxygen steelmaking process, the capital schemes declared indicate a major alteration in the shares of the different processes.

Basic Bessemer steel, which in the recent past accounted for approximately one-half of total production, will in 1965 represent only one-third of production potential, with even the actual tonnage showing a decrease.

Open-hearth steel is expected to remain at about the same quantitative level, but with its share falling from about 40% to about 30%.

Electric-furnace steel will maintain its relative position, owing in part to increasing demand for high-carbon and special steels.

Finally, oxygen converter potential, which in 1960 represented only a little over 2% of the whole, will by 1965 account for rather over one-quarter.

450. In view of the probable increase in oxygen steel production by its most enterprising competitors in the world market, it is essential that the Community industry too should step up its proportion of oxygen steel on a considerable scale, if it is to maintain its competitive position.

This course would, moreover, enable it the better to satisfy consumers' requirements as regards improved properties and the consistency of these in a wide range of steels, and it seems likely, on present evidence, that the costs would be lower than with other processes producing equivalent qualities.

TABLE 63

('000,000 metric tons and %)

	1955	1960			1965	
	Production	Production	Production potential		Production potential	
Basic Bessemer	27·5	35·9	37·2	48·8%	32·8	33·1%
Open-hearth	20·5	27·5	28·6	37·6%	29·6	29·9%
Electric-furnace	4·4	7·6	8·4	11·0%	10·4	10·5%
Oxygen-blown, etc.	0·2	1·8	2·0	2·6%	26·2	26·5%
Total	52·6	72·8	76·2	100 %	99·0	100 %

Not enough details are, however, available as to the advantage to consumers of obtaining such products in order to work out precisely how demand is likely to be distributed between the new qualities and metal possibly less high-grade but lower in price. It is not, therefore, possible to be sure at present that the breakdown of production potential is in accordance with consumers' requirements, so that it will be necessary to follow closely the movement of the market, and in particular the movement of the relative prices for products used for approximately the same purposes.

It should also be noted that oxygen converters can be constructed comparatively quickly, and that producers will be able to some extent to speed up or slow down the expansion of oxygen steelmaking capacity as the market conditions in the coming years may dictate, at the same time scrapping existing basic Bessemer plant more rapidly or more slowly, as the case may be.

POSITION AS REGARDS ROLLED PRODUCTS

451. Estimates as to the demand for rolled products, subdivided into eight main categories, are given in the preceding section.[1])

[1]) See Nos. 429 ff. and Table 62 above.

Comparisons of future supply and demand, are, however, sometimes complicated by the fact that many rolling-mills are multipurpose in character. Thus wide-strip mills can also be used to produce various sizes of heavy and medium plate in substantial quantities; it is becoming quite usual to make hoop and strip and tube strip by slitting wide strip; many modern wire mills are equipped to turn out certain types of light sections, while conversely some small-bar mills are equipped with wire-rod finishing lines. Accordingly, it is proposed to deal separately, firstly with all flat products, and secondly with all other rolled products.

In addition, the estimates of production potential arrived at on the basis of the annual investment surveys and of the declarations submitted to the High Authority contain quite considerable elements of uncertainty. The enterprises' own estimates of their rolling capacity and production potential are liable to vary in accordance with such factors as the movement of the market, the effecting of complementary (usually minor) investments not yet planned at the time of declaration, the scrapping at short notice of obsolete mills, and the system of working hours (including in particular the number of shifts). These can result in both the actual capacity of a given mill and the distribution of the crude steel as among the different mills — and hence the production potential of the latter — departing fairly substantially from the forecasts.

Consequently, great caution has to be observed in examining the balances for individual types of product. However, comparison of the various data available does yield a number of worth-while observations.

Flat products

452. As just mentioned, the fact that the different flat-products mills can be used to some extent interchangeably makes it necessary to examine them together as a group. Table 64 following shows the figures at present available. Columns 6 and 7, showing production potential and capacity, are based on enterprises' declarations, while line 7 reproduces

the upper-limit figures given in Table 62. The breakdown of the demand for each product as among the different mills able to produce it (lines 1-6, cols. 1-5) has been calculated by the High Authority's departments from the data in their possession: it is, of course, to be taken as approximate only. It is based on the assumption that the hot wide-strip mills will also be used to make several different types of finished product, namely sheet (mostly finished on the cold mills), plate (over and above that produced by the plate and universal mills), hoop and strip (in addition to that produced by the hoop and strip mills), and finished coils. Line 6 shows the breakdown of the coils so produced according to the finished product they are to be used to make. Finally, column 8 indicates the relation of demand to declared capacity.

The production potentials estimated from the enterprises' declarations are not very different from the totals of demand shown in column 5, being slightly above in each case. This indicates that the producers' present individual plants for 1965 add up to a level pretty well in line with the probable upper limit of demand.

A very different picture emerges, however, when we turn to the figures for production capacity; these are in some cases very much higher than the effective potentials, which are restricted by the insufficient flow of metal to the mills from the steelworks.

Given the breakdown of production by types of mill which was taken as probable in Table 64, the rate of utilization of capacity works out fairly high for the plate and universal mills (88%) and the hoop and strip mills (83%); on the other hand, there would seem likely to a distinct surplus of capacity in the case of the cold wide-strip mills (73% utilization), and a very large one indeed in that of the hot wide-strip mills (51% utilization) practically all of which are of up-to-date design and consequently unlikely to be scrapped on any scale to speak of in the next few years. The surplus would, of course, be still greater should cyclical factors cause demand to be below the upper limit, on which the table is based.

In view of the multi-purpose character of the installations, it is not possible to be quite so categorical, or to pro-

TABLE 64

Supply and Demand Position for Flat Products in 1965
(upper limit)

('000,000 metric tons)

	1	2	3	4	5	6[1])	7[1])	8[1])
	Product				Total	Estimated potential	Capacity	Demand (5) in % of capacity (7)
	Plate	Sheet	Hoop and Strip	Finished coils				
1. Reversing mills		1·5			1·5	1·7	2·5	60
2. Plate and universal mills	8·8				8·8	9·0	10·0	88
3. Hoop and strip mills			5·8		5·8	6·0	7·0	83
4. Cold wide-strip mills		11·7			11·7	14·0	16·0	73
5. Hot wide-strip mills — Finished products	2·1	0·8	0·5	1·4	—	—		
6. Hot wide-strip mills — Coils required	(2·3)	(14·2)	(0·5)	(1·4)	(18·4)	(22·0)	36·0	51
7. Total demand for finished products (upper limit)	10·9	14·0	6·3	1·4				

[1]) In view of the points noted in the text concerning the difficulty of calculating potential and capacity with accuracy and of comparing them with demand, the figures in this column are to be regarded as approximations only.

nounce definitely concerning any one type of mill: all categories have to be considered together. The breakdown of demand by types of mill was arrived at on the basis of the current declarations referred to, but it is possible to make greater use of the wide-strip mills to produce certain kinds of plate, and also coils for slitting into hoop and strip. This would of course increase the rate of utilization of these particular mills, but would reduce that of the plate and hoop and strip mills. Taking flat products overall, therefore, there is, on the hypotheses adopted with regard to demand, a very definite danger of spare capacity in 1965: the disparity between capacity and demand in the case of the hot wide-strip mills is so glaring that we may conclude it to be largely due to excessive building of new mills of this type.

Other rolled products (wire-rod, heavy and light sections)

453. The *wire-rod mills* are undergoing rapid technological changes designed to speed up the rate at which the rod leaves the finishing stands, and so to increase capacity. In 1952, 80% of the wire-rod produced came from mills with speeds of 10 metres per second and under (coiling by hand); by 1959 the proportion was down to 40%, and after 1965 it will be negligible. Conversely, the present-day mill with an output rate of anything up to 28 metres per second and more was unknown in 1952, but by 1963 will be accounting for 46% of the total.

These advances have impelled enterprises — though to somewhat lesser extent than in the case of the wide-strip mills — to install up-to-date plant which will take some years to reach saturation point. The effective potential of the wire-rod mills may be expected to increase by approximately 1 million metric tons a year between 1962 and 1964 inclusive, and to amount in 1965 to eight million tons, exclusive of small bars with a cross-section surface area over 13 × 13 sq. mm., which the enterprises are planning to produce on the same mills. This potential would represent 109% of the upper limit of demand for 1965; the corresponding technical capacity would work out at over 9 million metric tons, or 125% of the 1965 upper limit.

The production potential of the *heavy and light section mills* will in 1965 total some 29,800,000 metric tons, thus just about covering the upper limit of demand. Capacity will certainly be sufficient, but the plant itself, particularly as regards heavy and medium sections, will not be as highly modernized as the other types of mill.

The breakdown of potential as between heavy and light sections is somewhat uncertain: however, the enterprises' declarations suggest that the figure for heavy sections is likely to be about 10,800,000 metric tons and for light sections about 19 million, representing respectively 114% and 97% of the upper limits calculated. At first glance this appears to indicate a slight shortfall in light-section potential, but the apparent insufficiency need give no cause for concern, since certain light sections can be produced in installations rated for declaration purposes as wire-rod mills.

All in all, then, as regards rolled products other than flats, it can be said that there will be no shortage of capacity, and that generally speaking supply and demand will be in balance, apart from a few minor surpluses of capacity.

Semi-finished products

454. Comparison between total availabilities of crude steel and requirements of finished products shows that sufficient metal will be produced in 1965 to meet demand, even should this be a particularly active year for business, while in addition the capacity of the semis mills, and particularly of those producing coils, is greater than the requirements of the finishing mills. Overall, therefore, the requisite quantities of semis can be produced; it will, however, continue to be a question what proportion of these will be handled by integrated mills and what by independent rerolling firms.

In general, the integrated works are tending more and more to do all the processing of their own crude steel, and the rolling installations which they are now building or planning seem likely to result in even keener competition between the two sets of producers. The rerollers' position may thus

be expected in the future to depend more than ever on production costs and on adjustment to the market situation.

SPECIAL STEELS

455. The supply-and-demand positions by types of product thus defined relate to all qualities together. A separate balance-sheet has, however, also been worked out for special and high-carbon steels as a whole.

Between 1955 and 1960 the share of these steels in total production (in terms of crude steel) rose from 7·7% to 8·2%, the absolute figure for 1960 being close on 6 million metric tons.

Total demand in 1965 for high-carbon and special alloy steel ingots is estimated at 7,800,000 metric tons going by the mean trend and 8,300,000 by the upper limit: to this should be added requirements of liquid alloy steel for casting, which would bring the upper-limit estimate to perhaps 8,500,000.

The maximum possible production is put at 9,300,000 metric tons, representing a 92% rate of utilization of capacity in the event of very active market conditions.

Overall, the enterprises' plans can be said to be pretty well in line with estimated requirements. Actually, this sector is a very varied one, and it has not yet been possible to study all its elements in detail. One point which should be noted is that as regards cold-rolled stainless-steel flats the Community industry's production potential will expand considerably as the new installations declared to the High Authority are brought into operation. So, however, will that of the third-country industries regularly producing these steels, for there too major extensions are planned or already in hand. Since international competition is already fairly keen in most of the markets for these products, enterprises thinking on installing additional capacity would do well to adopt a certain caution in the matter.

Flow of raw materials to the steelworks; the scrap position

456. To estimate the steelworks' raw-material requirements, the procedure adopted was, on the basis of the known breakdown of *capacity*, to work out a hypothesis as to the breakdown, by processes, of *actual production* given, firstly, a mean trend in demand of 89 million metric tons, and secondly, an upper limit of 94 million.

This is no easy matter: enterprises' schemes for the installation of oxygen converters may or may not be implemented in full, according to the state of the market as time goes on, so that the following figures, which are based on the production potential declared by the enterprises, may be anything up to two or three metric tons out as regards oxygen steelmaking.

TABLE 65

Breakdown of Steel Production in 1965, by Processes

('000,000 metric tons and %)

	Trend		Upper limit	
Basic Bessemer	30	34 %	31	33 %
Open-hearth	27	30 %	28	30 %
Electric-furnace	9	10 %	10	10·5%
Oxygen-blown, etc.	23	26 %	25	26·5%
Total	89	100 %	94	100 %

THE CHARGE FOR THE DIFFERENT PROCESSES

457. As pig-iron and scrap are up to a point interchangeable, an attempt has been made to work out the input of pig-iron and the input of scrap for each of the steelmaking processes in 1965.

The definition of the respective inputs presented certain difficulties. In the case of the *traditional processes*, it was possible to take into account both the foreseeable development of techniques and the opinions of the producers in the different

countries; thus for scrap the forecasts indicate a continuing slight rise in the input rate in the basic Bessemer converter (62 kg. in 1954; 75 kg. in 1960), the end of the drop in the open-hearth furnace (753 kg. in 1954; 697 kg. in 1960), and a levelling-off in the electric furnace.

As regards the *oxygen converter* the position is much less clearcut: the process has been in use for such a short time that really full information is not yet obtainable, though it does seem to be established that there is considerable technical flexability as to the proportions of scrap and pig-iron in the charge. The figures quoted are based on the declarations received from the industries in the different countries.

Finally, it should be noted that the proportion of scrap used is not governed purely by technical considerations, but may also be affected by prices or by the tonnages available.

Subject to these reservations, we may put forward the following figures.

TABLE 66

Input Rates of Scrap and Pig-iron in 1965 by Steelmaking Processes[1])

(kilograms)

	Scrap-Pig-iron	Open-hearth	Electric-furnace	Oxygen-blown
Scrap	90	707	946	240
Pig-iron	1,040	393	54	860
Total charge	1,130	1,100	1,000	1,100

[1]) Exclusive of alloys.

458. By applying these input rates to the tonnages mentioned for production by each process, we obtain the requirements of scrap and steelmaking pig-iron on the two production hypotheses.

TABLE 67

Steelworks Requirements in 1965

('000,000 metric tons)

	Trend	Upper limit
Steel production	89	94
Pig-iron required	62·1	65·3
Scrap required	35·1	38·8

In addition to pig-iron and scrap, small amounts of iron ore are used. The input rates for the traditional processes will remain unchanged; the use of ore in the oxygen converter allows some saving in oxygen consumption, but has certain disadvantages, in that it makes for less regular operation and lowers productivity.

It might prove advantageous to use high-grade ores or partially-reduced pellets in the converter; this is a point worth following up in detail.

SCRAP POSITION

459. Table 68 shows the estimated scrap position for 1965 as compared with that for earlier years.

The input rate at the blast-furnaces, which dropped sharply between 1955 and 1960 and is likely to decrease further in some countries, may nevertheless be expected to remain more or less unchanged overall. The rate at the steelworks will remain much the same, since while scrap consumption in the oxygen-blown process is below the average for Community steelworks as a whole, the increase in the share of oxygen steels is taking place largely at the expense of the basic Bessemer process in which very little scrap is used.

As regards availabilities, steelworks' and rolling-mills' own arisings will probably continue at approximately the same rate over the five years 1960-65, since, as in the previous

Average Scrap Input Rates

	1955	1960	1965 Upper Limit
Scrap consumed in the blast-furnaces (kg. per metric ton of pig-iron produced)	98	56	52
Scrap consumed in the steelworks (kg. per metric ton of crude steel produced)	395	406	405

five, the two main factors influencing them — the increase in continuous rolling, which makes for smaller scrap arisings, and the increase in the share of flat products, which makes for larges ones — will pretty well balance out.

The ration of scrap recovery to actual steel consumption, which has been going down in recent years owing to the fact that availabilities of capital scrap were increasing less rapidly than steel consumption, will more or less level off, as capital scrap will begin to become more plentiful. The average rate of process scrap arising in the metal-working will decrease only slightly: although the rates in a number of individual industries are likely to go down, the sectors with a high scrap rate are expected to expand faster than those with a low one. Taken overall, the trend in Community scrap requirements and availabilities (see Table 68) should bring the shortfall — which at its greatest, in 1957, amounted to nearly 4 million metric tons — down by 1965 to between 1 and 2 million tons.

Problems of grade will, however, assume greater importance than hitherto. The increasing proportion of steel consumption accounted for by the industries whose scrap is in the form of turnings, swarf and cuttings from light-metal products, and the steep rise in salvage scrap from motor-cars, miscellaneous hardware and the like, will result in a disproportionate increase in availabilities of low-grade scrap.

This means that careful attention will have to be given to the matter of scrap preparation and grading. Oxygen steelmaking requires good-quality heavy scrap, while technological improvements at the blast-furnaces are making it more and more uneconomic, and even, sometimes, impossible, to use low-grade scrap bundles.

Since it would be a pity to make no use at all of these resources, and so lower the Community's potential, efforts should be made to work out technical and other means for rendering them usable, though bearing in mind the incidence of such processing on their price *vis-à-vis* the price of alternative materials.

TABLE 68

Scrap position in the Community

('000,000 metric tons)

	1955	1960	1965	
			Trend	Upper limit
Requirements				
1) Blast-furnaces	4·0	3·0	3·4	3·6
2) Steelworks	20·8	29·6	35·8	38·1
3) Rolling-mills	0·3	0·3	0·4	0·4
4) Total (1 + 2 + 3)	25·1	32·9	39·6	42·1
5) Other requirements (steel scrap for foundries)	1·0	1·5	1·8	1·9
6) Total requirements (4 + 5)	26·1	34·4	41·4	44·0
Resources				
7) Arisings in steelworks, rolling-mills and steel foundries coming under the Treaty	10·9	15·4	18·7	19·3
8) Process scrap and collected scrap	13·2	16·6	20·8	22·1
9) Cast-iron scrap available to iron and steel industry	0·6	0·7	0·8	0·8
10) Total Community resources (7 + 8 + 9)	24·7	32·7	40·3	42·2
11) *Shortfall* (6 — 10)	1·4	1·7	1·1	1·8
12) Net imports	2·5	1·7	—	—
13) Stock changes	+1·1	—	—	—

Generally speaking, given the position regarding pig-iron capacity (see below), the steelworks operating rates just indicated would mean, firstly, a comparatively minor shortfall in scrap, and secondly, a certain reserve of pig-iron capacity which could be drawn on if necessary to offset any shortage of high-grade scrap for the steelworks. In view of the further fact that there is now a fourth, and technically very adaptable, production process which should make for greater flexibility in the composition of the charge, it seems reasonable to expect that the industry will have more freedom of choice than it has had up to now, which will enable it to take more account of price differences, and will at the same time tend to stabilize scrap prices.

Blast-furnaces: capacity required and raw materials

BLAST-FURNACE CAPACITY

460. The blast-furnace capacity needed is governed by the level of pig-iron requirements, *viz.* requirements of steel-making pig (see above) and of foundry pig.

Taking the trend to date in foundry production, in conjunction with the structural changes observable in this sector, we may calculate that production of iron castings, which in 1960 amounted to 7,200,000 metric tons, will by 1965 have risen to 8 million (mean trend) or 8,500,000 (upper limit), representing a first-melt pig-iron consumption of 3,800,000 or 4,100,000 metric tons, as the case may be; the foundries are tending to increase the proportion of scrap, and especially of steel scrap, in their charges, since they are now using hot-blast cupola furnaces.

Maximum possible pig-iron production in 1965 works out, in round figures, at 75 million metric tons, according to the declarations received from the producers in the six countries. This assumes a blast-furnace operating rate involving full utilization of the burden-preparation and sintering plants, and the installation of equipment for the injection of fuel oil or other fuels.

TABLE 69

Pig-Iron Requirements[1])

('000,000 metric tons)

	1955	1960	Estimates for 1965	
			Trend	Upper limit
Steel production	52·6	72·8	89	94
Pig-iron consumption at the steelworks	37·3	50·7	62·1	65·3
Pig-iron consumption at the foundries	3·9	4·0	3·8	4·1
Net imports	—0·1	—0·6	—0·5	—0·5
Changes in stocks	—0·1	—0·1	—	—
Pig-iron production	41·0	54·0	65·4	68·9

[1]) Including spiegels and carburized ferro-manganese.

Requirements in 1965, then, are estimated at 65,400,000 metric tons taking the mean trend or 68,900,000 as the upper limit, and production potential at 75 million tons. After a long period when capacity was only just sufficient to cover peak demand, this apparent surplus of potential should — unless additional requirements develop — enable the industry to scrap certain obsolete installations having a very low output as compared with the rapidly-increasing productivity of the latest models.

The industry would do well to continue its efforts to raise the productivity of the blast-furnaces. The increase obtainable by sintering and by fuel-oil injection will be dealt with in connection with the coke position. More generally, it may be said that the theoretical capacity estimated for a given-blast-furnace only a few years ago has since been substantially improved upon, thanks to all-round progress resulting from the introduction of various up-to-date production techniques. The consequent capital saving is undeniable, and activities in this connection should be pursued for some considerable time to come, since there is room for still further

advances. Provided this is done, the satisfactory pig-iron/steel ratio now forecast may well persist beyond 1965 without entailing major additional capital expenditure on the blast-furnaces.

The question does arise whether these targets for blast-furnace capacity are not liable to be to some extent invalidated by the development of processes for the direct reduction of iron ore. This possibility is giving rise to a great deal of research, in which the High Authority has already demonstrated its interest. However, under the economic conditions prevailing in the Community, none of the processes investigated seems likely in the short term to emerge as a competitor to the blast-furnaces in the mass production of metal from ore. On the other hand, individual firms too small to operate blast-furnaces might well profit by this method, which yields ferrous matter of notable purity.

Although, in the present state of knowledge and of relative costs, the advantage of using these processes is proportionately less the farther we are from a coke or scrap shortage, nevertheless as regards fundamental research it is important not to be left behind.

RAW-MATERIALS POSITION: IRON ORE AND COKE

Iron ore

461. The following table shows blast-furnace consumption of raw materials.

TABLE 70

Consumption of Raw Materials in the Blast-Furnaces and Sintering-Plants

('000,000 metric tons)

	1955	1960	1965	
			Trend	Upper limit
Pig-iron production	41·0	54·0	55·4	68·9
Ferrous matter required (950 kg. per metric ton of pig-iron produced)	39·0	51·3	62·1	65·5
of which:				
scrap	3·6	2·7	2·9	3·0
calcined pyrites	2·2	2·4	3·0	3·0
ore	31·6	43·7	52·9	56·0

In recent years there has been an increase in the ratio of imported to Community-mined ore so consumed. This is partly due to the fact that up to 1960 pig-iron production was expanding much faster in the areas where imported ore was used. From 1960 to 1965, on the other hand, it is expected to grow at appriximately the same rate both in the imported-ore and in the Community-ore regions, so that the shrinkage in the share of Community ores is likely to slacken off appreciably.

TABLE 71

Coverage of Total Ore Requirements

(% *of ore Fe consumed*)

	1952	1955	1960	1965
Ore				
Community-mined	72	67	58	56
Imported	28	33	42	44

TABLE 72

Iron-Ore Position

('*000,000 metric tons*)

	1955	1960	1965 Upper limit
1. Fe content			
Requirements			
Blast-furnaces and sintering plants	31·6	43·7	56·0
Steelworks	0·4	0·8	1·2
Total	32·0	44·5	57·2
Availabilities			
Community-mined ore	21·6	26·0	32·0
Imported ore	10·4	18·5	25·2
2. Saleable ore			
Requirements			
Community-mined ore	71·3	86·8	108·0
Imported ore	18·7	32·3	42·0

As these figures show, requirements of Community-mined ore, expressed in saleable tons work out at 108 million metric tons (upper limit). This is slightly below the production potential at present declared, inasmuch as some very high-cost Community orefields will be obliged to cut back their production faster than had been bargained for, in face of competition from imported ores at lower and lower delivered prices.

Requirements of imported ore (also in saleable tons) are estimated at 40 million metric tons, plus 2 million tons for the steelworks, *i.e.* 42 million tons in all as against 32,300,000 in 1960 and 18,700,000 in 1955: the Fe content of the imported ores is expected to rise to just under 60% in 1965, as against 57-58% in 1960.

Calculated on the basis of the mean trend, requirements both of Community and of imported ores would be below the levels just mentioned.

No particular difficulty should be encountered in covering requirements of imported high-grade ores between now and 1965, nor is their transport a problem, though care should be taken to ensure that the transport arrangements are as economic as possible, as regards both the size of the carriers in which the ore is shipped and the capacity of the loading and unloading installations.

Beyond 1965 the outlook is more uncertain. Beneficiation of Community ores should make it possible to count on larger workable reserves; on the other hand, in the Community's biggest orefield any further expansion of production will be impeded by the progressive exhaustion of the deposits of calcareous ore, so that it will then be a choice between using siliceous ore (involving a change in the operating rates of the blast-furnaces) and stepping up imports. In any case, studies should be continued with respect to outside orefields which could serve as long-term sources of supply for the Community.

Coke

A distinction must be drawn between the actual coke for the blast-furnace and the fuels (coke breeze, etc.) used in sintering.

462. Blast-furnace coke. — When the last General Objectives were drawn up, one objective fixed, in view of the expected coke supply difficulties, was the reduction of the average coke input rate, which it was indicated should be lowered from 970 kg. in 1955 to 900-920 in 1960: technical progress has, however, brought the rate down still further, so that by the end of 1960 it already stood at only 880 kg., the figure originally laid down for 1965.

Although the supply situation has changed in the meantime, the main point still holds that, in view of the capital expenditure necessary and the relative price of substitute products, any lowering in the specific consumption of raw materials must serve in turn to lower pig-iron production costs.

The coke rate will be influenced more particularly by the composition of the burden and by the injection of fuel oil.

Capital schemes definitely decided upon as at the beginning of 1961 in respect of sinter and pig-iron production (75 million metric tons for each) indicate that the 1965 specific consumption of sinter per metric ton of pig-iron production will be 1,000 kg. Notwithstanding, the enterprises are planning to increase the total sinter potential to 84 million metric tons, a development which the High Authority approves. Sintering makes it possible to expand pig-iron production potential at comparatively low cost, and at the same time facilitates the introduction of other technical improvements, such as raising the temperature of the blast, operating under top pressure, and building larger-capacity and more highly-mechanized furnaces — all of which make for considerably higher productivity and lower production costs.

On the basis of an upper-limit pig-iron requirement of approximately 69 million metric tons and a sinter consumption of something approaching 84 million, the sinter burden per metric ton of pig-iron produced would increase to 1,200 kg. The trend would then show as follows.

	(kg. per metric ton of pig-iron)		
	1955	*1960*	*1965*
Sinter	445	635	1,000-1,200

A further technical improvement in blast-furnace operation has been obtained by the development of fuel injection, which as well as permitting a saving on coke appreciably increases the productivity of the furnace. However, although injection is both simple and convenient, it is unlikely to be in general use as early as 1965, the furnaces not being sifficiently adaptable (particularly as regards obtaining the necessary increase in the blast temperature). Moreover the economic advantage of the injection process depends in part on the relative prices of coke and of the fuels to be injected. The present method is to use liquid or gaseous hydrocarbons (natural, residual or coke-oven gas); industrial research is also in progress on the use of pulverized coal, and on the additional introduction of oxygen. The choice of fuel will be governed partly by the location of the works.

The coke rate in 1965 is unlikely to be higher than 780 kg.[1]): how much lower it will go must depend on whether the sintering projects are carried out in full and on how rapidly fuel-oil injection comes to be a regular practice.

In particular, the full implementation of the sintering projects could result in a substantial reduction in the coke rate; to as little as 750 kg.: this would bring the iron and steel industry's coke requirements (estimated above on the provisional assumption of 780 kg.) down by two million metric tons.

463. Coke breeze for sintering; other uses. — Where sinter is used in the blast-furnaces the coke rate falls, but on the other hand the production of sinter requires coke breeze or similar fuels (anthracite fines, degasified Lorraine coal). The latter will, incidentally, be increasingly in demand in the future, as availabilities of coke breeze will be insufficient to meet requirements.

Finally, the iron and steel industry also uses certain tonnages of coke for other purposes such as space heating, furnace heating and steel casting.

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[1]) Coke actually charged into the blast-furnaces, *i. e.* exclusive of (a) coke breeze consumed in sintering and (b) coke used for other pnrposes in the iron and steel industry, these two items being dealt with under "Coke breeze for sintering; other uses."

464. Total requirements. — The total requirements of the iron and steel industry, exclusive of the pig-iron foundries, are as follows.

Coke and Coke-Breeze Requirements of the Iron and Steel Industry

('000,000 metric tons of coke)

	1955	1960	1965	
			Trend	Upper limit
Consumption				
(a) blast-furnaces	39·81	47·72	50·4	53·7
(b) sintering-plants[1])	0·93	2·24	3·5	3·5
(c) "other uses"	1·07	1·10	0·9	1·0
Total	41·81	51·06	54·8	58·2

[1]) Plus and increasing consumption of anthracite and/or low-volatile fines which might by 1965 amount at some 2,500,000 metric tons should all the sintering projects be carried out, The breakdown of the resulting total of six million metric tons as between coke breeze and other fuels is mentioned for guidance, and may easily alter under the influence of various technical and economic factors.

While not wishing to go here into the practical arrangements for meeting these requirements, we may add that the details obtained so far suggest that no difficulty is likely to be experienced in securing the necessary tonnages of coking fines, which will be provided both by the Community collieries and by imports.

Objectives for improving the competitive capacity of the Community production set-up

465. Points concerning the improvement of competitive capacity can of necessity be made only in fairly general terms. In the High Authority's case the objectives will be determined by its practical policy on investment and research; as for the enterprises, each will follow this general line while adapting it in the light of its own particular structure and location.

The basic principles adopted are dictated in the main by the rapid — indeed in some cases the revolutionary — changes in the production techniques in a heavy industry regarded until recently as remarkably little subject to change in that respect. By making the most of the opportunities afforded it by this development, the iron and steel industry will be all the better able to fulfil the increasing demands as to the quality of its products.

The following account deals with points supplementary to the indications already given concerning the different production stages. The object is not to draw up a list of steelmaking techniques: the enterprises and research centres in the six countries are better placed than anyone else to know the pros and cons of each. On the other hand it is easier to work out at Community level certain general lines of action calculated to improve the Community industry's competitive position *vis-à-vis* third countries or substitute products.

Two points may be emphasized right away:

(a) to attain this objective, every effort must be made to ensure flexibility of adaptation to consumers' requirements and to apply the results of engineering research;

(b) greater attention to fundamental research, both on actual production and on utilization, is essential, even though the results may in some cases be long-term ones only.[1])

APPLICATION OF REGULATION AND CONTROL TECHNIQUES IN THE IRON AND STEEL INDUSTRY

466. It is important that the Community iron and steel industry should, after appropriate adaptation, introduce on a general scale the latest regulation and control techniques: this is particularly necessary inasmuch as the consumers' manufacturing techniques demand more and more exact tolerances and extreme consistency of quality in the products supplied them.

Automation is coming in more and more in the rolling mills, and not only there: one of the advantages of the

[1]) For the High Authority's research policy, see Nos. 312 ff. above.

oxygen-converter process is that it allows of practically complete control by means of electric computers. In fact, more and more advanced control is becoming possible for all the steelmaking processes, as a result of higher productivity and, in particular, faster reduction.

Incidentally, the use of control techniques on the management side could lead to substantial savings in the general services: this is, of course, well known, but the field is one to which more research should certainly be devoted.

OPTIMUM SIZE AND UTILIZATION OF PLANT

467. Technical development is having very considerable effects on the size of the production installations, and consequently of works and even enterprises. This is, however, chiefly apparent in the case of ordinary steels, which represent very much the major part of production; it is a good deal less noticeable in the case of high-grade steels and special sections.

So far as ordinary steels are concerned, this trend seems likely to become more and more marked. The most up-to-date blast-furnaces in the Community at the time of the 1956 General Objectives had an annual capacity of about 600,000 metric tons of pig-iron; the capacity of those on which building has recently started will be close on one million. As a result of this development, the oxygen converters are reaching capacities of over half a million metric tons. And the actual works are at the same time increasing in size: in addition to the factors which used to make for large size, such as the dimensions of the wide-strip mill or the blooming and slabbing mill, we now have to take into account those of the blast-furnaces and the steelworks proper. It is for these reasons that the new integrated works for ordinary steels are being planned on such a scale.

As for the rolling mills, we now have not only the by this time giant continious hot wide-strip mills but also various other types of continuous mill. Thus in the case of wire-rod, demand for which is increasing at a rate second only to that for flats, and for which new capacity installed since 1959 will in 1963 amount to more than one-third of the total

wire-rod capacity then existing, the Community will be equipped thanks to this modernization drive with some of the largest mills in the world. Individual capacities are now up to 300,000 metric tons a year, and will from 1962 onwards reach nearly 400,000: that is to say, one new mill will turn out the equivalent of the Community's entire annual consumption increment.

It is important, therefore, to avoid unduly sharp leaps in Community capacity and unduly marked imbalances as between one production stage and another. We shall be dealing with this point again in the conclusion.

QUALITIES AND TYPES OF PRODUCT: APPROACH TO BE ADOPTED WITH A VIEW TO BETTER UTILIZATION

468. Attention will need to be focused more and more on methods of processing to improve the quality of the product (and especially its mechanical and chemical resistance), and on the production of steel in the forms in which the customer needs it for his purposes.

This serves to underline one of the industry's great tasks, research on new products. Such research has always been one of the features of the special-steels side: in future it will have to be carried on by all producers, who will, what is more, have to devote the keenest attention to all foreseeable changes in techniques or types of product in the consumer industries.

Thus for instance by perfecting certain types of ultra-thin tinplate the American industry has been able to maintain considerable sales outlets for packaging, competing with substitute materials and making the product cheaper for the consumer.

Also, there should be still closer technical co-operation between producers and consumers, to enable the latter — where necessary be adapting their manufacturing processes or products — to derive all the advantages possible from the qualities or types of iron and steel product supplied them.

Finally, one means of ensuring more rational utilization of modern high-productivity rolling mills, and so lowering costs, would be to arrange for a larger proportion of the

tonnage rolled to be in standard sizes. This raises the question of the practical standardization of steel sizes and qualities. The establishment of the European series of I.P.E. joists and beams and the rationalization of European broad-flanged beams (H.E.) are steps in this direction by reducing the number of types in these products; so is the rationalization of merchant bars, which is being undertaken at Community level.

Standardization would also serve to reduce the size of the stocks to be held at the works: More will need to be done in this line, by co-ordinating consumers' and producers' research both on the technical and on the commercial side.

MANPOWER PROBLEMS

469. In 1960, the Community iron and steel industry employed an average of 476,000 workers and 77,000 clerical, technical and managerial personnel, an increase of 57,000 and 13,000 respectively over the figures for 1955.

During the period 1955-1960, the industry went ahead with the modernization and rationalization on which it had already embarked on a considerable scale prior to that time, while in addition new production units embodying the latest technical improvements were constructed. Apart from the brief recession in 1958, the production figures showed a steady rise.

During this period the working week was shortened by varying amounts in the different countries. Nevertheless, the rate of intake — most of which was accounted for by the need for extra manpower resulting from these reductions in working hours — was well below the rate of increase in production. This was due to the fact that the increase in production was achieved mainly by a substantial stepping-up of productivity, calculated in terms of the relation of production to hours worked: the proportion rose steeply, by nearly 6% per annum, from 1955 to 1960.

These various factors also appreciably influenced the composition of the total personnel employed. There has been an increase of almost 22% in a clerical, technical and managerial staff, while technical progress has also made it necessary

to expand the ancillary services, including more particularly the maintenance side, which has become more essential than ever owing to the installation of highly-mechanized and semi-automated equipment.

The personnel strength necessary in 1965 will depend, firstly, on the movement of the production/hours-worked ratio, and secondly, on the average length of the working week.

Personnel strength in 1965; recruitment required

470. The numbers which the industry will need to employ in 1965 were calculated by estimating, on the basis of selected hypotheses as to the expansion of iron and steel production, the number of hours to be worked ("level of activity").

The statistical bases employed were of a very general nature, so that the results represent only a rough approximation.

The calculations rest on the reasonably probable assumption that the march and spread of technical progress will continue to influence the production/hours worked ratio in much the same degree as in the past. On this hypothesis,

TABLE 73

Personnel of the Community Iron and Steel Industry
(annual averages)

	1955	1960[1])	Difference	Difference in % of 1955 average
Workers on production side	236,300	264,000	+27,700	+11·7
Workers in the ancillary services	182,700	211,700	+29,000	+15·9
Workers, total	419,000	475,700	+56,700	+13·5
Clerical, technical and managerial personnel	63,700	77,200	+13,500	+21·9
Apprentices	10,300	10,800	+ 500	+ 4·8
Total personnel employed	493,000	563,700	+70,700	+14·3

[1]) 1960 was an extremely active year.

the ratio would rise by 4·3% per annum given a steel production of 89 million metric tons (mean trend), and by 5% given a production of 94 million (upper limit): the level of activity (number of hours to be worked) necessary would increase by 1% in the first case, and by 3% in the second.

If the working week remained unchanged, therefore, the increase in the number employed would be a slight one. In point of fact, it is likely to be larger in view of the trend towards shorter working hours in the iron and steel industry.

It is, naturally, not possible to predict how the position will develop, but two hypotheses have been worked out — a 3% shortening (based on existing agreements[1])) and a 10% shortening (based on the all-round introduction of the 40-hour week now planned for the German industry, but taking into account in this case certain compensating effects such as a drop in absenteeism).

471. If production expanded in accordance with the mean trend, the industry's manpower would then need to be increased by either 5% or 12%, as the case might be, *i. e.* by 22,000 or by 58,000; expansion to the upper limit would require 9,000 more again. The increase would thus be no larger than that which has already taken place in the recent past. At the same time, of course, it would be necessary to replace men leaving the industry. The annual rate of wastage from 1955 to 1960 was 13% of the total number of steelworkers; the above calculations assume the continuance of this turnover.

Overall, the number of workers to be recruited may be estimated, according to the hypothesis adopted, at between 67,000 and 79,000 a year, replacement of wastage accounting for very much the greater part (63,000 or 65,000 a year).

Given the probable trend in personnel, it is likely that there will be a further increase in the number of clerical, technical and managerial employees. The extent of this increase is, however difficult to judge: on the one hand,

1) Agreements in force in 1961, either actually shortening the working week or providing for its shortening in several stages.

TABLE 74

Estimated Personnel Strength of the Iron and Steel Industry in 1965
(annual average; mean trend)

	3·5% shorter working week	10% shorter working week
Workers	498,000	534,000
Clerical, technical and managerial personnel	85,000	87,000
Apprentices	12,000	12,000
Total	595,000	633,000

rationalization of the administrative side check, or even reverse, expansion there, while on the other hand technical progress will oblige the industry to employ more technicians, supervisors and worksmanagers than it requires at present. In addition, some jobs are already having to be ranked in this category rather than in the workers' category, owing to the new skills demanded by technical progress.

Finally, there is a growing tendency to classify key workers among the personnel paid by the month. This alters the demarcation of the category "clerical, technical and managerial personnel", thereby adding to the difficulty of estimating its future size.

One observation should be made concerning the forecast as to the personnel strength of the industry in 1965 and the resulting requirements of extra manpower. One of the main bases on which it was calculated was the expected movement of productivity, defined as the production/hours-worked ration. Present studies in this connection are based on the extrapolation up to 1965 of the productivity trend observed during the five years up to 1960. This is a provisional method only, and studies on the future trend in productivity, and in particular on the effects of the rapid introduction of new technical processes, are to be continued, methodological improvements being made as time goes on. By the present method forecasts of the trend are of doubtful accuracy, and consequently there is a margin of error in the forecasts of personnel strength in 1965.

472. The personnel strength of the iron-ore industry in 1965 was estimated by the same methods as that of the iron and steel industry.

In consequence of increasing mechanization and of concentrations among certain mines and workings, the Community average output per man/shift may be expected to rise by approximately 5·5% per annum up to 1965: the rates will, however, vary fairly considerable from one country to another (Germany 3·5%, France 6·5%, Italy 6%, Luxembourg 3%).

This being so, the required level of activity (number of hours to be worked) will slowly decrease.

Were the length of the working week to remain unchanged, this would mean a gradual shrinkage in the labour force, with manpower requirements confined to the replacement of wastage, and totalling approximately 300 a year for the Community as a whole.

If, on the other hand, we allow for the tendency towards a shorter working week, a slight increase may be expected in the numbers employed by the industry. If the 40-hour week were to be introduced in all the iron-ore mines of the Community, additional manpower requirements would work out at an annual average of 200.

TABLE 75

Personnel Strength of the Iron-Ore Industry
(annual average)

	1955	1960	1965	
			Unchanged working week	40-hour week
Workers (incl. apprentices)	51,100	46,500	45,000	50,000
Clerical, technical and managerial personnel	5,500	6,000	6,000	6,000
Total	56,600	52,500	51,000	56,000

In preparing the General Objectives, it is not, and in present circumstances could not be, the intention to work out with precision the trend in production, and consequently in personnel strength, in the different works and areas. The Objectives indicate simply what capacity should be available in the Community as a whole: the fact that there is a Common Market leaves consumers entirely free to procure their supplies from whatever source they prefer, in whatever area, and producers to expand their plants wherever they see fit.

Accordingly, the personnel increase up to 1965 represents the average expected growth in the numbers employed by the iron and steel industry and the iron-ore industry of the Community as a whole; it may be that in some areas or works the numbers will not rise at all, or will even fall.

Nevertheless, it is important to obtain at any rate a rough idea of the personnel strengths and manpower requirements (both overall and broken down by skills) of the different areas, and it will be necessary to secure fuller and more comprehensive information for this purpose.

Closures are difficult to allow for sufficiently well in advance for forecasting purposes; on the other hand, the enterprises' investment declarations (supplemented here and there where necessary) do provide certain regular indications as to the probable effects on the personnel position, and make it possible to follow any changes developing in the distribution of personnel as among the different stages and sectors of iron and steel production.[1])

Skills

473. While the actual numbers which the industries will need to recruit up to 1965 in order to reach the level forecast are not much larger than in the past, attention should be drawn

[1]) It should be noted that, quite apart from the studies for the preparation of the General Objectives for steel, the High Authority's departments are attentively following manpower developments in connection with shorter-term problems. In particular, they are examining all cases liable to necessitate readaptation of steelworkers or iron-ore miners, and also the possible need for industrial redevelopment in certain given areas.

to the considerable changes likely to take place in the skills required of the men concerned.

As new installations come into operation and new methods of production are introduced, changes usually have to be made in the composition of the personnel concerned as regards both numbers and skills.

Present trends indicate that the numbers of workers employed direct on production are diminishing, while on the other hand many existing jobs are undergoing a complete change in structure and at the same time altogether new jobs are coming into being.

Thus the production worker is becoming more and more a machine operator, and the machines which he operates are becoming more and more complicated as a result of the constant improvements being made to them. Side by side with the traditional type of worker there is springing up a new category of technicians with greater responsibilities and more specific skills. This trend is also affecting both the numbers and the skills of the men employed on the general services, and especially on the maintenance and repairs side. Again, the introduction of highly-mechanized and automated equipement is obliging the industry to employ larger and larger numbers of automation- and remote-control specialists. In consequence of this increased responsibility borne by workers in certain jobs, it will be necessary to adapt the methods employed in personnal selection and training.

Finally, the pace of technical and economic development in the iron and steel industry is such that much greater attention will have to be given to the question of training managerial personnel and keeping them constantly up to date, so as to equip them to cope with their increasingly complex duties: they must be able to co-ordinate all the multifarious aspects of management — technical, economic, commercial and human (work organization and personnel management) — which are becoming all the time more closely interlinked.

The modern methods now available enable managerial personnel to be trained more quickly and effectively for these heavy responsibilities.

474. The High Authority has requested a working party of training experts to assemble all material likely to afford guidance to those concerned in the industry regarding the scope and implications of these changes and their incidence on personnel training.

The changes may be expected, as time goes on, to result in recruitment difficulties. Accordingly, it is important that the trend in the pattern of skills should be followed now with the aid of fuller and more reliable employment statistics. The employers' and workers' associations have already undertaken to co-operate actively with the High Authority in this matter.

In addition, the structural changes consequent on technical progress, and the resulting alterations in the skills required of the workers, will continue to face existing enterprises with the problem of equipping men accustomed to the older types of plant to cope with the new techniques.

Finally, it should be noted that the changed pattern of skills is bound to affect the enterprises' approach to questions in connection with wages and terms of employment. The problems confronting the highly-mechanized enterprises in this regard are of a somewhat special nature, and will need to be dealt with in a rather different manner from that adopted hitherto: for example, questions relating to wage structure and methods of payment will have to be thoroughly reviewed and adapted to the new technical situation.

Certain aspects have already been tackled by High Authority committees, by the Consultative Committee and by the Joint Committee on Harmonization of Terms of Employment. The High Authority intends to pursue and extend these studies, in order to prepare for and promote the changes which will be necessary.

Coverage of manpower requirements

475. In the High Authority's view, which is also the unanimous of the experts consulted, the position as to the meeting of manpower requirements is likely to be dominated to a greater degree than hitherto by the question of skills.

At the same time, that position will vary considerably from one area to another.

In some regions local shortages are developing now. Enterprises are already having to bring in workers from neighbouring areas, and even from other countries. Recruitment difficulties will tend to persist, and may be aggravated, particularly in highly-industrialized zones, by the fact that the new skills will bring the iron and steel industry into more direct competition for labour with other industries also using more and more advanced technical methods.

In other regions some works may be compelled to close some of their departments: the manpower thus released will not, however, be always sufficient to meet the requirements developing elsewhere. In isolated districts in particular there is likely to be difficulty in finding men alternative employment on the spot. The High Authority intends, in accordance with the Treaty, to do its part towards dealing with this problem by pursuing a policy of readaptation (tiding-over/or retraining) for the men themselves, and if necessary of industrial redevelopment for the areas affected.

A further problem is that when new iron and steel complexes are constructed their managements will have to do with a manpower situation which will vary widely according to the degree of industrialization of the regions concerned. Generally speaking, they will be obliged in a good many cases, as has already had to be done in the past, to sign on workers from a very considerable range of different areas. In order to stabilize their labour force, they will need to devote very special attention not only to personnel selection and training methods, but also the men's reception and adaptation, and to the absorption of their families into their new surroundings.

CONCLUSION

476. From the analysis thus completed of future requirements and production capacity, it emerges that the General Objectives for 1965 are transistional in character, summing up the information at present available concerning an industry in

the midst of a technological revolution, within the context of a rapidly-expanding economy.

When the last General Objectives were drawn up, the European iron and steel industry, while faced with requirements still abnormally swollen by the needs of post-war reconstruction, had still not fully overcome certain deficiencies in its production set-up and certain difficulties in the procurement of its raw-material supplies. The great point was to produce. The state of demand made it less necessary to produce under the most economic conditions, and ,owing to the prices which could be charged, easier to finance the installation of new capital equipment. During this stage the main object was to increase *installed capacity* sufficiently fast for *production potential* to keep pace with *demand* without overstrain, and as scarcely any imbalance developed during the five years between capacity, production potential and demand the rate of utilization of the plant remained consistently high, especially at the blast-furnaces and the steelworks proper.

The detailed analysis of the various elements of supply and demand for 1965 indicates that, now that the European iron and steel industry has with such remarkable drive reconstructed a co-ordinated production set-up and disposed of its supply problems, its main objective will undergo a change: it will be primarily concerned in the future to ensure that expansion takes place in a manner as economic and as carefully tailored to demand as possible. Operation at optimum rates by the Community's installations as a whole will reduce to a minimum the financial burdens represented by the very large investments in fixed assets. The aim must therefore be to keep *demand* and *capacity* as nearly equal as possible, by not allowing capacity to develop too far ahead of *production potential.*

The effects of over-hasty installations of plant would be twofold: firstly, it would make for less economic production and lower profits, thus causing difficulties with regard to self-financing; secondly, the existence of partly idle capacity would discourage new investment, and so prevent full use being made of the many new possibilities likely to be opened up by technical progress in the years ahead, as regards both

production processes and steel utilization (the latter being a field in which there is room for considerable further extension through the development of new products, to which it is most important that the industry should devote special research). These dangers are particularly serious inasmuch as they concern mainly the heaviest and most costly types of plant taking the longest time to install and amortize, *e. g.* the big rolling-mills.

477. These points suggest, firstly, an observation as to economic policy, and secondly, a conclusion as to method.

As regards economic policy, the producers ought, and the High Authority intends, to devote very careful attention to all elements serving to stimulate and align rates of growth and rates of operation.

As was noted on the subject of production-capacity targets, the increase in the size of the installations resulting from technical progress has frequently caused imbalances within works as between the capacities at the different production stages, with the consequent risk of the Community's finding itself landed with sudden quite unduly sharp leaps in particular capacities as several large installations come into operation more or less at the same time. This problem will need to be gone into thoroughly in order to find a way in which such untoward developments can be avoided: one possibility would be to arrange, in certain circumstances and subject to certain limits, for the conclusion of temporary specialization agreements or long-term supply or jobbing contracts.

As regards method, the changes taking place in the iron and steel industry are making it increasingly necessary that the General Objectives should cover a longer period ahead, should be revised at more frequent intervals, and should go in greater detail into the specifically economic prerequisites for their implementation.

1965 is by now not far off. Most of the capital schemes whose results will be visible by that time have already been decided upon: this has made it possible to discuss and debate the expected production potentials and increased the probability of the present forecasts, but the gain in accuracy is offset by a loss in the value of what the General Objectives

are supposed to be. Studies should therefore now be begun with reference to a more distant date. The most practical arrangement would probably be to publish at the usual intervals an overall Memorandum relating to objectives seven or eight years ahead, and to fix comparatively near dates, say every two years, for review and correction: this would put back the main year forecast for as between one publication and the next, while enabling account to be taken of new developments supervening and of the results of studies conducted. The concept would thus be to some extent one of more continuous General Objectives.

Only if there is this continuity in the examination of the actual course of events and in the comparison of it with the relevant forecasts will it be possible to ensure that the new forecasts are fully up to date. Also, the proper contact could be maintained with the experts for the purpose of conducting the highly necessary economic studies referred to in the summary, as and when both become urgent and feasible.

The new problems thus calling for priority treatment are the very sign and seal of the vitality of the European iron and steel industry. They show that, having earlier demonstrated its vigour in the work of reconstruction, it is now in a position to demonstrate its maturity in achieving balanced growth.

ANNEX TO SECTION 5

TABLE 76

Mean Annual Steel Consumption by Sectors, 1955-1957, with Forecasts for 1965

('000 metric tons)

Sector	1955-57	1965	Indices 1965/1955
1. Coalmining	412	510	106
2. Other mining industries	73		
3. Iron and steelworks' own consumption	575	910	159
4. Steel-tube industry	4,220	7,410	176
5. Wire, wire manufactures and cold-rolled products	5,260	8,640	164
6. Steel foundries	1,200	1,760	147
7. Forges	2,185	3,200	147
8. Steel furniture and fittings	535	1,070	200
9. Hardware, cutlery, tools, locks	2,300	3,670	160
10. Metal packaging	845	1,600	189
11. Hollow-ware	1,265	2,110	166
12. Mechanical engineering	3,095	5,510	178
13. Electrical engineering	835	1,760	211
14. Shipbuilding	1,750	1,860	106
15. Locomotives and rolling-stock	745	770	103
16. Motorcars, motorcycles, bicycles and other vehicles	2,455	5,270	215
17. Constructional engineering	2,490	4,120	165
18. Building industry	4,490	6,180	138
19. Permanent-way material	685	800	117
20. Other consuming industries	685	1,200	175
Total	36,100	58,350	162

Estimated total demand for steel in 1965, shown above in thousands of metric tons of products, was obtained by adding together the expected requirements of the different sectors, and works out at 58,300,000 metric tons. This figure represents 74,700,000 metric tons of crude steel, shown under the sector-by-sector method in Table 56.

The figure finally adopted for internal steel requirements in 1965 is 76 million metric tons, which is about 2% above that arrived at by the sector-by-sector method. Accordingly the figures originally obtained (by the sector-by-sector method) for the different types of products, which add up to the same total as that shown in the table above, have been increased by approximately 2% in all cases. This brings the total figure forecast, for finished products, to 59,500,000 metric tons, as shown in Table 57.

CHAPTER FIVE

SOCIAL POLICY

478. As regards employment, the outstanding development of 1961 was the practical disappearance of short-time working in the mines. Otherwise, much the same trends were in evidence as in 1960, including recruitment difficulties in certain sectors of the iron and steel industry and in some coalfields, and a very high turnover of underground mine-workers.[1]) The drift avay from the mines is a particularly serious matter since the cost of recruiting and training miners is extremely high. After a long period during which many collieries had pretty well stopped engaging any new personnel at all, some are now having to resume recruiting.

479. The recruitment difficulties are due more particularly to the fact that the E.C.S.C. industries nowadays require their workers to be more and more highly skilled. This is reflected especially in the rising proportion of technical, clerical and managerial personnel in relation to the total numbers employed in the iron and steel enterprises.

It was therefore obviously necessary to push ahead with the activities as a result of which a vigorous impetus had already been given to the occupational training of miners and steelworkers, and improvements made in training arrangements and methods.

The High Authority in 1961 launched a new programme taking every possible account of the changes which are occurring, in consequence of technical and social progress,

[1]) See *Statistical Annex,* Table No. 51.

in the numerical and qualitative composition of the E.C.S.C. industries' personnel taken overall. The programme relates simultaneously to workers, technicians and managerial and supervisory personnel, and is based on the findings of the Conference on Technical Progress and the Common Market which the High Authority helped to organize in 1960.[1])

480. The financial assistance which the High Authority is providing for the building of workers' houses is also doing something to ease the recruitment problem.

To maintain the regular flow of this assistance, a fourth building scheme was launched.

481. The High Authority fully realizes that in the field of readaptation and redevelopment it cannot expect to achieve quick or striking results. Each programme requires long and careful preparation; moreover, the High Authority cannot insist that any particular action be taken, it can only exercise persuasion, all active intiative and responsibility resting with the Governments.

The High Authority is concentrating on getting the problems recognized, discussing them with all the parties immediately concerned, and securing the joint implementation of the arrangements ultimately agreed on.

482. One of the most serious problems is the re-employment of elderly or physically-handicapped miners.

Also, it sometimes happens that when a pit closure takes place in a particularly depressed area the men are dissatisfied with the readaptation and redevelopment measures adopted.

However, apart from these cases demanding very special attention, a combination of readaptation and redevelopment operations is usually found an adequate answer to the social problems arising in connection with pit closures under the coal industry's reorganization programme.

483. The fact that principles have been laid down on the basis of which practical, even if in some respects defective,

[1]) See *Ninth General Report*, Nos. 460-462.

action can be taken; is of crucial importance for the social field; the procedural details of that action can always be modified in the light of experience, and varied according to the needs of the individual countries and areas.

The High Authority is, as ever, ready and willing to examine with the Governments any measures calculated to ensure that the readaptation and redevelopment operations fulfil their economic and social object as effectively as possible.

In particular, it feels that each operation is to be regarded as a separate entity presenting individual features of its own to be taken into account. Its task and that of the Government concerned are greatly eased where the enterprise and the local employment offices see to it that the measures are implemented in an individualized basis, with due regard to the men's particular capabilities, ambitions and family problems. At a time when the workers are understandably sensitive, no amount of consideration and psychological circumspection can be too much.

484. The workers' attitude is beginning to undergo a definite change. They are more concerned with the general situation in the area than with the mere maintenance of uneconomic pits, for it is the economic vitality of the area that governs the future of the rising generation.

It is now not only the coalminers who are affected by the demographic — indeed in some sort the family — aspect of regional redevelopment: for some years this has also been observable among the iron-ore miners of Eastern France. These men are employed at mines located at isolated points in largely non-industrialized areas; in consequence of the rationalization and modernization schemes undertaken there, the mines' manpower requirements are no longer large enough for them to take on sufficient numbers of miners' sons, nor can the boys find work at other enterprises nearby.

485. While the position of workers in the E.C.S.C. industries has substantially improved since 1953, there is comparatively little evidence of any particular country's catching up on any other in social standards. The automatic levelling-up of living and working conditions which was earlier expected

by some to result from the operation of the Common Market for coal and steel has thus not materialized.

The High Authority is convinced that no real levelling-up can be achieved without closer co-ordination of economic and social policies. Its own documentation and information work and the activities of the Joint Committee (Mines) and the Joint Committee (Steel) — which now meet regularly — will, it is hoped, provide a sound long-term basis for such co-ordination.

Trends in the field of social security are bound to be influenced by the advance of integration. As the free movement of workers increases, moreover, the Governments are likely to find it advisable to introduce parallel arrangements for parallel situations. Already, given the regulations on social security for migrant workers, which are statutorily applicable in all the member States, the responsible authorities in each Community country are having to bear in mind all the time the provisions in force in the rest.

The whole question of the basic structure and projected harmonization of social-security systems in the Community will be raised in a new form should Great Britain and certain of the Scandinavian countries become members, since the latter's systems are on a different basis from that adopted (with one exception)[1]) in the present member States.

486. In the field of health protection, the High Authority continues to devote particular attention to the matter of broncho-emphysema: the pathegenesis of this complaint (which is not necessarily linked with the pneumoconioses) is being systematically investigated.

The High Authority noted with satisfaction that in several Community coalfields the number of new pensionable silicosis cases in 1961 was lower than in the preceding years.

This most encouraging advance may to a great extent be regarded as a result of the High Authority's work in connection with industrial health, medicine and safety. This is among the activities required of it by the Treaty, which makes

1) The new old-age, widows' and orphans' pensions schemes in the Netherlands.

provision for the necessary funds; incidentally, full support has always been forthcoming from the parties directly concerned.

The promotion of research and scientific co-operation — together with the study of practical applications, which is conducted by the Mines Safety Commission — is of course at all times a major item in the High Authority's social policy.

Part I

MANPOWER PROBLEMS

Section 1 : Trends in Employment in the E.C.S.C. Industries[1])

IRON AND STEEL INDUSTRY

Trend in numbers employed

487. Although production continued to rise, the increase in total personnel was slower than in 1960: during the first nine months of 1961 the total number of persons employed[2]) in the Community iron and steel industry increased by 1·9%, as against 3·9% in the first nine months of 1960. The actual (rounded) figures were 572,000 persons employed at the beginning of the year and 583,400 at the end of September, *i. e.* an increase of 10,900, as compared with 21,500 during the corresponding period of 1960. In Germany, Belgium, France and Luxembourg the increase was only 1·5% or less; in the Netherlands, on the other hand, it was 7·8% and in Italy 5·6% (in comparison with 4·5% and 3% respectively during the first nine months of 1960), in consequence of the steady expansion of production capacity there.

It should be noted that technical progress is having a considerable influence on the composition of the industry's personnel.

Many jobs are changing in structure, and other entirely new jobs are emerging. At the same time, the number of men directly employed on production is increasing more slowly than the numbers in other categories. While not wishing to suggest that this is necessarily an indication of future trends,

1) See *Statistical Annex*, Table No. 50.

2) Workers, apprentices and clerical, technical and managerial staff.

TABLE 77

Changes in Numbers Employed in the Iron and Steel Industry, by Occupational Categories

	January-September 1960	January-September 1961
Workers	+ 17,900	+ 5,800
Apprentices	+ 900	+ 800
Clerical, technical and managerial staff	+ 2,700	+ 4,300
Total	+ 21,500	+ 10,900

TABLE 78

Changes in Numbers Employed in the Iron and Steel Industry, by Countries

('000 persons employed)

	1960				1961			
	Jan. 1	Sept. 30	Net change	% of total at Jan. 1	Jan. 1	Sept. 30	Net change	% of total at Jan. 1
Germany (Fed. Rep.)	239·8	252·3	+12·5	+5·2	251·9	255·2	+ 3·3	+1·3
Belgium	60·9	62·4	+ 1·5	+2·5	62·4	63·2	+ 0·8	+1·3
France	156·3	160·7	+ 4·4	+2·8	161·8	163·8	+ 2·0	+1·2
Italy	58·1	60·5	+ 2·4	+4·1	60·6	64·0	+ 3·4	+5·6
Luxembourg	21·8	21·8	—	—	21·7	22·0	+ 0·3	+1·4
Netherlands	13·2	13·9	+ 0·7	+5·3	14·1	15·2	+ 1·1	+7·8
Community	550·1	571·6	+21·5	+3·9	572·5	583·4	+10·9	+1·9

we may note that for some years there has been a marked rise in the proportion of clerical, technical and managerial staff. Technical progress is also necessitating expansion of personnel in the ancillary departments, and in particular on the maintenance side, now one of the most vitally necessary parts of any enterprises owing to the introduction of highly-mechanized and automatic equipment.

TABLE 79

Composition of Personnel of the Iron and Steel Industry[1])

	1955 (monthly average)	1960 (monthly average)	1961 (average, 1st 9 months)	Change 1955-1961	Percentage change over 1955
Workers employed on production side[2])	236,300	264,000	269,800	+33,500	+14·2
Workers employed in ancillary departments	182,700	211,700	215,500	+32,800	+18·0
Workers, total	419,000	475,700	485,300	+66,300	+15·8
Clerical, technical and managerial staff	63,700	77,200	81,800	+18,100	+28·4
Apprentices	10,300	10,800	11,400	+ 1,100	+10·7
Total personnel	493,000	563,700	578,500	+85,500	+17·3

[1]) See Graph No. 12 following.
[2]) Steelworks-owned coking-plants, blast-furnaces (including ore-preparation installations), steelworks proper, rolling-mills and tinning, galvanizing and lead-coating shops.

Production workers, who in 1955 accounted for 48% of the Community industry's total personnel, in 1961 accounted for only 46%; conversely, the proportion of clerical, technical and managerial staff rose between the two years from 13% to close on 15%.

As a result of these various changes, a new approach is having to be adopted with regard to vocational training.[1])

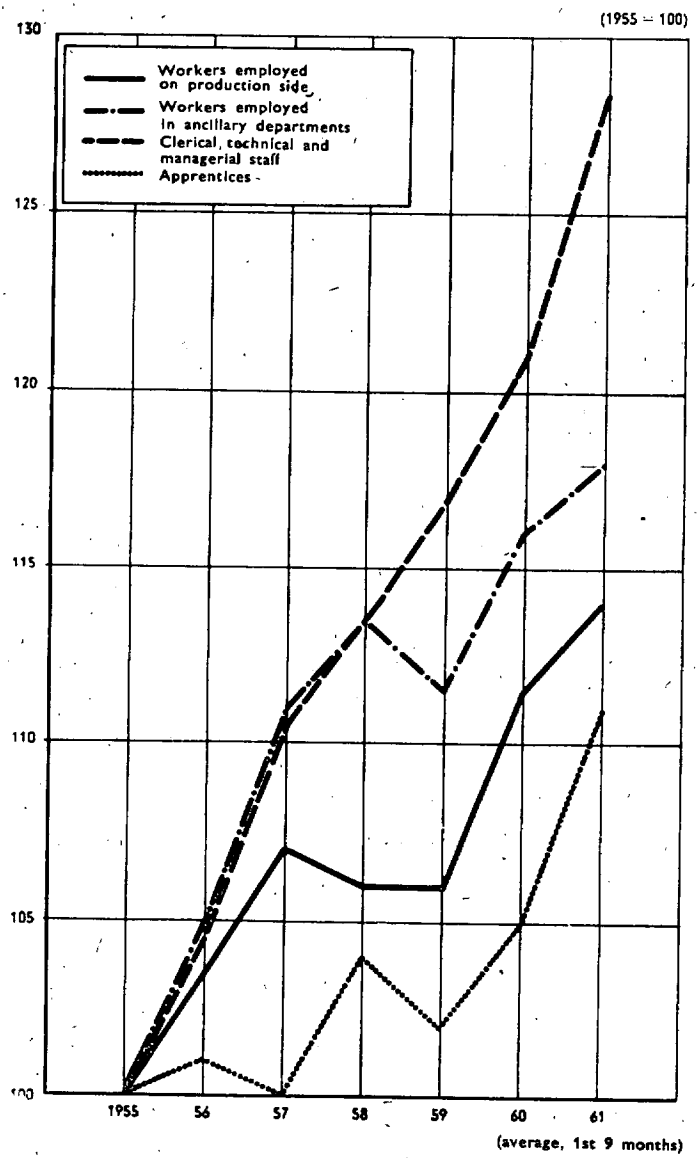
Manpower changes and requirements

488. In the first nine months of 1961, the Community iron and steel industry recruited 55,800 new workers, as against 64,100 in the first nine months of 1960. Of these, 40% were taken on in Germany, 31% in France and 14% in Italy, the remaining 15% being distributed among the Benelux

[1]) See Nos. 509-512 below, "Vocational Training."

GRAPH No. 12

Trend in Personnel of the Iron and Steel Industry
(yearly average) 1955 = 100



countries as follows: Belgium 10%, Netherlands 3%, Luxembourg 2%.

	Recruitment[1])	Wastage[2])	Net change
January-September 1959	51,300	41,300	+10,000
January-September 1960	64,100	46,200	+17,900
January-September 1961	55,800	50,000	+ 5,800

[1]) Of workers not drawn direct from the iron and steel industry (exclusive of apprentices).
[2]) Exclusive of apprentices.

Recruitment is proceeding briskly in Italy and the Netherlands, in line with the expansion of the industry. In Germany, Belgium and France, on the other hand, such offers of employment as are forthcoming are intended to replace wastage rather than to increase personnel.

The labour market is, however, so tight that recruitment has been becoming more and more difficult. Moreover, in several parts of the Community skilled labour is particularly short. Accordingly, enterprises have been obliged to fall back more than they previously did on the employment of foreign workers.[1])

In Germany, in the early part of the year the employment exchanges were unable to fill with any promptness the vacancies notified to them by the iron and steel enterprises. However, the position subsequently improved, and the industry's replacement needs can now be more easily met from local and regional manpower resources.

The Belgian industry's requirements are comparatively stable, but it seems probable nevertheless that about one-half of its intended monthly average intake of 200-300 men will have to be found abroad.

In France, the manpower reserves immediately available are sufficient to cover only 15-20% of the industry's requirements. In face of the labour shortage, some enterprises have had to lengthen the working week. Demand steadied somewhat during the autumn in the departments of

[1]) Including nationals of third countries.

Moselle and Meurthe-et-Moselle, but remains considerable in the Nord area. Larger numbers of foreign workers were recruited.

In the Netherland, the demand for labour is so considerable in all the metal-producing and metal-working industries that the iron and steel industry is also having to engage foreign workers in order to cover part of the manpower requirements resulting from its plans for expansion.

Foreign workers

489. The actual number of foreign workers recruited remained much the same as in 1960, but the proportion increased since the total number of new workers signed on was smaller. Thus 17% of all workers recruited during the first nine months of 1961 were of foreign nationality, as against 15% in the first nine months of 1960.

TABLE 80

Workers Recruited by the Iron and Steel Industry in the First Nine Months of 1960 and of 1961

Country	Recruitment[1])		of which: foreign nationals		Percentage of foreign nationals recruited	
	1960	1961	1960	1961	1960	1961
Germany (Fed. Rep.)	31,200	22,500	2,100	2,100	6·7	9·3
Belgium	5,900	5,700	900	1,300	15·2	22·8
France	19,000	17,400	6,400	5,600	33·7	32·2
Italy	5,600	7,400	—	—	—	—
Luxembourg	1,100	1,100	200	100	18·1	9·1
Netherlands	1,300	1,700	0	500	0	29·4
Community	64,100	55,800	9,600	9,600	15	17·2

[1]) Of workers not drawn direct from the iron and steel industry.

At September 30, 1961, 47,600 workers were employed in the iron and steel industry of an E.C.S.C. country of which they were not nationals. This figure, which had increased by 4% over that for the previous year, represented 9·7% of the total number of workers employed in the Community iron and steel industry.

The largest net increase was in Germany, where the industry's foreign labour force was augmented by another 1,100 new workers (mainly Italians) in twelve months.

TABLE 81

Foreign Workers Employed in the Iron and Steel Industry[1])

Country	September 1960		September 1961	
	Foreign nationals	% of total labour force	Foreign nationals	% of total labour force
Germany (Fed. Rep.)	3,500	1·6	4,600	2·1
Belgium	9,300	17·1	9,600	17·5
France	29,900	22·8	30,000	22·6
Italy	0	0	0	0
Luxembourg	2,800	14·4	2,800	14·4
Netherlands	300	2·9	600	6·2
Community	45,800	9·5	47,600	9·7

[1]) Exclusive of apprentices.

In France, 18-20% of all foreign workers recruited and found employment through the National Immigration Office were signed on by the iron and steel and metal-working industries. They were for the most part Spaniards and Italians.

IRON-ORE MINES

Trend in numbers employed

490. The gradual contraction of the labour force recorded for several years past continued.

In the first nine months of 1961 the total number employed[1]) fell by some 1,800: on September 30 it stood at about 50,800.

The manpower at present available is adequate to meet economic demands. Thanks to the continued rise in output the iron-ore mines are fully capable of meeting requirements.

TABLE 82

Changes in Numbers Employed in the Iron Ore Mines, by Occupational Categories

	January-September 1960	January-September 1961
Workers	— 1,300	— 1,300
Apprentices	— 100	— 300
Clerical, technical and managerial staff	—	—
	— 1,400	— 1,600

TABLE 83

Changes in Numbers Employed in the Iron-Ore Mines, by Countries

(*'000 persons employed*)

Country	1960				1961			
	Jan. 1	Sept. 30	Net change	% of total at Jan. 1	Jan. 1	Sept. 30	Net change	% of total at Jan. 1
Germany (Fed. Rep.)	20·9	19·7	—1·2	—5·8	19·6	18·7	—0·9	—4·6
France	27·8	27·5	—0·3	—1·1	27·4	26·8	—0·6	—2·2
Italy	3·1	3·2	+0·1	+3·2	3·1	3·1	—	—
Luxembourg	2·3	2·3	—	—	2·3	2·2	—0·1	—4·5
Community	54·1	52·7	—1·4	—2·6	52·4	50·8	—1·6	—3·1

1) Workers, apprentices, and clerical, technical and managerial staff.

Manpower changes and requirements

491. Once more, the largest drop was in Germany, where a major concentration and modernization drive is in progress. Many enterprises are going all out to mechanize, in order to reduce their personnel requirements; also, unproductive mines in several areas are scheduled for closure in the course of the next few years.

In France, reductions in the personnel at the mines in the east of the country were effected mainly by means of premature retirements. Some mines in Western France and the Pyrenees, which had been experiencing serious sales difficulties, were obliged to lay off part of their personnel, while others went out of operation stage by stage. A number of the discharged miners were taken on by the collieries of the Nord/Pas-de-Calais region.

Several enterprises, particularly in Luxembourg, are discontinuing underground operations and going over to opencast mining, a notably more productive method which also has the advantage of requiring fewer personnel.

The manpower requirements of the Community iron-ore industry as a whole are limited, and can be met without difficulty.

Foreign workers

492. At the end of September 1961, 6,300 workers[1]) were employed at iron-ore mines in E.C.S.C. countries of which they were not nationals. The figure in September 1960 had been 6,800: the drop over the twelve months thus amounted to 500.

COALMINING INDUSTRY

Trend in numbers employed

493. The contraction in the labour force with set in early in 1958 continued in 1961 in all the countries of the Com-

[1]) Exclusive of apprentices.

munity, total personnel[1]) decreasing steadily from 875,000 at the beginning of the year to 833,500 at September 30.

At the same time, after a long period during which recruitment had been kept to a minimum, some collieries reported that they would now have to begin taking on additional personnel in order to maintain a flow of saleable production.

TABLE 84

Changes in Numbers Employed in the Coalmining Industry, by Occupational Categories

	January-September 1960	January-September 1961
Underground workers	—48,800	—28,800
Other workers	—12,800	— 8,500
Apprentices	— 6,600	— 3,500
Clerical, technical and managerial staff	— 2,700	— 1,400
Total	—70,900	—42,200

The number of workers employed below ground[2]) fell from 508,900 on January 1, 1961, to 480,100 on September 30.

The contraction of the labour force was not on the same scale as in 1960.

At the same time, the number of pits in operation was reduced by the closures effected in 1961 under the reconstruction programmes.

Manpower changes and requirements

494. Except in Belgium, more underground workers[3]) were signed on in 1961 than in 1960: the total for the first nine

[1]) Workers, apprentices and clerical, technical and managerial staff.

[2]) Exclusive of apprentices.

[3]) See Table 88 below.

TABLE 85

Changes in Numbers Employed in the Coalmining Industry, by Countries

('000 persons employed)

	1960				1961			
	Jan. 1	Sept. 30	Net change	% of total at Jan. 1	Jan. 1	Sept. 30	Net change	% of total at Jan. 1
Underground and surface[1])								
Germany (Fed. Rep.)	531·8	493·2	—38·6	— 7·2	490·9	469·9	—20·3	— 4·2
Belgium	127·8	110·6	—17·2	—13·5	108·9	97·9	—11·0	—10·1
France[2])	229·7	216·9	—12·8	— 5·6	214·1	204·9	— 9·2	— 4·3
Italy	4·1	3·9	— 0·2	— 4·9	3·9	3·7	— 0·2	— 5·1
Netherlands	61·2	59·1	— 2·1	— 3·4	58·6	57·1	— 1·5	— 2·6
Community	954·6	883·7	—70·9	— 7·4	875·7	833·5	—42·2	— 4·8
Underground workers								
Germany (Fed. Rep.)	312·3	286·1	—26·2	— 8·4	285·8	273·1	—12·7	— 4·5
Belgium	84·0	72·3	—11·7	—13·9	71·3	62·7	— 8·6	—12·1
France	132·3	122·9	— 9·4	— 7·1	121·4	115·4	— 6·0	— 4·9
Italy	2·6	2·2	— 0·4	—15·3	2·2	2·0	— 0·2	— 9·1
Netherlands	29·5	28·4	— 1·1	— 4·1	28·2	26·9	— 1·3	— 4·6
Community	560·7	511·9	—48·8	— 8·7	508·9	480·1	—28·8	— 5·6

[1]) Workers, apprentices and clerical, technical and managerial staff.
[2]) Including the non-nationalized mines.
[3]) Exclusive of apprentices.

months of 1961 was 72,000, as against 59,400 in the corresponding period of 1960. The proportion of these not drawn direct from within the coalmining industry was 37% of the total intake, as against 34% in 1960.

The number of underground workers leaving the industry between January and September 1961 was 51,100 — somewhat less than in January-September 1960, when the loss had been 57,000, but a substantial figure nevertheless.

The highest wastages were in Germany (30,000) and Belgium (10,200).

TABLE 86

Underground Workers Not Drawn Direct from the Coalmining Industry

Country	No. of such workers		% of total intake	
	1960	1961	1960	1961
Germany (Fed. Rep.)	11,500	14,600	30	30
Belgium	5,500	5,500	36	42
France	3,000	6,100	55	73
Italy	0	0	—	—
Netherlands	200	600	20	50
Community	20,200	26,800	34	37

TABLE 87

Indices of Changes in E.C.S.C. Underground Labour Force (1957 = 100)[1]

	Recruitment of workers not drawn direct from the coalmining industry	Underground workers leaving the industry
January-September 1957	100	100
January-September 1959	25	70
January-September 1960	20	64
January-September 1961	27	57

[1]) In the first nine months of 1957, recruitment of workers not drawn direct from the industry amounted to 150,100, while the number of workers leaving the industry was 89,700.

The stated manpower requirements of the Ruhr and Aachen collieries in the autumn of 1961 totalled 23-24,000, including approximately 10,000 underground workers: the overall figure, however, represented real requirements for several months, and included vacancies for some 12,000 apprentices and juvenile workers. The collieries stepped up their recruitment of foreign workers.

In Belgium, many collieries complained of a shortage of skilled underground workers. After four years during which the industry had been debarred from engaging any but Belgian nationals, the Government once more authorized the admission of foreign miners. The first of these were mostly recruited in Spain.

In France, the demand for manpower was mainly concentrated in the Nord/Pas-de-Calais coalfield, where some 2,500 underground workers were needed.

In the Netherlands, the manpower requirements reported at the end of 1961 could not be met at either regional or national level. The collieries therefore planned to recruit foreign workers in 1962.

Foreign personnel

495. 1961 saw a further drop in the number of persons[1]) employed at collieries in E.C.S.C. countries of which they were not nationals. Although, after standing at 98,500 in September 1960, it did briefly rise to touch 99,900 on the following January 1, by September 30, 1961, it was down to 96,700.

The German collieries were the only ones to increase their foreign personnel, taking on a total of 7,000 over the twelve months September 1960-September 1961: of these 4,400 were recruited during the first nine months of 1961.

In view of the rise in demand for manpower and the labour shortage prevailing in some areas, the German industry and the collieries in the Nord/Pas-de-Calais region began to recruit larger numbers of foreign workers.

Thus the number of foreign nationals employed at the German collieries increased between January 1 and September 30, 1961, by some 4,400, of whom 2,900 were Spaniards and 600 Italians. Some 8,400 vacancies in the Ruhr were still outstanding before the foreign recruitment services in the autumn; of these 3,600 were for Italians, 2,900 for Spaniards, 900 for Greeks and 1,000 for Turks.

[1]) Workers, apprentices and clerical, technical and managerial staff.

TABLE 88

Changes in Number of Underground Workers
(exclusive of apprentices)

during First Nine Months of 1961

('000,000 men)

	Germany (Fed. Rep.) incl. Saar	Belgium	France	Italy	Netherlands	Community
Total number of men employed at beginning of period	285·8	71·3	121·4	2·2	28·2	508·9
Recruitment						
Workers not drawn direct from the coalmining industry	14·6	5·5	6·1	0·0	0·6	26·8
Workers transferred from surface to underground duties and apprentices completing their apprenticeship	27·9	0·3	2·0	0·0	0·6	30·8
Workers transferred from other collieries	6·7	7·4	0·3	—	—	14·4
	49·2	13·2	8·4	0·0	1·2	72·0
Wastage						
Discharges on medical grounds, retirements and deaths	5·1	3·8	2·9	0·0	0·4	12·2
Workers transferred from underground to surface duties	20·1	0·4	2·3	0·0	0·3	23·1
Workers transferred from one colliery to another[1])	6·7	7·4	0·3	—	0·0	14·4
Workers leaving the coalmining industry[1])	30·0	10·2	8·9	0·2	1·8	51·1
[1]) *of whom*: dismissed.	(2·6)	(2·0)	(0·3)	(0·0)	(0·0)	(4·9)
	61·9	21·8	14·4	0·2	2·5	100·8
Total at end of period	273·1	62·7	115·4	2·0	26·9	480·1
Net change	—12·7	—8·6	—6·0	—0·2	—1·3	—28·8

TABLE 89

Changes in Numbers Employed[1]) in the Coalmining Industry during the First Nine Months of 1961

	Germany (Fed. Rep.)	Belgium	France	Italy	Netherlands	Community
Persons employed in their own country	*—24,700*	*— 5,300*	*—7,500*	*—200*	*—1,300*	*—39,000*
Foreign personnel[2])	*+ 4,400*	*— 5,700*	*—1,700*	*—*	*— 200*	*— 3,200*
Italians	+ 600	— 3,700	— 800	—	—	— 3,900
Other E.C.S.C. nationals	—	— 700	— 500	—	— 100	— 1,300
Nationals of E.C.S.C. countries' extra-European territories	—	— 200	— 300	—	—	— 500
Moroccans and Tunisians	—	—	+1,900	—	—	+ 1,900
Spaniards and Portuguese	+ 2,900	— 100	— 800	—	— 100	+ 2,000
Other nationals	+ 900	— 1,000	—1,200	—	— 100	— 1,400
Total	*—20,300*	*—11,000*	*—9,200*	*—200*	*—1,500*	*—42,200*

[1]) Workers, apprentices and clerical, technical and managerial staff.
[2]) Including nationals of E.C.S.C. countries' extra-European territories.

In France, the coalfield mainly concerned was the Nord/Pas-de-Calais: during the first nine months of 1961 the National Immigration Office channelled to this region something like 1,500 workers, as against only about 400 in the corresponding months of 1960. However, Italian and Spanish labour is becoming more and more difficult to find. Recruitment is progressing more satisfactorily in Morocco.

Short-time working

496. The incidence of short-time working due to poor sales, which had been falling sharply since mid-1960, was very low indeed in 1961, amounting during the first nine months of the year to a mere 0·7% of total shifts workable,[1]) and

[1]) Shifts worked + shifts not worked.

that, to all intends and purposes, in two main areas only, the Campine and the Centre/Midi.

TABLE 90

Man/Shifts Not Worked for Lack of Sales, January-September

Country	Total (underground and surface)		% of total of man/shifts not worked in the Community		% of total of man/shifts worked and not worked	
	1960	1961	1960	1961	1960	1961
Germany (Fed. Rep.)	541,500	38,266	12·8	4·5	0·8	0·1
Belgium	2,327,600	621,635	55·0	73·8	12·3	4·1
France	1,361,100	179,555	32·1	21·7	3·9	0·6
Italy	2,300	—	0·1	—	0·4	—
Netherlands	—	—	—	—	—	—
Community	4,232,500	839,456	100	100	3·2	0·7

The breakdown by coalfields of the total of man/shifts not worked during the first nine months of 1961 was as follows:

Ruhr	4·5%
Campine	62·9%
Southern Belgium	10·9%
Lorraine	3·1%
Loire	6·6%
Cévennes	3·7%
Aquitaine	4·0%
Auvergne	4·3%

There has been practically no short-time working since the end of September 1961.

"E.C.S.C. allowance"[1])

497. With short-time working thus on the way out, payments by the High Authority in 1961 under its "E.C.S.C. allowance" scheme for Belgian mineworkers placed on short time owing

[1]) See *Ninth General Report,* Nos. 414 and 415.

to poor sales were very small, totalling only 184,000 units of account in the first nine months of the year.

Decision No. 2/61, under which the allowance was payable, expired on December 31, 1961.

Section 2: Vocational Training

TREND IN NUMBER OF APPRENTICES

498. The trend in the numbers of apprentices in the three E.C.S.C. industries in 1961 were much the same as in 1960, namely a slight increase in the case of the iron and steel industry (+600) and further decreases in that of the iron-ore mines (—300) and the coalmining industry (—6,200).

Iron and steel industry

499. The number of apprentices continued to rise slowly.

In Germany, France and Italy there was an increase both in the actual number and in the proportion of apprentices to total personnel: the latter point is particularly signi-

TABLE 91

Trend in Number of Apprentices and in Proportion of Apprentices to Total Personnel in the Iron and Steel Industry

Country	September 1960		September 1961	
	No. of apprentices ('000)	%	No. of apprentices ('000)	%
Germany (Fed. Rep.)	7·2	2·8	7·3	2·9
Belgium	—	—	—	—
France	3·1	1·9	3·5	2·1
Italy	0·1	0·2	0·2	0·3
Luxembourg	0·3	1·4	0·3	1·4
Netherlands	0·5	3·6	0·5	3·3
Community	11·2	1·9	11·8	2·0

ficant inasmuch as in these three countries there was also an increase in total personnel.

In Luxembourg, both the absolute figure and the percentage remained unchanged.

In the Netherlands, the percentage dropped, while the absolute figure remained the same.

Iron-ore mines

500. Between September 1960 and September 1961, the number of apprentices in the German iron-ore industry dropped from 600 to 400, and in the French from 800 to 700.[1])

In Germany, apprentices represented 2·1% of total personnel in September 1961, as against 3·1% in the previous September, and in France 2·6% as against 2·9%.

Coalmining industry

501. Table 92 gives the changes from September 1960 to September 1961, while Graph 13 following shows these as compared with the position in September 1955.

TABLE 92

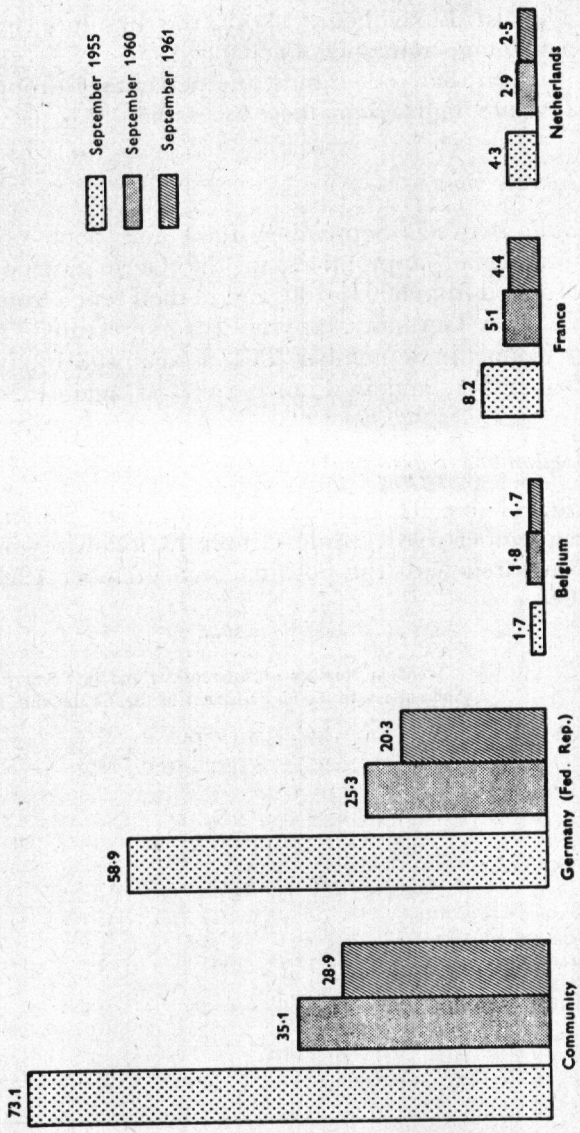
Trend in Number of Apprentices and in Proportion of Apprentices to Total Personnel in the Coalmining Industry

Country	September 1960		September 1961	
	No. of apprentices ('000)	%	No. of apprentices ('000)	%
Germany (Fed. Rep.)	25·3	5·1	20·3	4·3
Belgium	1·8	1·6	1·7	1·7
France	5·1	2·3	4·4	2·1
Italy	—	—	—	—
Netherlands	2·9	4·9	2·5	4·4
Community	35·1	4·0	28·9	3·5

[1]) These are the only two Community countries in which the iron-ore industry provides systematic apprenticeship training.

GRAPH No. 13

Trend in Number of Apprentices Employed in E. C. S. C. Coalmines
(in thousands)



Despite the sharp drop which had already taken place, the German industry showed the largest decrease, the number of apprentices falling in the course of the twelve months by 5,000, or nearly 20%. Germany nevertheless accounts for over two-thirds of the total number of apprentices in the Community coalmining industry.

Substantial decreases also took place in France, where the downward trend was even more marked than before (—700), and in the Netherlands, though here the shrinkage was rather less than in 1960 (—400).

In Belgium, the decrease was slighter (—100).

The proportion of apprentices to total personnel continued to fall in all countries except Belgium.

WORK OF THE HIGH AUTHORITY

502. During the first stage of its activities concerning vocational training, from 1953 to 1956, the High Authority studied matters connected with the training of miners and steel process workers, the collection and distribution of teaching aids available in the E.C.S.C. industries, and exchanges of experience with regard to methods of instruction.

In a second stage, lasting from 1957 to 1960, the High Authority turned more particularly to the problems involved in the training of supervisory personnel. After discussing the matter with the Council of Ministers, it took joint action with the Governments on various aspects, concentrating in particular on

(a) the encouragement of co-operation between the educational institutions and the E.C.S.C. industries;

(b) the preparation of two studies to form part of the documentation which is to be available for consultation when the High Authority comes to discuss with Government experts ways and means of achieving its and the Governments' aim of harmonizing vocational training;

(c) the elimination of Customs and administrative impediments to the exchange of teaching aids within the Community.

It was noted in the Ninth General Report that, thanks to progress to date with the work begun in 1957, the High Authority was now in a position to embark on a third stage; the Report added that the High Authority intended to review its whole policy on vocational training, and listed the various circumstances prompting it to adopt a new programme, together with the main objectives to be pursued.

503. In 1961, the new programme was duly drawn up and put in hand. The High Authority at the same time continued the activities already begun, some of which it completed in the course of the year.

Activities completed or suspended

504. A meeting was held in September 1961 of the Government experts whom it is the High Authority's practice to consult at regular intervals. The High Authority submitted the three studies which it had compiled in accordance with its programme of joint action with the Governments, dealing respectively with co-operation between the educational institutions and the E.C.S.C. industries,[1]) with the structure and organization of general and technical education in the Community countries,[2]) and with draft "minimum standards" of theoretical knowledge and practical proficiency for the exercise of basic occupations in the E.C.S.C. industries.[3])

The experts undertook to bring to the attention of the competent authorities in their countries the practical suggestions contained in the first of these studies, which they felt should be acted upon at national level.

As regards the dissemination of comparative data on the structure and organization of general and technical education, it was agreed that the High Authority's work in this respect could be considered to have been completed.

In the case of the draft minimum standards, the experts came to the conclusion that these had better not be finalized

1) See *Ninth General Report*, No. 419.

2) *Ibid.*, No. 421.

3) *Ibid.*, No. 421.

for the present; it would be premature to seek to define once and for all the two basic occupations selected, as technical progress had already caused a major structural alteration both in the job of "hewer (coalmines)" and in the job of "keeper (blast-furnaces)," even since the date at which the studies on the draft standards had been begun. Both occupations were in process of changing still further and most enterprises were still studying and experimenting with them.

505. The High Authority passed the study on educational co-operation to the E.E.C. Commission, mentioning that it was prepared to take part in any future work on the subject. Meantime, it intends to take up through its committees and working parties questions of current interest having a particular bearing on the relations between educational institutions and the industries under its own jurisdiction.

Activities continued under the 1957 programme

Elimination of Customs and administrative impediments to the exchange of teaching aids within the Community[1])

506. The High Authority made preparations for the practical implementation of the suggestion put forward in June 1960 by the working party of Customs and vocational-training experts.

A recapitulatory table was drawn up of the Customs regulations in force in the Community countries concerning the temporary importation of teaching aids for non-commercial purposes, and was submitted to the Customs experts, who agreed to add any missing details. They also undertook to inform the High Authority whether it would be possible to allow duty-free admission in respect of all the items listed in the table, and if so to indicate the appropriate procedure in each case.

Not all the national Government departments concerned adopted attitudes conducive to progress in the matter.

[1]) See *Ninth General Report*, No. 422.

Instructor training

507. A draft of the study which the High Authority is proposing to publish on current problems and past experience with regard to instructor training in the E.C.S.C. industries[1]) will be available shortly.

New Programme

508. On March 16, 1961, the High Authority decided to embark on a third stage in its activities concerning vocational training, and preparations for the introduction of the new programme were begun forthwith.

Background

509. The advance of mechanization and electrification in the mines and the introduction of new production processes and new automatic control devices in the iron and steel industry are causing the whole nature of many jobs to alter, and a number of entirely new ones to develop. The old-style miner is gradually being replaced by a worker with much more complicated duties to perform, and the skilled steel process worker is more and more becoming a kind of technician. Moreover, the efficient operation of increasingly complex production units, the extension of markets and the keenness of international competition are demanding higher and higher qualification on the part of the technical, sales and administrative executives.

It is necessary to technical and social progress that the rising generation of miners and steelworkers, technicians and supervisors, should receive more thorough training for their posts, and that appropriate follow-up and advanced-training facilities should be provided for all.

Should vocational training fail to keep pace with the rapid march of scientific and technical progress, the odds are

1) See *Ninth General Report*, No. 422.

that production would sooner or later be impeded by the lack of skill of the personnel.

Further, the competitive capacity of Community coal and the reconstruction of the coalmining industry hinge largely on the improvement of productivity, and hence of the standard of vocational training.

Finally, the provision of training in line with the interests and ambitions of the boys themselves — who are usually well aware of the need to acquire skills, and attracted more particularly by industries which do give up-to-date training — would afford the collieries one means of combating their present recruitment difficulties. These are, of course, due to a number of causes, including general less of popularity by mining as an occupation, current tightness in the labour market in some coalfields, and the fact that the manual and mental attainments demanded of apprentices are increasing in direct proportion to the technical character of the miner's duties.

Aims

510. The High Authority is required to act in line with the technical, economic and social trend which it sees or expects to be operative, and to do all it can to help deal with the problems resulting from that trend for the industries under its jurisdiction.

Its new programme is therefore designed to ensure that each man, whatever his particular position, materially contributes by his individual qualifications to the success of his enterprise and industry.

The High Authority's object is to support the measures now being taken in the different member countries to adapt the training of miners and steelworkers to the requirements of technical and social progress and provide systematic advanced training for technical, sales and administrative executives.

The national authorities responsible for training questions are engaged in defining job, selection and training criteria, and working out notably improved methods of instructions.

Objectives

511. The activities planned under the new programme may be subdivided as follows:

(a) detailed study of problems in connection with the training of miners, and in particular of points arising out of the mechanization and electrification of underground operations;

(b) precise establishment of the present trend of developments, as a means of helping those concerned in preparing training schemes, manuals, etc.;

(c) detailed study of problems in connection with the training of steel process workers, and in particular of points arising out of the introduction of new production processes and new automatic control devices;

(d) definition of new jobs coming into being as a result of technical progress;

(e) study of problems in connection with systematic advanced training of executive personnel in matters of organization (two separate studies for the coalmining and for the iron and steel respectively).

Implementation

512. The Government experts and the employers' and workers' representatives were given an outline of the new programme; both groups expressed satisfaction.

The Government experts assured the High Authority of their full-co-operation, promising to put their own experience and documentation at its disposal.

The employers' and workers' representatives have embarked on an examination of the trends which they con-

sider likely to affect future action by the producers' associations, the trade unions and the enterprises; they are also exploring the opportunities for co-operation at Community level, and are seeking to work out ways and means of promoting exchanges of experience, constructive action and the adoption of new methods.

Two working parties, one for the coalmining and the other for the iron and steel industry, are studying needs and possibilities with regard to advanced training for the higher grades: they are cataloguing the arrangements at present in force in the Community, and drafting practical proposals on points still calling for attention.

Section 3: Free Movement of Workers

513. Figures supplied by the employment authorities in the member countries show that a further 193 E.C.S.C. labour cards were issued between October 1, 1960, and September 30, 1961, in addition to the 1,342 issued prior to this period since the system was first instituted on September 1, 1957.[1])

The distribution of the new cards by countries of issue was as follows:

Germany (Fed. Rep.)	6
Belgium	67
France	3
Italy	2
Netherlands	115

Over the twelve months to September 30, 1961, the number of cardholders who had obtained jobs abroad, either through an employment exchange or direct, rose from 285 to 318.

150 offers of employment were made to cardholders by collieries; from the iron and steel industry no offers were made.

514. 1961 saw the final stages of the proceedings begun in 1959 for the adoption of a second schedule of occupations entitling workers to an E.C.S.C. labour card.[2])

[1]) For details of the preceding period, see *Ninth General Report*, Nos. 428 and 429.

[2]) See *Ninth General Report*, Nos. 430 and 431.

The Intergovernmental Commission which met in Luxembourg in November 1960 had named the occupations it intended to propose to the Governments for inclusion in the second schedule, but had not defined them in detail. Definitions were therefore drawn up by the High Authority's departments, and finalized by an editorial committee meeting from February 6 to 10, 1961. The steering committee of heads of national delegations which the Intergovernmental Commission had appointed then, on March 28, approved the definitions as passed by the editiorial committee, thereby bringing its own work to an end.

At the conclusion of this stage, the draft schedule included 118 occupations, of which 87 belonged to the iron and steel industry, 18 to the extractive industries (coal and iron ore) and 13 to both sectors (ore preparation and coking).

515. The national delegations gave a wide interpretation to the criteria as to skills which had been observed in the preparation of the first schedule. While occupations not peculiar to the coalmining, iron-ore and iron and steel industries were included only if exercised in a special manner in those industries, practically all the skilled and specialized occupations specifically followed there figure in either the first or the second schedule. The only occupations excluded are unskilled jobs requiring no training or initiation.

516. On April 26, the High Authority submitted the draft of the second schedule to the Council of Ministers. On May 16 the Council incorporated the text as it stood into a Decision supplementing the earlier Decision of December 8, 1954, concerning the implementation of Article 69 of the Treaty.[1])

As soon as the Secretary-General of the Council has been officially notified by all the member States that it is applicable in accordance with their own laws, the Decision, which has already been recorded in the minutes of the Council's proceedings, will be published in the *Journal Officiel des Communautés Européennes;* it will come into force twenty days from the date of publication.

[1]) See *Ninth General Report*, No. 427..

From then on, Community nationals employed in any of the 174 occupations listed in the first and second schedules, and fulfilling certain minimum requirements as to length of time employed and wages received, will be entitled to E.C.S.C. labour cards, and hence to take up offers of employment, through employment offices or direct from collieries or iron and steel enterprises, in other Community countries in the scheduled occupations for which their labour cards are made out; any regulations in force in the receiving countries concerning the recruitment and employment of foreign labour will not apply to them.

517. E.E.C. Regulation No. 115, instituting the first measures for the establishment of freedom of movement for workers within the European Economic Community, came into force on September 1, 1961.

Over and above its general importance as opening the way to freedom of employment for nationals of the Community, it has a direct bearing on the position of miners and steelworkers: Article 42 lays down, firstly, that the Regulation is not to be taken as derogating from the provisions of the E.C.S.C. Treaty or from measures thereunder concerning workers of "recognized qualifications," and secondly, that it is to apply to such workers where their legal position is not covered by the Treaty or measures thereunder.

In addition to their rights under Article 69 of the Treaty and the Decision of December 8, 1954, E.C.S.C. cardholders now have the benefit of various provisions in Regulation No. 115. These concern mainly the admission and employment of workers' families and the possibility for the men themselves, after working for a specified period in the country of reception, to take jobs in industries other than coal and steel.

Section 4: Readaptation of Workers

518. The High Authority continued its activities under both Section 23 of the Convention containing the Transitional Provisions and Article 56,2 of the Treaty.

Its work under Section 23 consisted in seeing to the implementation of the Decisions of February 9, 1960, referred to in the Ninth General Report.

Its operations under Article 56,2 assumed fairly substantial proportions, principally owing to the continuing slack demand for coal, which obliged a number of collieries to close down. It should be noted, however, that the High Authority can already be seen to have been quite right in urging, from the very start of the amendment proceedings, that Article 56 should cover iron and steel as well as coal: certain iron-ore enterprises too have lately been having to lay off workers in consequence of radical changes in the sales position. Accordingly, at the request of the French Government, the High Authority decided to take action under Article 56 in favour of the workers at various iron-ore mines faced with production cutbacks or closure as a result of changes in the supply arrangements of the Community iron and steel works (which are going over more and more to imported high-grade ore).

519. Between the entry into force of Article 56,2 and January 31, 1962, the High Authority set aside a total of 3,815,000 dollar units of account, for the readaptation of 14,430 workers.

The following table gives the number of intended beneficiaries and amount of the funds made available, broken down by countries and sectors.

TABLE 93

High Authority Readaptation Assistance under Article 56,2

Country	Coalmining industry		Iron-ore mines		Totals per country	
	No. of workers	Amount ($'000)	No. of workers	Amount ($'000)	No. of workers	Amount ($'000)
Germany (Fed. Rep.)	2,700	515			2,700	515
Belgium	8,860	1,893			8,860	1,893
France	2,280	1,175	590	232	2,870	1,407
Community	13,840	3,583	590	232	14,430	3,815

At January 31, 1962, the total amount made available, at the request of the Governments, for readaptation under Section 23[1]) and Article 56 came to 46,333,000 units of account.[2])

520., At the end of 1961, the German Federal Government and the High Authority agreed on the practical details of the readaptation assistance to be payable under Article 56 to workers at German collieries embarking on closure operations before April 30, 1963.[3])

The agreement, which was greeted with approval by the employers' workers' organizations, includes the following provisions:

(a) discharged mineworkers either *(i)* finding themselves unemployed or *(ii)* undergoing occupational retraining will be entitled to a tide-over allowance equivalent to 50% of their previous gross wage, and to additional payments according to number of dependants;

(b) discharged mineworkers taking up employment in an industry other than the coalmining industry will be entitled to a differential allowance equivalent to the difference between 60% of their previous gross wage and their new net wage, and to additional payments according to number of dependants;

(c) mineworkers leaving by arrangement with the colliery and either *(i)* eligible for a disability pension for 50% disablement or over from the Bergbau-Berufsgenossenschaft, or *(ii)* aged over 50 and eligible for a normal miner's pension *(Bergmannsrente)* or a pension from the miners' friendly society *(Knappschaftsrente)*. will be entitled to a lump down payment of DM3,000.

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1) See *Ninth General Report*, No. 433.

2) Calculated allowing for the revaluation of the Deutsche Mark.

3) In Germany, the arrangements described in the Eighth General Report (No. 142) are to continue for workers in the coalmining industry receiving or due to receive readaptation assistance under Section 23, and are also to apply in the case of workers in the other two industries in respect of whom Decisions are taken under Article 56. The main provisions of the High Authority's agreements with the other Governments are indicated in previous General Reports: these are to remain in force for the purposes of readaptation under Article 56.

The High Authority has agreed to assume part of the cost of occupational retraining.

Workers who find fresh employment within the coalmining industry, but suffer a loss of earnings owing to being placed in a lower wage group or paid at day rates instead of piece rates, are to receive a differential allowance making their pay up to 65%, instead of 60% of their previous gross wage, and additional payments according to number of dependants.

Where a colliery pays a special allowance to workers who have left by arrangement with it, the Government and the High Authority may refund to it 50% of the amount concerned for a period not to exceed twelve months from the twelfth month following the discharge.

521. At its meeting on January 31, 1962, the High Authority decided in principle to contribute funds towards the payment of assistance under a readaptation scheme just worked out by the French Government.

The assistance is to be granted in the coalfields of Aquitaine (where social disturbances connected with the reorganization programme occurred at Decazeville in December 1961), Auvergne, the Cévennes, Dauphiné and Loire; the details are to be settled in accordance with the special needs of these areas.

Germany

522. In 1961, six collieries for which the Federal Government had requested readaptation assistance went out of production, and several partial closures were carried out.

The number of workers affected was estimated at some 7,000 in all. In none of the coalfields concerned (the Ruhr, Lower Saxony, the Saar and Aachen) was there any appreciable difficulty in finding alternative employment, the nation-wide labour shortage and the rising manpower requirements of the coalmining industry itself making for quick reabsorption.

Belgium

523. Eleven pits closed in 1961, and about 6,000 workers were laid off.

The process of finding them new jobs was aided by the fact that many collieries are now needing more workers, after some years of reduced recruitment. Also, a number of the men dismissed obtained new employment by their own efforts; it appears, however, that some of them are now less well off than before.

The High Authority is examining with the Belgian Government the possibility of taking special action, as part of the readaptation operations, to facilitate the re-employment of those still out of work, including in particular elderly or physically-handicapped surface workers.

The number of discharged mineworkers registered with the employment exchanges as in search of work, which at the end of December 1960 had totalled 2,700, stood at the end of September 1961 at 1,400. It must, however, be borne in mind that further closures are to take place, resulting in more dismissals.

France

524. Readaptation assistance was given in connection with the completion of certain closures in the Centre/Midi coalfields, and with the closure of a coking plant and four small non-nationalized mines. The total number of workers affected in 1961 was about 500.

The High Authority agreed to help with regard to various closures and production cutbacks in Lorraine and Auvergne designed to bring coal production in line with the Government's targets for 1965. In 1961, some 600 workers from the Lorraine coalfield were transferred to the Nord/Pas-de-Calais. In Auvergne, where approximately 1,400 men are expected to become redundant in the next few years as a result of the closures planned, the Government and the Charbonnages de France are seeking to encourage the installation of new enterprises able to take on this surplus labour.

Finally, readaptation assistance was furnished for some 600 workers at two iron-ore mines in Western France and one in the Pyrenées. The discharges are to be phased over several months, but in areas such as these, where there is little industrial activity, re-employment is likely to be no easy matter.

Section 5: Industrial Redevelopment

525. The Intergovernmental Conference[1]) called by the High Authority from September 27 to October 1, 1960, to discuss the industrial redevelopment of areas affected by pit closures carried out a European-level study of a kind never before attempted. The High Authority, considering the findings to be of the greatest value, decided, in accordance with its information duties under the Treaty, to disseminate them on the widest possible scale.

526. The first two of the four volumes containing the Conference's papers have already appeared.[2]) Round-table meetings have been organized for leading trade-union officials, and the High Authority also had discussions with the Consultative Committee's subcommittee on labour problems on February 9, 1961, and with the full Committee on February 21.

527. The various meetings held in 1961 were, however, more than mere occasions for exchanging views and experiences: they were part of the process of framing proposals for Community co-operation on coalfield redevelopment. The High Authority had undertaken to submit such proposals to the Council of Ministers, and before producing its final draft was anxious to obtain full details of the employers' and workers' views on the subject.

A Memorandum, "Guiding Principles for Dealing with Problems in Connection with the Industrial Redevelopment

[1]) See *Ninth General Report*, Nos. 444-448.

[2]) Published in the series *Economie et Politique Régionales* - La Conversion Industrielle en Europe. Vol. I - Les Politiques Nationales de Développement Régional et de Conversion; Vol. II - Voies et Moyens de la Conversion Industrielle (Luxembourg, 1961).

of Areas Affected by Pit Closures," was duly submitted to the 77th meeting of the Council, and was discussed by the Council a few weeks later on December 5, 1961.

528. In the Memorandum the High Authority examines the points emerging from the Redevelopment Conference,[1]) and outlines the practical action it considers it should take to deal with applications for redevelopment assistance, in close co-operation with the other European Institutions and the Governments. (The E.E.C. Commission is responsible for regional policy, while the European Investment Bank holds substantial funds for development purposes).

The High Authority feels that co-operation should be on a more comprehensive basis than that which the Joint Working Party on Coalfield Redevelopment is seeking to establish between the Community Executives and the European Investment Bank:[2]) in its view, the Governments too should take part.

It suggests calling in outside experts, to be nominated by the Governments, to facilitate the study and preparation of redevelopment operations, and to improve and reorganize the various means of ascertaining which enterprises are likely to be interested in setting up in a particular area and informing them as to the concessions and facilities offered there.

The High Authority's proposals leave the selection of the actual means and procedural arrangements entirely to the discretion of the Governments, the main responsibility and initiative to lie with them as regards both the forwarding of applications and regional policy.

In sum, the proposals are a first result of the co-operation between the Community Executives and the Bank, and a concrete demonstration of their determination to work constructively together in the field of redevelopment.

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[1]) See *Ninth General Report*, No. 447.

[2]) The Joint Working Party set up by the High Authority, the E.E.C. Commission and the European Investment Bank is required, *inter alia*, to examine all redevelopment schemes for which Governments seek financial aid from the European Institutions.

529. The High Authority decided to contribute funds towards a number of schemes to be launched in Belgium and France. It also decided to assist the carrying-out of several new area-development studies.

In the case of Belgium, the High Authority took part in the work of the Steering Committee on Coalfield Redevelopment Problems. The Committee, which consists of officials from the various Ministries concerned and of representatives of the High Authority, with a Belgian Government representative in the chair, is a general co-ordinating body instituted to advise on and promote action for the purpose of Belgian coalfields redevelopment, to work out appropriate Community-level means for furthering this process, and to maintain contact in order that the policy it recommends may be promptly and effectively implemented. In particular, the Committee has drawn up draft articles of association for industrial development corporations, and a draft rent-purchase contract for the acquisition of factory premises on exceptionally attractive terms.

ACTION TAKEN

530. The High Authority and the Governments are agreed as to the precise significance attaching to the word "capable" in Article 56,2 of the Treaty ("programmes ... for the creation of new and economically sound activities ... capable of assuring productive re-employment ...").

They recognize that it is essential to avoid any timelag between the closure of a colliery and the creation of new employment opportunities.

Hence, rather than plan and undertake redevelopment operations only after discharges have actually taken place, it is advisable to view each plan and each operation beforehand in the light of the employment problems which will arise, and of the expected course of the reorganization drive: these aspects are more determinant than the degree of unemployment in fact prevailing at any particular moment. To conduct redevelopment operations successfully, it is often necessary to have plenty of time in which to do so.

Intending investors have to bear two points in mind: they must seek locations already offering the structural conditions required for their particular operations, and they must see that their enterprises are not rendered uneconomic or potentially uneconomic by the composition of the personnel employed. Were some time to elapse between the closure of a colliery and the provision of the necessary structural conditions, incoming enterprises would not be in a position to open recruitment until the most productive elements had either found fresh employment on the spot or left the area: they would therefore have to take on an unduly high proportion of elderly or physically-handicapped miners, and to get them to do so it would be necessary to afford them more substantial inducements in other respects.

Belgium

Liège area

531. An iron and steel enterprise is planning to install a third galvanizing line, the operation of which will result in the creation of some 470 new jobs.

The project, after being examined by the Steering Committee, was submitted to the Government, which approved it and applied for financial assistance from the High Authority. The High Authority decided to grant to the enterprise concerned a credit of Hfl.7 million (out of the latest loan contracted in the Netherlands) at 4 7/8% for a term of twenty years, the enterprise undertaking to reserve a number of the new jobs for discharged mineworkers.

Programme of the Liège Société Provinciale d'Industrialisation

532. The Société Provinciale d'Industrialisation for the Liège area was set up on February 17, 1961, as a joint public/private intercommunal corporation, under the Act of July 18, 1959, concerning economic expansion and regional development.

Its first projects are calculated to result in the creation of approximately 4,000 new jobs. It is currently planning

(a) to make available for rent-purchase by three enterprises factory premises to be acquired or built by it in the communes of Herve and Battice;

(b) to prepare and equip an industrial belt on the Hauts-Sarts plateau, where three large enterprises have already decided to set up;

(c) to carry out improvements to disused colliery sites at Wandre and Herstal, by demolishing redundant buildings and levelling dirt-heaps; the dirt is to be used to fill up to the level of the Meuse dykes certain tracts of land at Chertal on which an iron and steel enterprise is planning to extend its works, while at the same time sites become vacant at Wandre and Herstal which might attract enterprising investors.

The programme, after study by the Steering Committee, was approved by the Government, which then requested financial assistance from the High Authority. The Joint Working Party on Coalfield Redevelopment expressed itself in favour of the High Authority's participation.

The High Authority took a decision in principle to grant under Article 56,2, a of the Treaty a loan of Bfr.115 million to help finance the Société's programme. The Council of Ministers at its meeting on October 26 and December 5, 1961, unanimously gave the consent which is required whenever the High Authority proposes to furnish assistance to an enterprise not coming within the terms of the Treaty.

The loan is granted at 4 7/8% interest for a term of twenty years, with an initial redemption-free period of four years. It is guaranteed by the Belgian Government, which is also arranging for interest reductions bringing the rate down, in certain cases, as low as 1%.

The Société Provinciale is to submit to the High Authority all applications by enterprises wishing to set up on sites prepared with E.C.S.C. participation. Enterprises receiving assistance from the Société must recruit some of their personnel from among discharged mineworkers.

The High Authority intends to follow closely the progress of operations under the Liège scheme. The scheme is, in fact, an exceptionally interesting one, in view not only of its scale — it is designed to dispose altogether of certain problems in the area — but also of the wide range of redevelopment techniques to be tried out (building of factory premises, preparation of industrial belts, utilization of disused colliery sites).

Borinage area

533. The High Authority requested the Council's consent to its plan to grant a loan to a company proposing to build an aluminium mill at Ghlin-Baudour. The Joint Working Party had reported on November 13, 1961, that it found no grounds for refusing the application for assistance in respect of this project.

The Council at its meeting on January 23, 1962, unanimously gave its consent, subject to confirmation by the E.E.C. Commission that the scheme would be carried out without infringement of Article 92 ff. of the E.E.C. Treaty.

The loan is to amount to a maximum of Bfr.125 million. The Belgian Government is prepared to give its guarantee, and also to grant the maximum interest reduction (4%) allowed under the Act of July 18, 1959: this will bring the rate actually payable by the investor to 1%.

The mill project forms part of the overall programme for the redevelopment of the Centre and Borinage coalfields, which the Government has drawn up on the basis of studies conducted with High Authority participation. The plant is to come into operation in the second half of 1963, and will employ between 500 and 700 men.

France

Champagnac

534. The High Authority's attention was drawn in 1956 to the unemployment which would result from the intended closure of the small mine at Champagnac, in Central France.

The position there was therefore specially examined in the study on Auvergne and Aquitaine in the series of Regional Employment Studies.

In July 1959, the High Authority agreed to institute readaptation arrangements, as provided for in Section 23 of the Convention containing the Transitional Provisions, on behalf of 220 workers who had lost their jobs in consequence of the closure at Champagnac. Then, with the consent of the Council, it decided in February 1960 to grant the loan applied for, under Section 23,3, to help finance the installation of a new enterprise. The Working Party expressed itself in favour of the High Authority's participation.

The loan, amounting to 365,000N.F., was granted at 3 3/4% interest, repayable in 21 identical annual instalments, from July 1, 1962, to July 1, 1982, inclusive. It is secured by collateral pledged to the High Authority and the Charbonnages de France (which participated with a loan of 740,000 N.F.).

As the object of the operation is to provide alternative employment for former mineworkers who have not yet succeeded in finding any for themselves, the enterprise in question has undertaken to sign on by December 31, 1962, not less than 80 such men, and to retain them for at least two years, except in the event of serious misconduct.

Béthune

535. The French Government requested the High Authority under Article 56 to guarantee one-half of the loan of 6,000,000 N.F. granted by the Syndicat Intercommunal pour le Développement de la Région de Béthune to an enterprise to facilitate its transfer to Béthune. The Working Party pronounced in favour of the proposal, and on December 6, 1961, the High Authority took a decision in principle to comply. As the enterprise concerned does not come within the terms of the Treaty, the Council's consent was asked, and was forthcoming on January 23, 1962.

STUDIES

Studies on new products

536. Experience to date and the findings of studies conducted in various areas undergoing redevelopment indicate that active steps need to be taken to stimulate new departures in industry. Research should be undertaken with a view to encouraging the more extensive use of Treaty products, by facilitating the selection and development of new production lines. Such research is most important from the High Authority's point of view, and is at the same time a contribution — in some cases a potentially vital contribution — to the redevelopment and improvement of the areas affected by pit closures.

The High Authority has taken a decision in principle to have studies carried out on new products; it intends to call in outside experts to effects these, and to ask the firms, authorities and other bodies concerned to co-operate.

Belgium

537. The studies undertaken at the Belgian Government's request, under Article 46,4, in the Centre, Charleroi and Borinage coalfields[1]) have now been completed; they constitute a comprehensive survey of the position and problems of these areas.

The Steering Committee in charge of the studies consisted of representatives of the Government, of E.C.S.C. and of the coalfield redevelopment corporation, Socorec.[2]) Expenses were shared between Socorec and the High Authority; the studies were conducted by various research centres, with the Société d'Économie et de Mathématiques Appliquées, of Paris, responsible for the co-ordination of proceedings. A number of studies are to be published, either by the

[1]) See Ninth General Report, No. 443

[2]) Société Coopérative d'Étude et d'Assistance pour la Reconversion Économique des Régions Touchées par les Fermetures de Charbonnages.

research centres or by the High Authority, and a combined summary will also be published in the High Authority's series *Économie et Politique Régionales*.

The Programme just adopted by the Belgian Government for the Centre and Borinage is based on the main practical findings.

France

538. In view of the employment difficulties which were developing in the collieries of Auvergne and Aquitaine, the High Authority in 1957 had a regional employment study carried out on these two provinces.

In 1961, the High Authority decided to commission a study for the purpose of assisting the enterprise setting up at Champagnac to concentrate on products likely to find a ready market. The study, which is to be completed in 1962, will deal largely with new products made of stainless steel. The findings, which will be made available to all those concerned, will also serve as a basis for the more general studies on new products just referred to.

The French Government also requested the High Authority's assistance under Article 46,4 in respect of a study on the area of Montceau-les-Mines.

The object of the study is to prepare the way for arrangements to cope with the difficulties which are expected to arise in some five years's time in the Blanzy coalfield as a result, firstly, of the concentration and scaling-down of production, secondly, of higher productivity per miner, and thirdly, of a substantial increase in population.

The area is at present fully active, and the problems are not of immediate urgency, only foreseeable in the medium term. However, the Houillères de Blanzy, the Chamber of Commerce of Chalon-sur-Saône and the administrative authorities of the Department of Saône-et-Loire are already seeking to attract new industries able to absorb the expected manpower surplus. Steps to find successor enterprises and

make preparations for industrial development are thus being taken in good time, which will certainly make them so much the more effective.

Italy

539. The High Authority helped in 1956 and 1957 with the readaptation of some 3,000 workers of the Società Magona d'Italia, Piombino. Employment problems persist, however, in this area. Moreover, since the iron and steel industry is the dominant element in the regional economy, some diversification of employment opportunities seems desirable.

At the request of the Italian Government, the High Authority accordingly decided to contribute, under Article 46,4 to the financing of a detailed study on the Piombino area. The study is being conducted by the Società per la Matematica e l'Economia Applicate, of Milan, and will be completed in 1962.

Part II

LIVING AND WORKING CONDITIONS

Section 1: Wages, Social Security and Terms of Employment

HARMONIZATION

540. The High Authority has stated on a number of occasions what its view is as to the task imposed on it by the Treaty of improving living and working conditions.

Since, in the words of the Treaty, the aim must be "to harmonize those conditions in an upward direction," the process of improvement must be carried on in all the countries of the Community, and the position of those workers who are the least advantageously situated should be improved the fastest.

The High Authority also considers that harmonization should not be confined to wages, social security and working hours, but should also extend to all economic and social factors calculated to help ensure the proper development of the worker's personnality — housing, occupational training, betterment of the promotion prospects of the working man, employer-worker relations both inside and outside the enterprise, and so on.

541. Viewed both from the angle of the situation in each individual country and from the Community angle at large, the general improvement and the levelling-up of living and working conditions are two permanent and indissociable elements in the economic and social dynamic.

However, the High Authority has always felt that actual *equalization* was not a practical proposition. Thus,

(a) living and working conditions are governed by economic factors (situation of the enterprise within the Common Market, state of the labour market, etc.) and sociological factors (*e. g.* the relative size and influence of the employers' and workers' associations concerned) which operate quite differently in different countries, and even in different areas or enterprises within a single country;

(b) since the view as to what constitutes the "social optimum" at any particular juncture, varies from country to country, pressures do not operate on the same facets of living and working conditions;

(c) the situation could not crystallize once and for all at a given level and thereafter develop in parallel for all countries from that level onwards.

Since equalization can only be relative and gradual, it is considered that harmonization is the more realistic aim.

542. That there are such disparities between one part and another of an individual country is an indication of the difficulty of achieving harmonization.

It is scarcely less difficult to measure such progress as has been made in harmonization. It is, of course, possible to measure the harmonization accomplished in respect of conditions which are themselves measurable, such as working hours and wages. But it becomes practically impossible when we turn to the other elements going to make up the High Authority's broad conception of living and working conditions. Thus taking social security as a whole, we can hardly even determine precisely whether since the Treaty came into force the positions in the different countries have drawn closer together or the reverse. And finally, even if it were contrived to measure harmonization in each separate aspect of living and working conditions, how could these parts be added together to indicate the whole — which is what really matters? The weight attached in particular countries to particular aspects differs too widely.

543. To return to the subject of wages, it should be emphasized that the state of affairs as appearing at a given moment is of less significance than is commonly supposed. Evolution and harmonization do not progress in jerks: they generally move steadily and continuously.

As regards social security, the difficulty of measuring progress stems from several causes. Firstly, in none of the Community countries is there a fully uniform system with a single administration: a number of partly independent bodies exist side by side to shoulder different types of risk, and the benefit they allow vary accordingly. Country-by-country comparisons are possible only between corresponding branches of social security — health insurance, old-age pensions and so on — and all comparison is thus, inevitably, fragmentary.

Again, social security is almost exclusively a matter of legislation, and so comes under the jurisdiction of the Governments. It sometimes happens that, to improve the national social-security legislation, a Government will take a leaf out of another country's book. But the action which it takes is mainly dictated by economic and political circumstances often originating in the remote past. Parallels and assimilations — increasing State participation, substitution of a redistribution system for the capitalization system — are due purely to the fact that economic and social conditions have made it necessary to adopt the same or much the same arrangements.

The direct incidence of economic integration on the social-security trend is much less marked than it is on prices, wages and terms of employment.

Wages

Trend in direct hourly wages and wage costs[1])

544. The movement of direct hourly wages and total wage costs between 1953 and 1961 varied considerably from country to country and from industry to industry. However, certain

[1]) See *Statistical Annex*, Tables Nos. 53, 54 and 55.

trends do emerge from a comparison of direct hourly wages in the different countries.

The increases granted in Germany, France and the Netherlands were generally larger than those in Belgium, Italy and Luxembourg. This was particularly apparent in the case of the coalmining industry and of the iron-ore mines.

To some extent, the same applies to the movement of wage costs, though here the increases in Germany, and in the Italian coalmining industry, were more or less average.

Comparison by industries shows in general a faster increase in the iron and steel industry and the iron-ore mines than in the coalmining industry, although in the Netherlands the difference as regards direct wages between the coalmining and the iron and steel industry was slight, as was that in Germany with regard to total costs. In Italy, wage costs rose faster in the coalmining industry than in the other two sectors.

Dispersion of wage costs

545. The movement of wage costs expressed in the national currencies can be followed but cannot be compared: they have therefore been converted into Belgian francs, at the official rate of exchange, for the purpose of studying their levels and dispersion.

Graphs Nos. 14 (coalmining industry), 15 (iron and steel industry) and 16 (iron-ore mines) show that hourly wage costs (comparabilized by conversion to Belgian francs) rose steeply in all the Community countries during the period 1953-60.

In the coalmining industry a certain lessening in the disparities is observable from 1957 onwards. This is largely attributable to the devaluations of the French franc, which caused French costs as expressed in Belgian francs to fall, although in French francs they rose.

By 1960, only one country, Italy, had a wage-cost level well below the rest.

Not all the necessary data on wage costs are yet available for the financial year 1961. However, the direct hourly wages for the first nine months are known, so that it is possible to assess the probable movement between 1960 and 1961.

Comparing the average for the first nine months of 1961 with the figures for 1960, we find that direct wages as expressed in Belgian francs rose fastest in Germany and the Netherlands, by 13% and 12% respectively, as against 4% in France, 5% in Italy and 2% in Belgium. The considerable increase for the first two countries is due partly to the currency revaluation carried out there in 1961: this has the opposite effect to the French devaluations, sending up the Belgian-franc figure farther than the wage in marks or guilders.

On the basis of the movement of direct wages, it may be calculated that direct hourly wage costs in Germany topped those in France, hitherto the highest of all. In the Netherlands, the level was the same as in France. The difference between France and Belgium increased slightly; that between France and Italy remained more or less unchanged. Overall, the dispersion of wage costs became a trifle wider than before.

In the iron and steel industry, the dispersion narrowed slightly from 1953 to 1955, but thereafter remained pretty well the same. Since French wage costs were about average, the devaluations made little difference. Luxembourg is the extreme case, with wage costs 15-20% higher than those in Belgium, which comes second.

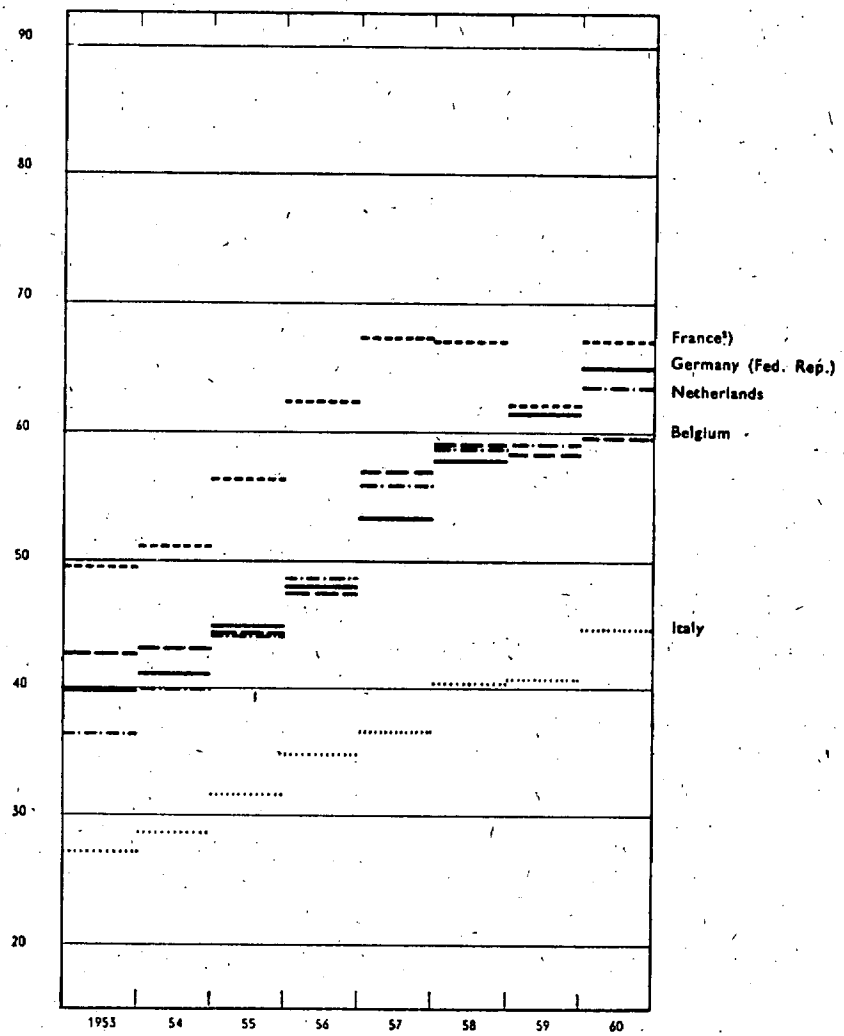
From 1960 to 1961 (1961 average March/June/September), direct wages in Belgian francs increased by 10% in Germany and 13% in the Netherlands, as compared with 8% in France, 6% in Italy, 3% in Luxembourg and 2% in Belgium: hence wage costs in all the countries except Belgium may be taken to have moved closer to those in Luxembourg. The dispersion decreased slightly.

In the iron-ore mines, the dispersion also contracted somewhat, mainly as a result of the French devaluations, from 1956 onwards; nevertheless it remained considerable, with relatively very high costs in Luxembourg and France, and relatively low ones in Germany and Italy.

GRAPH No. 14

Comparative Trend in Total Hourly Wage Costs in the Coalmining Industry

All workers
In Belgian francs[1])



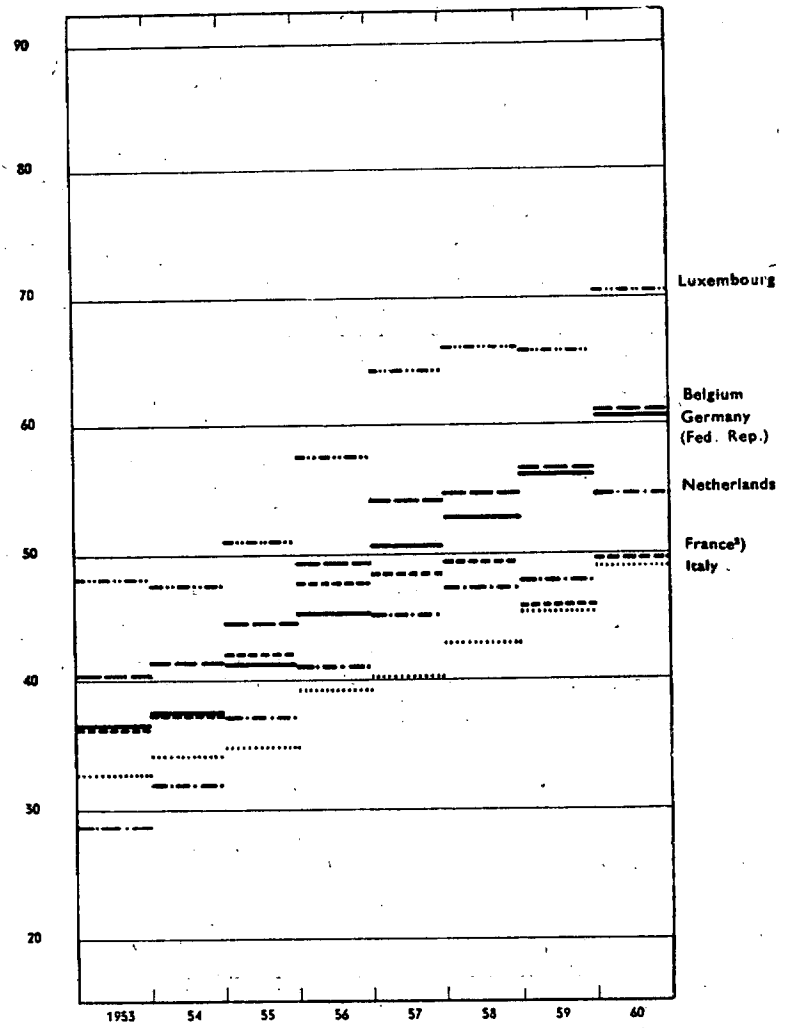
[1]) For details of method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

[2]) The reduction in 1959 in the French wage costs as expressed in Belgian francs is due to the devaluation of the French currency: expressed in French francs wage costs increased.

GRAPH No. 15

Comparative Trend in Total Hourly Wage Costs in the Iron and Steel Industry

In Belgian francs[1])



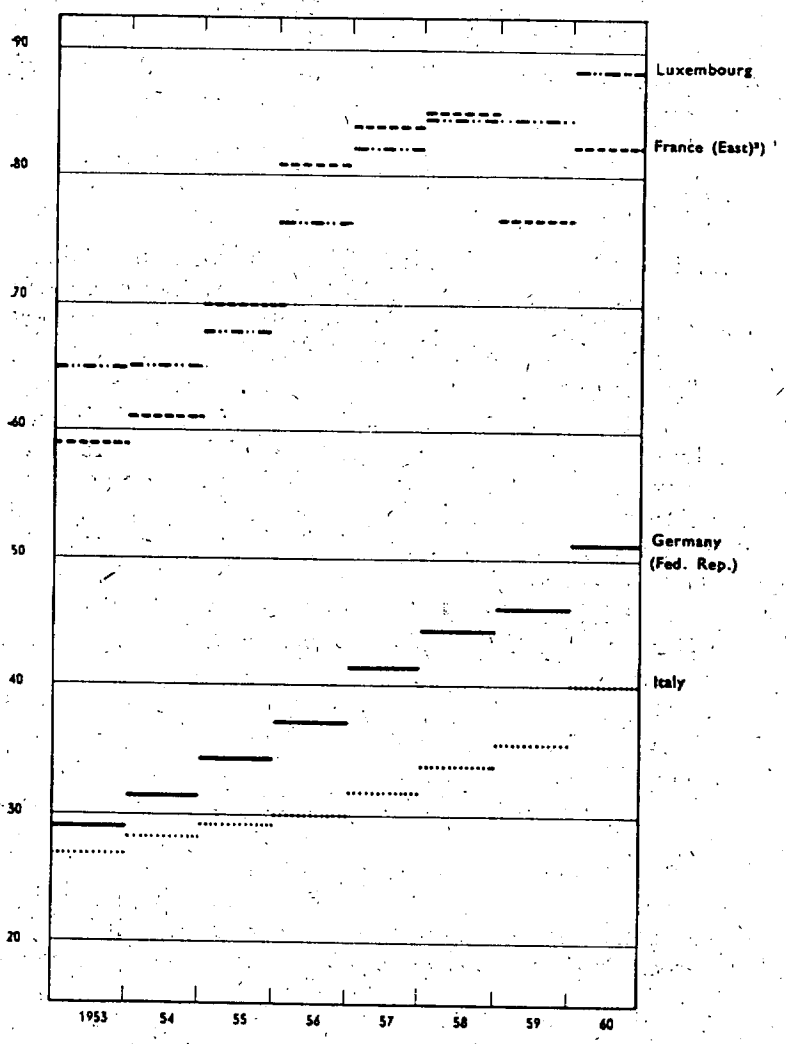
[1]) For details of the method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

[2]) The reduction in 1959 in the French wage costs as expressed in Belgian francs is due to the devaluation of the French currency: expressed in French francs wage costs increased.

GRAPH No. 16

Comparative Trend in Total Hourly Wage Costs in the Iron-Ore Mines

All workers
In Belgian francs[1])



[1]) For details of the method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

[2]) The reduction in 1959 in the French wage costs as expressed in Belgian francs is due to the devaluation of the French currency: expressed in French francs wage costs increased.

From 1960 to 1961 (1961 average February/May/August) direct wages in Belgian francs rose by 13% in Germany (partly owing to the revaluation), as compared with 6% in France, 3% in Italy and 2% in Luxembourg. It seems likely that French and, still more, German wage costs have drawn closer to the Luxembourg level; the difference between Italy and Luxembourg, on the other hand, remains practically the same. The dispersion has decreased only very slightly.

Real incomes

546. No estimate can be made for the first quarter of 1961. The necessary data are available for direct wages and the cost of living,[1]) but it is not possible to assess the incidence of changes in working hours. The only intercomparable data are for the years 1954-60.

Moreover, for the purpose of comparing yearly income levels between country and country straight conversion at the official rates of exchange is not enough. Incomes have therefore been converted into common units by special conversion rates allowing for disparities in consumer prices in the different countries.[2])

It should be noted that the French devaluations and the German and Netherlands revaluation do not affect real incomes.

Graphs Nos. 17 (coalmining industry), 18 (iron and steel industry) and 19 (iron-ore mines) show that, generally speaking, incomes increased between 1954 and 1957, remained unchanged or decreased from 1957 to 1959, and increased once more in 1960.

In the German, Belgian and Italian coalmining industries incomes dropped sharply in 1958 and 1959, short-time working having been introduced owing to sales difficulties. The social repercussions were, however, cushioned by unem-

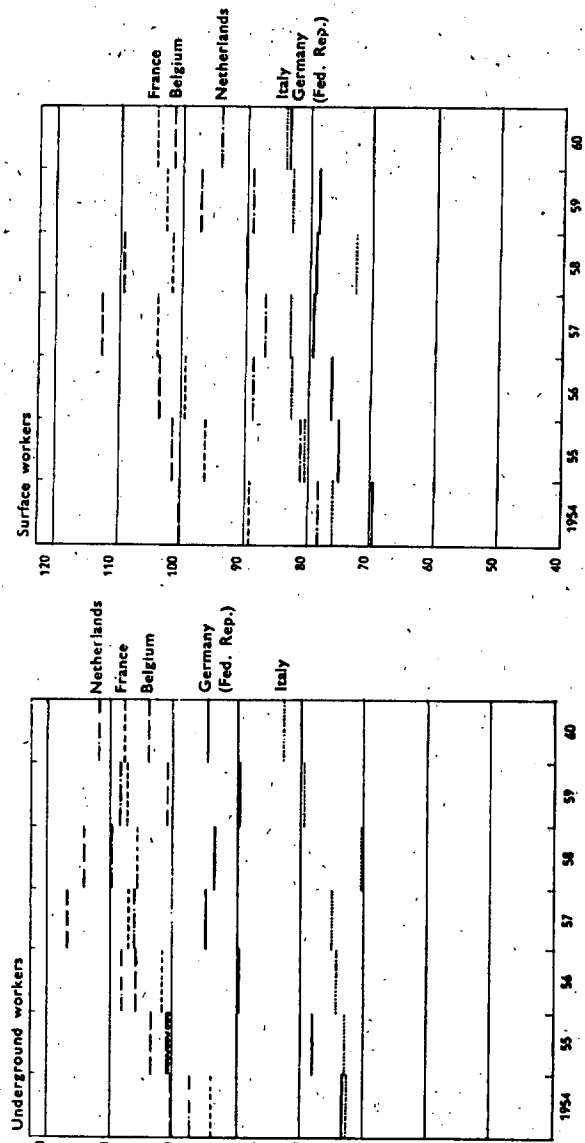
1) See *Statistical Annex*, Table No. 52.

2) For details of method of conversion, see series *Statistiques Sociales*, 1960, No. 2.

GRAPH No. 17

Comparative Levels of Real Incomes Coalmining Industry

Workers on the books, married with two children, living in mine-owned houses
Country with highest real-income level in 1954 = 100[1])

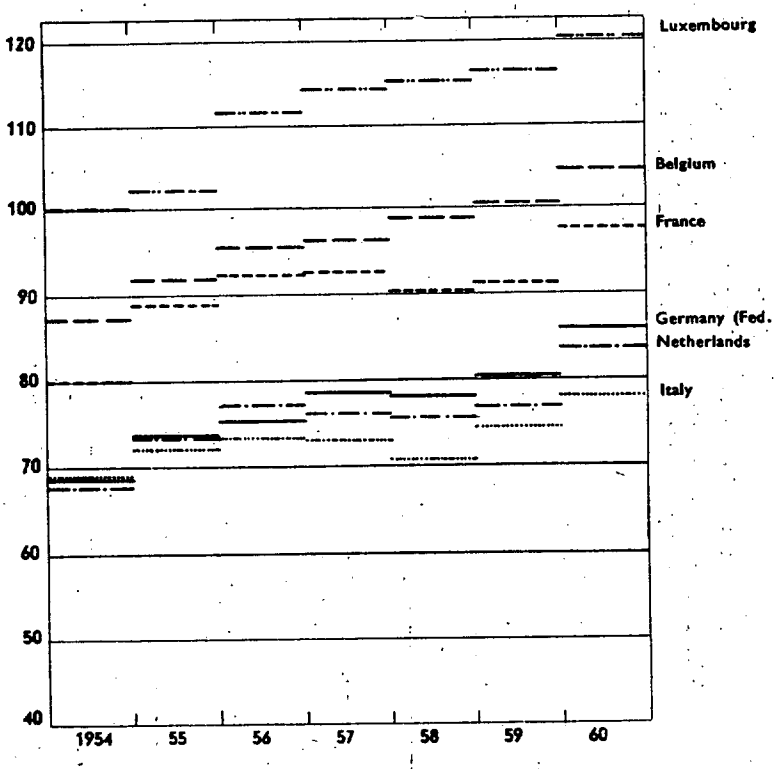


[1]) For details of method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

GRAPH No. 18

Comparative Levels of Real Incomes
Iron and Steel Industry

Workers on the books,
married with two children, living in company-owned houses
(Country with highest real-income level in 1954 = 100[1])



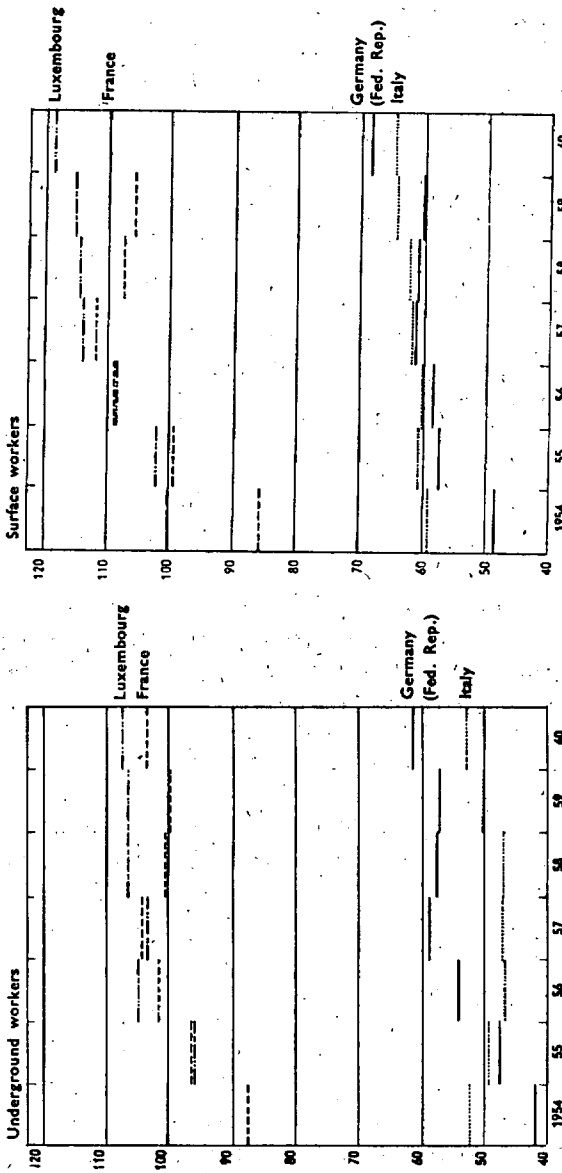
[1]) For details of method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

GRAPH No. 19

Comparative Levels of Real Incomes — Iron-Ore Mines

Workers on the books, married with two children, not living in company-owned houses

Country with highest real-income level in 1954 = 100[1])



[1]) For details of method of computation, see *Statistique des Salaires 1960; Charges Salariales et Revenus Réels 1954-1960; Statistiques Sociales.*

ployment relief and, in the case of Belgium, by the special "E.C.S.C. allowance,"[1]) which could not be taken into account in Graph No. 17.

Both for underground and for surface workers, the dispersion decreased during the period 1954-60.

In the iron and steel industry the dispersion scarcely varied at all during these years: after a minor increase between 1954 and 1958, it decreased again by the same amount, and was in 1960 exactly what it had been in 1954.

The dispersion in the iron-ore mines diminished very slightly in the course of the seven years, but remained considerable nevertheless, the difference between the highest incomes (Luxembourg) and the lowest (Italy) being still something like 50%.

Social security

Health insurance

547. The basic insurance systems have undergone no change.

Under the general system, which includes steelworkers, three countries (Belgium, France and Luxembourg) work on the principle of the percentage refund of medical expenses, two (Germany and the Netherlands) on that of free attention, and one (Italy) on both combined.

Various questions in connection with the improvement of insurance coverage and the meeting of rising medical costs have been the subject of protracted, and on occasion heated, political debate in all the member countries.

In Italy, insurance benefits for the various categories of recipients were increased and standardized in 1959 by the *piccola riforma* of the national health-insurance organization, I.N.A.M., which brought the system closer to those in force in the other Community countries.

In France, a Decree was issued on May 12, 1960, provising for a number of arrangements designed mainly to maintain the existing tariffs for the refund of medical charges

[1]) See *Ninth General Report,* Nos. 414 and 415.

and to allow the insurance offices greater financial responsibility.

Comprehensive reforms are in progress in Germany and Belgium, but have not yet been completed.

In the Netherlands. the system has been maintained of separate arrangements for cash benefits and benefits in kind; also, the Netherlands is the only country where there is a ceiling rate of pay above which insurance is not compulsory.

The special health-insurance scheme for miners offers many features which are the same in the different countries: in particular, miners usually receive treatment free of charge.

Disablement; old age; death

548. Except in Belgium, where it comes under health insurance, disablement insurance is treated as part of the old-age pension system.

Steps which have led to some degree of harmonization as among the different systems include the German reform in 1957 (instituting an arrangement comparable to the French *pension dynamique)*, the regular raising of contribution ceilings in France, and, also in France, the introduction of a supplementary retirement pension scheme extended to industry and commerce by collective-bargaining agreement.

Pensions are now readjusted automatically and retroactively in line with the movement of wages in Belgium, France and Luxembourg, as well as in Germany.

The conditions entitling to disablement and old-age pensions still differ very considerably.

The Netherlands, where there are now standard old-age, widows' and orphans' pensions for all citizens, is the only Community country with a universal contributory insurance scheme.

Industrial accidents and occupational diseases

549. Except in Belgium, which has no compulsory insurance against industrial accidents, enterprises in all the Commu-

nity countries are required to take out employers'-liability insurance with a co-operative or industrial society.

In France, accident insurance forms part of the centralized social-security system; contributions are, however, graded in accordance with different criteria, including class of risk.

No standard schedule of occupational diseases recognized in all Community countries has yet been adopted. Rules as to degree of disability and conditions entitling to compensation vary widely. Pensions arrangements, on the other hand, are structurally fairly similar.

Family allowances

550. The institution of family allowances in Germany in 1954 made for somewhat more uniformity in the Community. While there are still considerable differences as regards the amounts payable and the persons entitled to such allowances, the general trend is towards an improvement in the social and material situation of the family, an extension of the range of beneficiaries, and an adjustment of the allowances to increases in prices and in incomes.

Individual countries continue to adopt different attitudes with regard to other aspects of the family-allowance system, such as, for instance, the demographic and political aims to be served in the policy followed concerning the family.

Unemployment

551. Four of the six countries have very similar national compulsory insurance systems. In France and Luxembourg, on the other hand, unemployment-relief arrangements are run only by the local authorities. In France, however, a contributory scheme for industry and commerce was organized in 1958 and 1959, by collective-bargaining agreement, and was subsequently extended by Decree to be of general application. It does not apply to the mining industries, where a different system is in force.

Terms of employment

552. The trend in working hours is of particular interest. We here deal only with the working day and week and with paid annual holidays. It would certainly also have been desirable to examine developments with regard to public holidays, which have differed appreciably from one country to another, but this is a very difficult subject to investigate, since in some countries the number of public holidays has been taken into account in shortening the working week. We have therefore disregarded this aspect, in order not to overload with detail a description which is not intended to be more than a rough outline. It is nevertheless emphasized that an overall comparison is of considerable value in assessing the workers' position as regards the working year.

Working day and week

553. Table 94 compares the working day and week in the coalmining industry in 1953 and in 1962.

The working week for underground personnel in 1953 was 48 hours in Belgium, France (where in law though not in practice it was 38 hours and 40 minutes) and Italy, 46 in the Netherlands, and 45 in Germany.

Reductions took place in all these countries between 1953 and 1962: Germany and the Netherlands introduced the five-day, 40-hour week, Belgium an arrangement approximating to this, and France 40 hours of work every other week. These shorter hours represent a notable improvement in living and working conditions for the personnel of the coalmining industry.

In the iron and steel industry progress has been much less marked (see Table 94). In 1953, the position was much the same in all countries; the French 40-hour week was merely a legal fiction, the average in practice being 48 hours, as in the other countries. Collective-bargaining agreements now concluded provide for the introduction of the 40-hour week in Germany in 1965. In France, the only agreement has been in respect of the continuously-operating departments of iron and steel plants in the east of the country, which in

TABLE 94

Hours Normally Worked in the Community Coalmining Industry
(underground workers)

a) Working day
(b) Working week

	Germany (Fed. Rep.)	Belgium	France	Italy	Netherlands
1953 (a)	7 1/2	8	7 3/4	8	8[2])
(b)	45	48	38 2/3[1])	48	46 (5 days)
1962 (a) (as at (b) Jan. 1)	8 40 (5 days)	*Campine* 8 1/4 41 1/4 (5 days) *Southern coalfields* (a) 8 (b) 40 (5 days) for 44 weeks 48 (6 days) for 8 weeks	7 3/4 38 2/3[1]) *No. of hours actually worked* (a) 8 (b) 40 (5 days) for 26 weeks 48 (6 days) for 26 weeks	8 48[3])	8 40 (5 days)

[1]) In legal theory.
[2]) Saturdays, 6 hours.
[3]) The working year has been reduced by 48 hours.

TABLE 95

Hours Worked in the Community Iron and Steel Industry

(a) Working day
(b) Working week

	Germany (Fed. Rep.)	Belgium	France	Italy	Luxembourg	Netherlands
1953 (a)	8	8	8	8	8	8 1/2[2])
(b)	48	48	40[1])	48	48	48
1962 (a) (as at Jan. 1)	8	8	8	8	8	8 1/2
(b)	42	45	40[3])	46 1/2	43	48 or 45

[1]) 42 hours in the continuously-operating departments; both figures (40 and 42) are, however, only in legal theory, the working week in practice coming to 48 hours and in the continuously-operating departments even to 56.
[2]) Saturdays, 5 ½ hours.
[3]) In legal theory. In the continuously-operating departments in Eastern France the practical working week was reduced from 56 to 48 hours under an agreement concluded in December 1957.

contrast to those in other parts of France had been working a 56-hour week. In the Netherlands, where the five-day week has already been introduced in the collieries, the current collective-bargaining agreement for the metal-producing and metal-working industries provides that the 45-hour week must come in force in the iron and steel works on October 1, 1962.

Paid holidays

554. The system of allowing extra holidays based on length of service *i. e.* "seniority leave" (or, in the case of the Belgian coalmining industry, on regularity of attendance), and the different regulations applying to this and to the normal leave, make comparison extremely difficult.

TABLE 96

Paid Holidays in the Community Coalmining Industry
(underground workers)

(a) Normal annual holidays

(b) Maximum number of days taking account of length of service (or, in Belgium, regularity of attendance)

		Germany (Fed Rep.)	Belgium	France	Italy	Netherlands
1953	(a)	14	6[1])	12	12	12
	(b)	21 after 15 years of service	18 according to attendance	24 after 10 years of service	18 after 10 years of service	18 after 20 years of service
1962 (as at Jan. 1)	(a)	14	12[2])	18	12	14
	(b)	21 after 15 years of service	24 according to attendance	24 after 10 years of service	18 after 20 years of service	20 after 20 years of service

[1]) Workers are paid 12 days' wages for these 6 days (double holiday pay).

[2]) Workers are paid 22 ½ days' wages for these 12 days (double holiday pay plus special gratuity).

TABLE 97

Paid Holidays in the Community Iron and Steel Industry

(a) Normal annual holidays
(b) Maximum number of days taking account of age or length of service

		Germany (Fed. Rep.)	Belgium	France	Italy	Luxembourg	Netherlands
1953	(a)	12	6 1)	12	12	8	12
	(b)	18 after the age of 30	12 after 5 years of service	18 after 30 years of service	18 after 20 years of service	15 after 5 years of service	18 after 40 years of service
1962 as at Jan. 1)	(a)	12	12 2)	18	12	12	15
	(b)	18 after the age of 30	service	24 after 30 years of service	18 after 19 years of service	20 after 30 years of service	18 after 25 years of service

1) Workers are paid 12 days' wages for these 6 days (double holiday pay).
2) Workers are paid 22 ½ days' wages for these 12 days (double holiday pay plus special gratuity).

Table 96 shows that, despite the improvements in the three countries, disparities as among the different parts of the Community are still, as far as the coalmining industry is concerned, very substantial.

the position in Germany and Italy has remained unchanged;

in France normal holidays have been increased by 50%; but "seniority leave" has remained the same;

in Belgium both normal and attendance leave have been increased by 6 days;

in the Netherlands holidays have been increased by 2 days.

Some changes have also taken place in the iron and steel industry:

in Germany there have been no changes to speak of;

in Italy, there has been only one, *viz.* the length of service entitling the worker to extra holidays has been reduced from 20 years to 19;

in France, normal holidays and "seniority leave" have been increased;

in Belgium holidays have been increased by 6 days;

in Luxembourg, normal holidays have been increased from 8 days to 10, and "seniority leave" by 4 or 5 days according to actual length of service;

in the Netherlands, normal holidays have been increased and the terms on which "seniority leave" is granted have been eased.

Thus there have been major improvements in two countries (Belgium and France) and minor ones in two more (Luxembourg and the Netherlands).

555. It emerges, from this brief outline that

(a) there have been improvements as regards working hours in the coalmining and iron and steel industries of all the Community countries (in particular, two coalmining industries have introduced the five-day, 40-hour week, one of the trade unions' principal claims);

(b) on the other hand, there has been no progress of note towards the harmonization of working hours.

WORK OF THE HIGH AUTHORITY

556. The High Authority considered that it ought not to confine itself simply to bringing its earlier work up to date each year,[1]) but should also assemble, supplement and evaluate scattered items of information to be found in publications of various kinds.[2]) It was confirmed in this view of its duties by a number of requests addressed to it by the European Parliament and the employers' and workers' associations.

It therefore decided to make preparations for the publication in 1963 of three new studies giving as accurate a balance-sheet as possible of the first ten years of the operation of the Common Market for coal and steel from the point of

[1]) A study on the trends in wages, social security and terms of employment in the E.C.S.C. industries in 1960 is to appear shortly.

[2]) See *Ninth General Report,* No. 459.

view of the development of social policy and the economic and social situation of miners and steelworkers.

The drawing-up of this balance-sheet is one of the principal duties devolving on the High Authority under the Treaty in the social field, while moreover an accurate evaluation of the convergent and divergent trends as between one country and another is essential to the planning of its own activities. Finally, it is hoped that the material which it intends to furnish to the two sides of industry will be extensively drawn upon within the countries themselves, and so contribute to the harmonization of living and working conditions.

557. The first of the three studies is to be devoted to wages and terms of employment.

The second will deal with social security, pinpointing developments in this field by examining in turn the various elements in every social-security system — basic principles, field of application, organization, financing and benefits payable.

The third study will concern collective bargaining in the E.C.S.C. industries between 1953 and 1962. The changes which have been taking place in this connection do not relate merely to wage structures, working hours or workers' representation: alternations are also going on with regard both to the basis of regulations and to the object and level of negotiations. In practically all the member countries, and more especially in their iron and steel industries, there would appear to be a shift in focus to matters previously governed by the law or settled unilaterally by the employers, while at the same time there is a tendency for bargaining to be conducted at a lower level than heretofore, and even at enterprise level.

558. Each of the three studies to be published in 1963 will contain six separate reports for the six countries, plus a tentative comparative summing-up for the Community as a whole.

The study on social security will also cover the United Kingdom: not only has that country already been included

in the analytical monograph earlier compiled on social-security systems in force, but it is felt that fuller acquaintance with conditions there might yield food for thought in connection with the problems now arising in respect of some systems existing in the Community, and in particular the special schemes of miners.

Wages

Iron and steel industry

559. The High Authority decided to arrange for research to be conducted in the Italian iron and steel industry along the same lines as the study projects which it is already promoting in Germany, Belgium and France, for the purpose of further extending and supplementing the findings of the survey published under this title *Niveau de Mécanisation et Mode de Rémunération.*[1])

This research, which is to be undertaken by the Centro di Studi sui Problemi del Lavoro, of Florence, will concern the whole range of workers' and managerial employees' attitudes and opinions regarding the relation between means of production and methods of payment, account being taken both of technical changes and of the social and educational background and mental outlook of the different personnel categories in each enterprise studied.

Mining and iron and steel industries

560. The High Authority will be passing to the Consultative Committee in the course of the next few weeks the report

[1]) See *Ninth General Report,* No. 451.

of an expert working party set up at the Committee's request on the definition and measurement of productivity.[1])

The Committee will then be able to continue its discussions regarding a rational relation between the wage structure and the level of productivity.

Social security

561. Before reviewing the High Authority's work in 1961, we briefly recall the principles on which its activities are based.

The High Authority takes the view that

(a) it is required by the Treaty to promote the levelling-up of living and working conditions;

(b) as an essential element in the integration of the Community countries, the harmonization of social policies is just as necessary as that of commercial and of economic policies;

(c) social security is playing a more and more prominent part in the standard of living of the individual in the industrial society of today.

562. The High Authority also feels that its work in the field of social security promises to yield all the more useful results inasmuch as it will be carried on in close co-operation with the E.E.C. Commission and, on one particular aspect, with the Administrative Committee on Social Security for Migrant Workers.[2])

[1]) See *Ninth General Report*, No. 452.

[2]) The Convention on Social Security for Migrant Workers was signed on December 9, 1957, by the Ministers of Labour of the six countries, in implementation of Article 69 of the E.C.S.C. Treaty. After the Treaty of Rome came into force, the Convention was converted into Regulations Nos. 3 and 4 of the E.E.C. Council of Ministers. The Administrative Committee (which consists of representatives of the Governments, the E.E.C. Commission and the High Authority, with technical assistance from I.L.O.) is responsible for all administrative matters arising out of the provisions of the Regulations, and for the many tasks listed in Article 43 of Regulation No. 3.

Co-operation with the E.E.C. Commission

563. The High Authority is preparing a new edition of its 1957 monograph *Les Régimes de Sécurité Sociale Applicables aux Travailleurs du Charbon et de l'Acier dans la Communauté et en Grande-Bretagne.*

In order to have the sections on the different countries as balanced and co-ordinated as possible, the High Authority's and the E.E.C. Commission's departments are engaged in revising the edition now available; the Commission's departments are also providing additional matter concerning special social-security schemes other than those for mineworkers.

In addition, the High Authority and the Commission are co-operating in arranging for staff members of social-security organizations to spend some months working in their departments.[1])

Finally, the two Institutions are jointly studying measures to improve the facilities for building up comprehensive documentation.

Co-operation with the Administrative Committee on Social Security for Migrant Workers

564. In the Administrative Committee, the High Authority devoted special attention to the examination of a new Regulation concerning cross-frontier commuters.

The Regulation is a matter of direct concern to the High Authority: since the national frontiers cut across several major coal and steelproducing areas, quite a sizeable proportion of E.C.S.C. workers have to cross a frontier on their way to and from their place of employment.

The High Authority also attaches considerable importance to another problem which has not yet been satisfactorily dealt with under the present arrangements, that of the compensation payable to cross-frontier migrant workers in respect of occupational diseases, and first and foremost the occupational diseases incident to mining. The High Authority is ready to give the fullest support to the Administrative

[1]) See No. 567 below.

Committee in all efforts to settle this question in a manner contributing to the establishment of a common European social policy.

565. The High Authority's activities in 1961 were concerned more particularly with the miners. with migrant workers in all the industries under its jurisdiction, and with one special category of these, the cross-frontier migrants.

Miners

566. The High Authority issued comparative tables showing the social-security arrangements in force in the coalmining industries of the Community countries, including details of the legislation governing the insurance schemes for miners, their financing and the benefits provided under these schemes.

Its working party on social-security benefits worked out the basic outlines for each country which are to serve as the framework for the computation of the average benefits payable to workers in Community collieries. The High Authority has decided to arrange for a survey to be made of the protection afforded to actively-employed underground and surface mineworkers and their families by the statutory, complementary and private benevolent arrangements in force: the survey will deal in the first instance with the year 1958, and will be conducted annually.

The comparative study of social-security charges in the coalmining industry and in other industries which was mentioned in last year's General Report[1]) was not yet completed by the end of 1961. The statistical data which the Governments were to supply did not reach the High Authority until well after the date fixed: although the agreed time-limit was April 15, the last documents were received at the end of November. The material is now being analysed, and the High Authority proposes to hold a meeting of the Government experts on February 27, 1962.

[1]) See *Ninth General Report,* No. 455.

Migrant workers

567. The arrangements made by the High Authority and the E.E.C. Commission to receive staff members of social-security organizations into their departments for fixed periods are intended to help the latter to implement more faithfully the Regulations concerning migrant workers and to gain a better understanding of the concept of harmonization of social-security systems.

The aim is

(a) to train a corps of experts on the Regulations concerning social security for migrant workers, on behalf of the social-security organizations (including the special mineworkers' insurance societies), the liaison bodies assisting in the implementation of the Regulations, and the Ministries responsible in the member countries;

(b) to provide specialized training with regerd not only to the Regulations themselves but also to their implementation in a given country, in order that the national authorities may have the services of officials fully qualified to deal with all questions concerning relations with the workers' countries of origin.

The training period is spent first at the headquarters either of the High Authority or of the Commission, and then in one or more social-security organizations in a member country. It lasts from six weeks (two at the High Authority or the Commission and four in a national organization) to three months (one at the High Authority or the Commission and two in a national organization).

During the period which they spend in the High Authority's Directorate-General for Labour Problems, Industrial Reorganization and Redevelopment or the Commission's Directorate-General for Social Affairs, the trainees study the objectives and organization of the European Communities, the international social-security conventions, Regulations Nos. 3 and 4, and the social-security legislation of the country in which they are to pass the remainder of their training period. During the second stage, they work in the principal departments of the national organization con-

cerned, and in particular in the departments dealing with migrant workers.

Cross-frontier migrants

568. On May 25 and 26, 1961, the Administrative Committee on Social Security for Migrant Workers completed its examination of the first drafts for two additional Regulations relating respectively to seasonal workers and to cross-frontier migrants, drawn up by I.L.O. and passed by the E.E.C. Commission to the Administrative Committee for its comments.

After consulting the High Authority, the Government experts and the employers' and workers' representatives, the Commission submitted proposals to the Council of Ministers. The Council decided to consult in its turn the Economic and Social Committee and the European Parliament.

The new Regulations will come into force when they have been unanimously approved by the Council. It may be mentioned that they provide for the enjoyment by cross-frontier migrants of advantages similar to those granted to other migrants.

As regards long-term benefits, the new draft Regulations merely restate the terms of Regulations Nos. 3 and 4; on the other hand, they contain other provisions, taking account of the special position of cross-frontier migrants, with regard to the short-term benefits, *viz.* cover against sickness, disablement, industrial accidents and occupational diseases, and unemployment, together with family allowances.

The preambles to the new Regulations contain a statement to the effect that the High Authority is prepared to consider the Regulations as standing in lieu of the arrangements referred to in Article 69,4 of the E.C.S.C. Treaty.

Terms of employment

569. The Joint Committee (Mines) embarked on a new stage of its activities.

During the twelve months under review, each of the Joint Committees on the harmonization of terms of employment in the E.C.S.C. industries held two plenary sessions. These meetings have thus become regular occasions. The High Authority intends to continue convening the Joint Committee every six months or so, and also to publish their findings, bring these up to date periodically, and disseminate them in all interested quarters.

The High Authority attaches the greatest importance to the Joint Committees' meetings, which afford the two sides of industry the opportunity to examine from a practical angle the main concrete problems posed, at Community level, by the trend in the coalmining and iron and steel industries.

Since the employers' and workers' associations base themselves in their activities in their own countries — according to the particular procedure customary there — on the same points as they advance at the Joint Committees' meetings, the latter provide the High Authority with a means of fulfilling the obligation laid on it by the Treaty of improving and harmonizing living and working conditions.

Joint Committee on Harmonization of Terms of Employment in the Coalmining Industry

570. On March 20, 1961, the Committee resumed its study of matters to do with working hours. It examined recent developments in this connection and the various measures adopted since the introduction of the Common Market for coal and steel towards the shortening of the working week.

The Committee further agreed to study the rules in force in the individual countries concerning terms of employment, *i.e.* recruitment and discharge, the miner's position in the event of his being temporarily prevented from working, and so on. This study will provide an overall picture of the extent to which the different legal systems secure the miner's rights under his employment contract.

In view of the number of men leaving the pits and the turnover of personnel in the coalmining industry, the High Authority suggested to the Committee that it make a study

of the action taken in the different coal-producing countries of the Community to facilitate recruitment and improve labour stability. The Committee expressed itself in favour. The workers' representatives further suggested that the High Authority should arrange for a sociological survey on the reasons which impel miners to leave the industry and the rising generation in the coalfields to prefer employment in other industries.

The meeting on December 15, 1961, was particularly valuable. First, the ground having been prepared by its working parties, the Committee was able to agree on the broad outlines of the studies just referred to.

Next, basing themselves on the resolution voted by the European Parliament, the workers' representatives requested that the Committee discuss the proposed European Miner's Code. The employers' representatives, however, replied that they had not been given notice of such a discussion or been empowered by their associations to engage in one, and the High Authority therefore proposed the following course of action:

(a) that it would forward to all the employers' and workers' associations a comparative tabulation of the positions existing in the different countries, together with the draft Codes drawn up by the trade-union confederations and the proposals of the European Parliament;

(b) that it would request the associations to empower their representatives to discuss the European Miner's Code at the next meeting of the Joint Committee.

Joint Committee on Harmonization of Terms of Employment in the Iron and Steel Industry

571. At its meeting on July 10, 1961, the Committee completed its discussions on the general rules in force concerning working hours in the iron and steel industry, and heard a progress report on the studies in connection with the continuously-operating departments. The studies relate to the various aspects — legal and *de facto*, technical and medical —

of continuous and semi-continuous operation, with special reference, based on examples, to particular methods of shift organization and arrangements regarding shortening of the working week.

On January 26, 1962, the Committee fixed the directives for the study it is to make of the repercussions of technical progress on productivity, wages, working hours and employment. An overall analysis is to be effected comparing the statistical data in the High Authority's possession concerning trends in production, manpower (numbers of workers, numbers of employees, proportion of workers employed respectively on the production side and in the ancillary and auxiliary services), hours worked, wages and hourly wage costs, and incomes. The employers' and workers' associations in the individual countries will for their part examine methods by which case studies might be conducted to indicate the extent to which personnel have been affected by the consequences of technical progress.

Labour law

572. Since it considers that a full picture of the laws in force in the different countries and the disparities between them is essential to any effort to harmonize living and working conditions, the High Authority set to as long ago as 1955 to pinpoint the main elements in European labour law. Under its sponsorship and direction, six legal specialists are drawing up a set of studies, each consisting of six monographs on the state of affairs in the respective countries preceded by a combined summary report, on the main aspects of labour law in the Community countries.

Five of the studies have already been published, *Les Sources du Droit du Travail, La Stabilité de l'Emploi, La Représentation des Travailleurs sur le Plan de l'Entreprise, La protection des Travailleurs en Cas de Perte de l'Emploi,* and *Grève et Lock-out.* The two last-mentioned, which appeared in May and June 1961, stand as the first issues in the labour law series, which is to comprise all the studies in question.

573. By way of example, we quote a few of the points made in the study on protection of workers in the event of loss of employment *(La Protection des Travailleurs en Cas de Perte de l'Emploi)*.

The tendency is more and more in all the member countries for protection to be afforded for all cases of loss of employment.

Another trend is also apparent everywhere with regard to the worker's legal position under the different social-security systems: it is becoming more and more common practice for unemployment benefits to be ranked as wages. All the Community countries appear to be moving away from the strict application of the principle of correlation between the social-insurance regulations and the employment contract.

Lastly, there seems to be a general movement towards the adoption of a system whereby unemployment benefit is fixed in relation to the wage earned by the worker before losing his employment.

574. A second edition of *Les Sources du Droit de Travail* is in preparation; so also is another study, *La Relation de Travail.*

In addition, the legal specialists, with the High Authority's agreement, have selected the following subjects for further studies: the trade unions; collective-bargaining agreements; prevention and settlement of labour disputes; grievance procedure; the worker in the enterprise; workers' participation in the organization of economic and social affairs;[1]) wages and fringe benefits; working hours and holidays.

[1]) The report on France is to be published separately, in advance of the main body of the study in question. This gesture is intended by the High Authority as a tribute to the memory of Prof. Durand, who had just completed his contribution when he lost his life in the Agadir earthquake. Prof. Durand had been chairman of the working party of labour law experts since its inception.

Section 2: Housing

575. The High Authority in 1961 continued its activities in connection with the housing schemes described in earlier General Reports, and made preparations for launching a fourth loan-aided scheme.

Earlier schemes

Experimental Scheme I

576. By January 1, 1962, 1,432 of the 2,174 dwellings planned had been completed.

The members of the expert committee completed the studies which they had been asked to draw up, and the High Authority is now embodying these in a report which is to be published in 1962.

Loan-Aided Scheme I

577. By providing an appropriation of 23,600,000 dollar units of account[2]) out of loans floated within the Community countries, the High Authority was able in 1955 and 1956 to contribute to the financing of 14,145 dwellings. At January 1, 1962, 13,854 of these had been completed. A number of operations planned in Italy had in the event never been carried out, owing to difficulties encountered on the sites.

Loan-Aided Scheme II

578. The High Authority has decided in 1956 to employ funds from its Special Reserve (made up of the proceeds of interest on bank deposits and investments, of fines imposed and of interest on arrears) to finance the building of workers'

[1]) See *Ninth General Report*, No. 484.

[2]) The rate of exchange for all quotations in units of account is that ruling at January 1, 1962.

houses, and had set aside the sum of 16,870,000 units of account. This was supplemented by 22,900,000 units of account raised by the High Authority in the capital markets of the different countries and furnished by banks, social-security organizations, provident funds, insurance companies, and so on.

The funds from its Special Reserve were mostly lent at approximately 1%. Although those from the capital markets had to be relent at higher rates, the combination of the two sources enabled the rents or, in the case of dwelling intended for ultimate ownership by their occupants, the annual instalments charged to be kept within a range the workers could afford to pay.

The number of dwellings thus financed was 19,348; at January 1, 1962, 17,471 had been completed, 1,485 were building, and 392 were still "in preparation." Plans in respect of these last had to be changed owing to difficulties encountered on the building sites and to alterations in the financial position, so that the commencement of operations has been held up considerably.

Loan-Aided Scheme III

579. In 1958, the High Authority decided to launch a third loan-aided scheme, and to make available 15 million units of account out of its Special Reserve.

The financing operations in Germany have been completed in full. The 8,350,000 units of account set aside by the High Authority and the 21,900,000 raised in the German capital market make a total of 30,250,000 units loaned for the construction of 16,216 dwellings. At January 1, 1962, 9,313 of these had been completed, 6,013 were building and 890 were "in preparation."

During 1961 the High Authority succeeded in overcoming the difficulties (listed in last year's General Report[1])) which had previously stood in the way of the launching of Scheme III in member countries other than Germany.

[1]) See *Ninth General Report*, No. 487.

To help finance the building of 1,000 dwellings to be erected at the same time as the big new iron and steel complex at Dunkirk, the High Authority granted a loan of 5 million N.F. (approximately 1 million units of account) to the Société Civile Immobilière des Deux-Synthes at 1% interest for a term of thirty years, with an initial redemption-free period of five years.

The High Authority made available Lfr.30 million (600,000 units of account) as its contribution to the financing of some 100 dwellings to be occupied by workers of E.C.S.C. enterprises in the Grand Duchy. One-half of this amount came from a loan contracted in the Grand Duchy, was relent at 5:40%. The mean rate of interest works out at 3½%, and the loans have been granted, through the State Savings Bank, for a period of 25 years.

For the Netherlands the High Authority has set aside Hfl.3 million (828,729 units of account) from its Special Reserve, to be lent at 1%, while a further Hfl.6 million (1,657,458 units of account) is to be raised in the Netherlands money market and relent at 4·75%. The resulting total of Hfl.9 million (2,486,187 units of account) will be available at a mean interest rate of 3½%; the loans are for a term of 26 years. The High Authority has already decided that Hfl.2,250,000 (621,546 units of account) is to go to build some 375 dwellings for workers in the Netherlands iron and steel industry. Negotiations are still in progress with regard to the Hfl.6,750,000 (1,864,641 units of account) to be allocated to the Dutch colliery workers.

In Belgium, the High Authority has lent to the Société Nationale de la Petite Propriété Terrienne

(a) Lfr.85 million (1,700,000 units of account), the proceeds of a loan contracted in Luxembourg, at 5·4%;

(b) Bfr.15 million (300,000 units of account), out of its Special Reserve, at 1%.

The mean rate of interest on the two is 4·74%; the loans are granted for 24 years, repayable in 21 annual instalments, and are backed by a State guarantee. Between them, the two loans will cover one-half of the cost of building

some 750 dwellings for the use of miners and steelworkers, the Société Nationale de la Petite Propriété Terrienne to be responsible for the other half.

Having thus settled the financial basis for the first set of operations in Belgium under Scheme III the High Authority is now studying ways and means of arranging for a second set. Discussions are in progress with the Government, and it is hoped that work will begin in the near future.

In order to make up the time lost in Belgium, France and Italy, the High Authority intends in financing operations in these countries to make combined use for the funds still available under Scheme III and those to be provided for the new Scheme IV. Negotiations in this connection have now reached a stage which suggests that matters may be settled in the early months of 1962.

Loan-Aided Scheme IV

580. On March 29, 1961, the High Authority decided to launch a fourth scheme for the building of workers' houses.

Since most of the credits to be made available under this scheme will go, as before, to building societies or financing houses which are not enterprises within the meaning of Article 80 of the Treaty, the Council of Ministers was asked for its consent under Article 54,2, which it duly gave on May 16, 1961.

Scale

581. The High Authority proposes to provide a total of 45 million units of account, 15 million from its Special Reserve and 30 million from the capital markets of the various Community countries; these funds will enable it to assist the building of approximately 20,000 dwellings.

As the 15 million units from the Special Reserve will be lent at a much lower rate on interest than the rest, the mean rate on the whole will be moderate.

Objectives

582. Scheme IV is intended to help meet the needs established by the survey on E.C.S.C. workers' housing conditions.[1]) It will speed up the process of replacing hutments, makeshift accomodation and slums, and will provide adequate dwellings — that is, dwellings measuring up to present-day requirements as to sanitation, equipment and comfort — for workers now compelled to live two or more families to a house, apart from their own families or at an undue distance from their place of employment.

Another aim is that Scheme IV should dovetail with the High Authority's work regarding the readaptation of mineworkers affected by pit closures, by making it easier, where necessary, to reaccommodate men obliged to work at another colliery.

Finally, Scheme IV is designed to provide housing for those workers who will have to be recruited in localities where iron and steel plants are to be set up or extended. As special attention was paid to the needs of the coalmining industry under Scheme I, so under Scheme IV the main focus is to be on aiding the iron and steel industry, the modernization and extension of which involve the carrying-out of very large-scale housing schemes. Thus 4,000 dwellings will be required at Dunkirk, 3,400 at Taranto, 2,900 at Bagnoli, 2,000 at Genoa (Cornigliano), 1,700 at Piombino, and 2,000 at Bremen.

The High Authority feels under obligation to continue its policy of assisting building operations and to carry on its housing activities at least as intensively as in the past.

Financing

583. The work of financing Scheme IV was begun in the first instance in Germany. On June 21, 1961, the High Authority granted a loan of DM.10,071,000 (2,517,750 units of account) out of the Special Reserve, for 35 years at 1·05%, to the Bank für Gemeinwirtschaft AG., Düsseldorf, which is to act on its behalf. Social-security organizations

[1]) See *Eighth General Report,* No. 162.

furnished to the Bank, through the Wirtschaftsvereinigung Eisen- und Stahlindustrie a further DM.34,929,000 (8,732,250 units of account), DM.26,900,000 of this total at 5% and DM.8,029,000 at 5½%. This combination gave a rate of 4·25% for the resulting aggregate sum of DM.45 million (11,250,000 units of account), which is being lent by seven mortgage banks to the building companies carrying out the schemes. The loans are secured by first mortgages.

Through this operation the High Authority is helping to finance some 5,000 dwellings for occupation by steelworkers. About 60% of these are priority needs. being designed to replace hutments and temporary or overcrowded accommodation.

On October 18, 1961, the High Authority granted a loan of DM.1,300,000 (325,000 units of account) from its Special Reserve, for 34 years at 1%, to three German banks, which for their part undertook to furnish between them DM.3,250,000 (812,500 units of account) at 5·5%. The resulting total of DM.4,550,000 (1,137,500 units of account) will make possible the construction of 670 dwellings for iron-ore miners.

As the High Authority has decided to set aside 7,650,000 units of account in all for building in Germany, the amount available following the two financing operations just described is 4,807,250 units of account. Of this, a further 1,307,250 units of account is to go to the iron and steel sector and the remaining 3,500,000 to the coal sector. The formal decisions are to be taken early in 1962.

584. The High Authority's departments will continue to look about in the Community money market for additional capital on advantageous terms, to be laid out in combination with funds from the Special Reserve in order to ensure that they are used to the best possible effect.

Credits will be allocated, as under the earlier schemes, in accordance with two general criteria — the numbers of miners and steelworkers in each country and the housing requirements respecting them — with the particular objectives of Scheme IV, and with the views expressed by the national and regional committees which advise the High Authority as to the employment of the funds, choice of

GRAPH No. 20

The High Authority's Contribution to the Financing of Workers' Housing

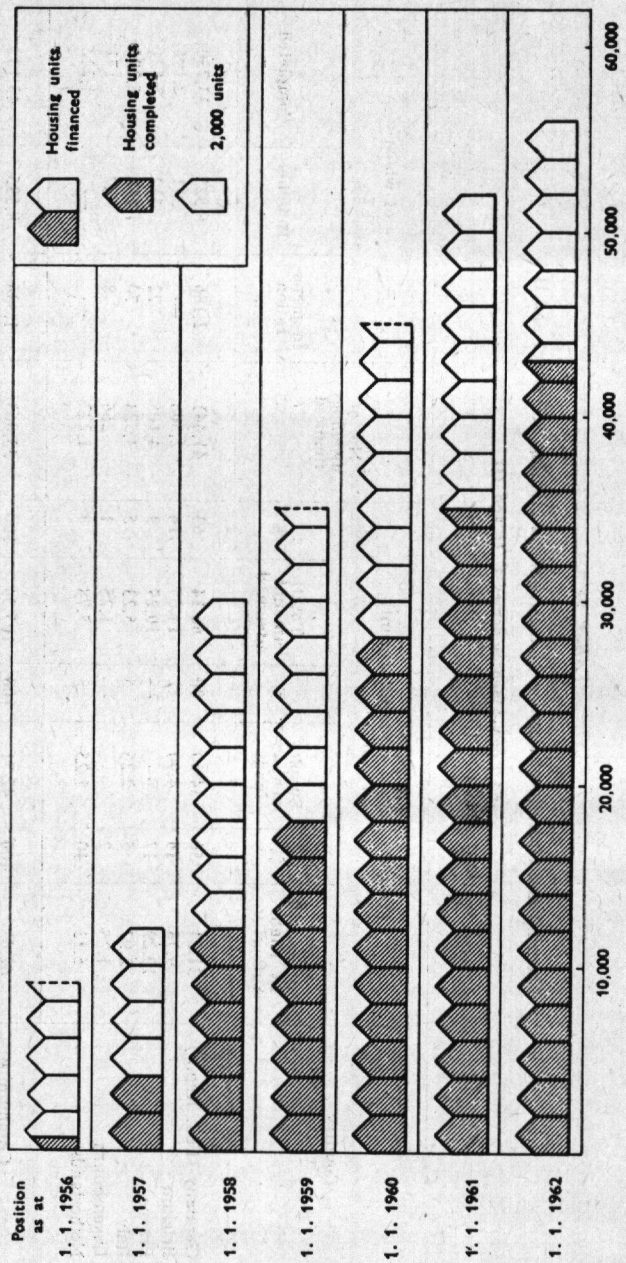


TABLE 98

Financial and Operational Position of Experimental Housing Schemes I and II and Loan-Aided Schemes I, II and III

Country	Credits ('000,000 E.M.A. units of account) of which						No. of dwellings financed	of which		
	Direct contribution by High Authority	%	Supplementary funds	%	Total amount advanced	%		In preparation	Building	Completed
Germany (Fed. Rep.)[1]	31.84	50	34.30	80	66.14	63	41,441	1,186	6,525	33,730
Belgium	9.75	16	4.90	12	14.65	14	2,506	—	311	2,195
France	10.29	17	—	—	10.29	9	4,105	72	512	3,521
Italy	2.97	5	2.26	5	5.23	5	3,523	70	1,160	2,293
Luxembourg	1.25	2	—	—	1.25	1	266	8	87	171
Netherlands	6.53	10	1.25	3	7.78	8	1,222	—	—	1,222
Community	62.63	100	42.71	100	105.34	100	53,063	1,336	8,595	43,132

[1]) Including the Saar.

housing association and designation of future occupants of the dwellings when completed.

Summary of the High Authority's achievements to date with regard to housing

585. From the date when it first embarked on the promotion of residential building for the benefit of workers in the E.C.S.C. industries up to January 1, 1962, the High Authority contributed financially to the construction of 56,396 dwellings of which 35,921 are to be rented and 20,475 to be ultimately owner-occupied.

At January 1, 1962, 43,132 of these dwellings were completed, 9,079 building and 4,185 "in preparation."

At the same date, funds made available for the building of these 56,396 dwellings — out of the High Authority's own resources, loans contracted by it and additional moneys mobilized at its instigation — totalled 111,700,000 units of account.

Table 98 gives a general picture of the financing and operational position in respect of Experimental Schemes I and II[1]) and Loan-Aided Schemes I, II and III. The five schemes together provide for the building of 53,063 dwellings in all.

Graph No. 20 also includes 3,333 dwellings for which loans have already been granted in Germany under Scheme IV.

Section 3: Industrial Health, Medicine and Safety

PROMOTION OF SCIENTIFIC RESEARCH

Reasearch on dust prevention and suppression, rehabilitation and human factors affecting safety[2])

586. The research promoted by the High Authority proceeded according to plan during 1961.

[1]) In 1954, the High Authority set aside 1 million units of account for the 1,022 dwellings provided for by Experimental Scheme I; Experimental Scheme II was financed by a non-repayable High Authority grant of 1 million units of account plus High Authority loans totalling 2,933,000 units.

[2]) See *Ninth General Report,* Nos. 492-495.

Two major decisions were taken with regard to financing, the one concerning dust prevention and suppression and the other human factors affecting safety.

Dust prevention and suppression (iron and steel industry)

587. After hearing the views of the Consultative Committee and securing the consent of the Council of Ministers, the High Authority on July 19, 1961, made a grant of 1 million units of account to aid a project submitted by the Union Sidérurgique du Nord de la France ("Usinor").

Usinor are planning to apply at industrial level the results of research on the elimination of air pollution caused both inside and outside iron and steel works by the ultra-fine dust, known as "brown smoke," which is given off by oxygen converters.

A new process, found to show promise in the course of tests at a semi-industrial experimental plant, is to be tried out and perfected at the works now building at Dunkirk.

The basic principle is that the gases are collected prior to the combustion of the carbon monoxide. This means that the amount of gas to be scrubbed is smaller and the dust-extraction process proper is more concentrated and not so costly; the equipment required is less bulky.

Since the use of oxygen in steelmaking is increasing apace and de-dusting is rendered more difficult — and at the same time even more necessary — by the larger and larger converters being installed, the new process seems likely to be most valuable to the European iron and steel industry and to do much towards the safeguarding of the workers' health.

Non-technical factors liable to affect safety

588. On December 13, 1961, the High Authority decided to contribute 765,000 units of account for purpose of Community-level research on safety,[1]) designed to afford fuller

[2]) See *Ninth General Report*, No. 495.

knowledge of the factors and circumstances underlying accidents.

The decision was taken with respect to a consolidated project prepared during 1961 by the heads of eleven national research teams who are to co-operate in the work. They are all to follow the agreed directives laid down, in order to ensure the co-ordinated study of the factors influencing hazards in a number of given sectors, *viz.* coal-winning, haulage and transport, work at high temperatures, and steel rolling.

The heads of the teams agreed that two specialized committees, one for the coalmining and the other for the iron and steel industry, should be set up to centralize the organizational and secretarial work involved. The committees will enable the researchers to work in closer co-operation.

Research on respiratory disorders, efficiency-affecting factors and burns[1])

589. It was recorded in the Ninth General Report that the High Authority had received applications for assistance in respect of 178 projects, involving a total of 3,197,061 units of account. Since then (February 1961) the number of projects submitted has risen to 208, and the aggregate amount of assistance sought to 3,900,000 units of account.

590. To ensure continuity in the research conducted from 1956 to 1959, the High Authority set aside 1,263,147 units of account for further work on 83 projects already assisted by it in the past.

These projects, which are being carried out in 37 research centres, fulfil two important requirements in that they have already produced partial or provisional results of an exceptionally promising nature, and seem likely to lead on to new and original developments.

[1]) See *Ninth General Report,* Nos. 496-501.

591. On September 13, 1961, the High Authority decided to grant 337,862 units of account in aid of a further 48 projects. Two of these relate respectively to work at high temperatures and to noxious fumes, while the rest are variously concerned with.

(a) research on noise;
(b) research on burns;
(c) fundamental research on silicosis;
(d) research on the incidence, prevention and treatment of respiratory disorders;
(e) research on emphysema;
(f) clinical, radiological and functional research on the pneumoconioses.

Organization of activities and consultations on research promotion

592. In six years of promotion of scientific research, the High Authority's departments and the experts working in co-operation with it have added considerably to their experience of the problems arising in this connection and to their knowledge of the potentialities and resources of the research centres of the Community.

In 1961, a number of discussions were held with the experts concerning both long-term objectives and organizational and procedural details, in order to review and evaluate experience to date and to obtain opinions as to the planning of future activities and the methods and procedures to be used.

A first result was improved integration of the various committees which afford the High Authority the benefit not only of their scientific and technical experience but also of the experience of the industrial and Government quarters directly concerned.

The High Authority is now engaged in extracting further conclusions. One conclusion emerging is that re-

search promotion could in future be especially usefully effected by means of two complementary arrangements, namely

(a) by Community programmes (some relating to specific questions) to be outlined in advance and entrusted to a limited number of centres specially selected by the High Authority for their outstanding experience in research on matters affecting miners and steelworkers;

(b) by skeleton programmes to be made public and open to all centres, the centres thereupon to submit projects suitable for inclusion within the skeleton framework.

Particular attention has also been devoted to the organization of check-ups on the progress of the research assisted.

ASSISTANCE FOR SCIENTIFIC CO-OPERATION

593. The High Authority's work in this second field mainly takes the form of convening regular meetings of a large number of working parties.

For the purposes of the General Report, it is proposed merely to give a rough indication on the very considerable variety of subjects tackled by the working parties during 1961.

Dust prevention and suppression (coalmining industry)

594. The four working parties dealing with this aspect heard periodic progress reports and sought to further the co-ordination of the research in question.

The Working Party on Dust Measurement continued its comparative study of the various instruments and methods used in measuring and analysing dust.

The two working parties concerned with dust prevention and suppression on the production side and in caving and stowing operations compared the different ways and means of keeping dust production to a minimum and of combating its effects.

The working Party on Personnel Protection is endeavouring to develop a method of comparing the degree and nature of dust exposures with results of medical examinations of the men exposed. This should enable correlations to be worked out between the two sets of observations, with the object of calculating the permissible levels of dust content beyond which silicosis is liable to develop or to worsen.

Dust prevention and suppression (iron and steel industry)

595. The Working Party on Dust Measurement (Fundamental Research) first studied the results of the investigations carried out by it in the sintering-plant of a German iron and steel works with the object of comparing different dust-sampling instruments and methods. The data assembled were then supplemented by comparative laboratory measurements conducted in France with the large (1,800 cu.m.) spherical dust chamber of the Institut National de Recherche Chimique Appliquée. A report on this Community research — which represents an important technical innovation — will be published in a specialized periodical.

The examination by the Working Party on Prevention and Suppression of Brown Smoke of the state of legislation concerning brown smoke showed that the law in some Community countries already required action to be taken to combat this nuisance, and that in others enactments to that effect were in preparation. The Working Party intends itself to frame draft regulations which the Governments may care to use as a basis.

The Working Party on Prevention and Suppression of Dust and Non-Brown Smoke discussed a method consisting in the direct exhaustion on the spot of small quantities of heavily dust-laden air moving at great speed. It also made a start on drawing up a nomenclature and descriptive classification of all known types of dust-extracting equipment. This document will enable engineers to ascertain quickly which apparatus is best suited to any particular de-dusting problem.

Diagnosis and prevention of occupational diseases

596. A working party studied developments in field of radiological technique. Thanks to recent progress, it is now possible to obtain extremely fine micronodular images, the detection of which is most important to the early-stage diagnosis and the prevention of pneumoconiosis.

A second working party drafted a questionnaire for circulation to medical officers and practitioners to obtain information on certain essential points in connection with the diagnosis and incidence of bronchitis and emphysema. As the questionnaire is to a great extent based on one drawn up by British experts, its adoption will enable useful co-operation to be carried on between the medical research centres of the Community countries and those of the United Kingdom.

The Working Party on Standardization of Respiratory Tests found that functional exploration was at present the most practicable means of establishing the degree of fitness of workers suffering from occupational pulmonary complaints. Such exploration can be effected only by using up-to-date techniques and employing apparatus having certain well-defined physical characteristics. The Working Party recommended the High Authority to arrange for a preliminary testing of spinographs and ergometers.

The heads of the research teams which, with financial assistance from the High Authority, are conducting studies on bronchitis and emphysema have expressed the wish that these should be extended to cover a suitably wide cross-section of the population, and that specialists on the respiratory system should be asked to co-operate with the researchers investigating the degenerations in selected anatomical specimens.

Other research directors have reached the conclusion that respiratory disorders are brought about by processes which nowadays could be analysed in considerably greater detail than has hitherto been the case.

Specialists in pulmonary haemodynamics exchanged observations on pulmonary arterial pressure as studied in normal subjects at rest and during exertion, and began work

to establish the technical desiderata for the exploration of haemodynamics in pneumoconiosis victims.

Treatment of occupational diseases

597. The directors of research on the treatment of respiratory disorders reviewed the different methods of improving respiratory and circulatory functioning in pneumoconiotics.

They also discussed the prevention of certain complications, such as bronchitis and silico-tuberculosis, by means of drugs acting on the inflammation processes or inhibiting the tubercle bacillus.

Finally, they discussed work to date on predisposition to respiratory complaints in mineworkers of different ages.

Rehabilitation of accident victims and persons suffering from occupational diseases

598. The processes involved in the knitting of fractures were examined in considerable detail. Discussion turned in particular on the factors determining whether the seat of the fracture will ultimately show a satisfactory bony callus or a biologically final failure to unite, and on methods of bone grating.

Experts studied the rehabilitation of persons affected by respiratory disabilities. Several researchers found that appreciable improvements could be obtained by reducing the effects of infectious and circulatory complications. Efforts are being made by means of motory retraining to improve the physical capacity of emphysema and pneumoconiosis subjects.

The directors of research projects aided by the High Authority also met on several occasions to make and hear progress reports. Some of them have been dealing with the surgical treatment of spinal fractures, methods of preventing sloughing, and difficulties regarding the re-employment of paraplegics (in connection with urinary and bladder weaknesses).

Others dealt with the causes and nature of blood-poisoning following on burns, with factors causing rejection of grafts, and with the prevention and treatment of sclerotic cicatrization.

One meeting was devoted to discussion of cranial injuries: the aspects dealt with included modes of and time-limits for immediate medical action to combat disturbance of the central regulation of the circulatory and respiratory functions and to prevent cerebral oedema; criteria for the employment of electro-physiological and radiographical methods of diagnosis; and the interrelation of the degree of seriousness of the injury, the promptness and quality of the treatment, and the long-term results.

An information session was held at which experts described the present position in the Community respecting artificial limbs. It was noted that considerable differences existed in technical facilities, regulations, and practical results as regards resumption of work or acceptance for other employment. A specialized working party is to meet in 1962 to draw up a detailed catalogue of existing resources and requirements in the individual countries.

Environmental conditions

599. The Working Party on Noxious Fumes examined the combined action of the various harmful agents which by their presence in the atmosphere at the workplace can cause non-pneumoconiotic degenerations in the lungs and bronchi.

The Working Party on Noise and Vibration Abatement discussed new contributions to the subject confirming that the level of the sound volume is liable to affect not only the ear but the whole organism.

The Working Party on Work at High Temperatures heard reports on the latest research carried out to obtain precise statistics on physiological reactions to heat as observed in miners stationed in experimental workings.

Non-technical factors liable to affect safety

600. The Working Party on Personal Protective Equipment dealt with

(a) questionnaires used for recording observations (comparison of the questionnaires sent in by the different research teams, problems regarding their employment, practical arrangements planned for direct observation of whether the personnel in fact make use of their protective equipment);

(b) investigations and discussions (venue, circumstances, methods, techniques, etc.);

(c) physiological and medico-legal (insurance) aspects of the use of protective equipment.

The Working Party on Criteria for Success in the Field of Safety sought to establish a fixed criterion for judging the effectiveness of accident-prevention measures: to this end it discussed

(a) the object of the criterion;

(b) the arguments for adopting a single individual accident-rate criterion and for introducing additional elements of reference;

(c) the value and accuracy of the criteria selected;

(d) the practicability of combining partial elements to arrive at one overall accurate and fixed criterion.

The Working Party on Attitudes and Reactions to Risk agreed on definitions of the terms used by researchers in connection with safety, such as "risk," "hazard," "danger," "choice," "probability," "utility" and "risk-taking." It also compared methods of appraising the variables selected.

The Working Party on Safety Research Contacts and Information, which assists the High Authority to promote co-operation among researchers, reviewed and assessed results to date in this field, and put forward practical suggestions for the further development of exchanges of information and experience.

Between June and September 1961 the Rapporteurs of the Research Committee on Human Factors (Safety), with

staff members of the High Authority, visited all the research centres receiving financial assistance for studies on human factors affecting safety. By this means direct information was obtained concerning the progress of this work and discussed from the practical angle with the researchers themselves.

Cost of accidents in the iron and steel industry

601. The Sub-Committee on Steel of the Producers' and Workers' Committee on Industrial Safety and Medicine adopted a questionnaire on the basis of which it intends to conduct a Community-wide survey on the cost of accidents in the iron and steel industry.

Medical Documentation Pool

602. The High Authority is engaged in finalizing the methods it proposes to follow in extending the documentation system it set up in 1954, to include the subject of burns.

DISSEMINATION OF RESULTS OF RESEARCH AND CO-OPERATION

603. The High Authority continued to send out regularly to scientific and medical bodies, industrial medical officers and safety engineers reprints of articles by researchers describing the results of their work.

604. A combined summary monograph, intended more particularly for the use of the medical profession proper, was brought out in December 1961 on the results of the research conducted between 1956 and 1960 under the High Authority's first programme on industrial medicine.

605. Five years after the launching of the first research programme on the pneumoconioses, it was felt that the time had come to present as full a balance-sheet as possible, and

to compare the results obtained by the researchers with the practical experience of the medical practitioners directly concerned.

The High Authority accordingly arranged for a Seminar on the subject to be held in Brussels on November 16 and 17, 1961, with one of its Members, M. Paul Finet, in the Chair. The Seminar was attended by some 700 persons: these included delegates from the Health Protection Committee of the European Parliament, the European Institutions, the International Labour Office, the International Social Security Association, the World Health Organization and the public authorities, although the majority of those present were researchers, representatives of the employers' and workers' associations, industrial medical officers and safety and dust-suppression engineers. A number were from third countries, including Austria, Denmark, Sweden, Switzerland, the United Kingdom and the United States.

Reports and papers were read on pneumoconiosis in the coalmining and iron and steel industries, the stage reached in research on the origin and progress of the disease, functional respiratory tests and radiological diagnosis, new forms of treatment, dust prevention and suppression, and personnel protection. All those who attended the Seminar should find the concrete information furnished by the speakers and in the course of the ensuing discussions most helpful in the discharge of their various responsibilities and in their day-to-day activities.

Several experts mentioned the appreciable drop in the numbers of new pensionable silicosis cases registered in the various producer areas of the Community, due to improved medical and technical preventive measures. Considerable progress had also been made in detection, and more effective technical methods were now being regularly employed.

Emphasis was laid on the need for close co-operation between the technical and the medical side. In order that workers should be assigned to jobs involving no risk to their health, it was necessary that the enterprise should have full details both of each man's existing state of health and of the

dust concentration present in each working. Dust measurement and medical examination were mutually complementary and of equal importance.

Section 4: The Mines Safety Commission

PLENARY SESSIONS

The Mines Safety Commission held two plenary sessions in 1961.

Session of June 23, 1961

Second Report of the Commission

606. The Commission's Second Report, which has now been made available to all bodies and persons immediately concerned, was approved unanimously.

It falls into three parts, dealing respectively with the work of the Commission, developments in connection with safety in the Community coalmining industry, and statistical data on accidents in collieries.

We need not recall here the recommendations, directives, opinions and reports which figure in full in Part I and its annexes: all these, which the Commission adopted in 1959 and 1960, were analysed in the Eighth and Ninth General Reports of the High Authority.

Part II records the action taken by the different Governments up to December 31, 1960, to implement the recommendations of the Conference on Safety in Coalmines. Substantial progress is shown to have been made since November 1, 1958, the date of the Commission's First Report. By December 31, 1960, despite the considerable problems remaining to be disposed of and the difficulties of adapting or remodelling the safety regulations, most of the Conference's recommendations had been either incorporated into national legislation and regulations or simply applied in practice. In a number of cases the national authorities had

not yet by that completed their preparations for introducing regulations in line with particular Conference recommendations, while in others they were still studying whether in their own country it was desirable that this should be done: only in very rare cases did one or other Government decline to make a particular change at all.

The statistics in Part III cover all accidents occurring below ground, with a special section devoted to group accidents. They are comparable country by country: thus

(a) the number of victims is broken down by the same 12 categories of technical cause of accident;

(b) figures are given only for those victims who either (i) died within eight weeks of the accident or (ii) were unable to resume work underground for at least eight weeks;

(c) all incidence rates are calculated per million hours worked;

(d) all group accidents given are those involving at least five fatalities or serious injuries as rated by the criteria mentioned under (b) above.

The Report contains a set of tables for 1958, showing first for each Community coalfield and then for each country the total number of men injured (in individual or group accidents), total number of men killed, injury incidence rate, fatality incidence rate, number of group accidents, number of men injured in group accidents, and number of men killed in group accidents. Similar tables are given for 1959, while three further tables furnish a comparison as among the different countries and as between the years 1958 and 1959 of death and injury rates and numbers and seriousness (men injured and men killed) of group accidents.

The Community injury rate[1]) works out at 13.551 in 1958 and 12.954 in 1959, and the death rate at 0.610 in 1958 and 0.590 in 1959. There were 9 group accidents, involving 27 injuries and 77 deaths, in 1958, and 6, involving 36 injuries and 46 deaths, in 1959.

[1]) Per million hours worked.

Graphs Nos. 21 and 22 will enable the tables in the Commission's Report to be more easily followed: they show only the main elements from these, including in particular the most commonly-recurring causes of accidents.

Accident reports

607. The Commission heard a preliminary report on the accident which occurred on February 11, 1961, in the Bure-aux-Femmes pit at Glain, in the Liège coalfield, where five men, including an engineer, lost their lives as a result of an inrush of water.

It also studied three reports on particular accidents presenting certain instructive features by the British Chief Inspector of Mines and Quarries.

Competition for the improvement of safety equipment in coalmines[1])

608. The chairman of the panel of judges submitted a statement on progress to date in the testing of the prototypes entered.

The Commission supported the panel's suggestion that the High Authority should defer the closing date of the competition in the case of the category "threshold-value oxygen indicators."[2])

609. The panel on December 14, 1961, announced awards for eight designs submitted:

(a) two devices representing considerable advances on existing types of portable methanometer, as regards greater suitability for use by personnel working below ground, size, weight and safety;

(b) a threshold-value methane detector which was both original, sturdy, easily adjustable, and accurate;

[1]) See *Ninth General Report*, No. 514.

[2]) The High Authority accepted this suggestion at its meeting on January 17, 1962.

(c) three threshold-value carbon-monoxide recorders enabling very small amounts of the gas to be detected, and employable either for fixed installation over a considerable period (to ensure continuous checking of a ventilating current) or for frequent movement from place to place (*e.g.* for purposes of fire detection or firefighting);

(d) two appliances representing a notable step forward towards the ultimate production of self-rescuers affording full protection against all noxious gases and against oxygen deficiency.[1])

Session of December 12, 1961

Examination of cage guides

610. The Commission adopted a report on the use of recording accelerometers. The Working Party on Winding-Ropes and Guides[2]) had made a study of these instruments, and had found that they could be most helpful not only for purposes of guide testing but for checking the functioning of winding gear generally. At the present stage in their development, however, they cannot be recommended for use by personnel in charge of routine checks on shaft equipment.

The Commission expressed the hope that experimenting would continue.

Rescue operations

611. The Commission approved a report drawn up by the Working Party on Co-ordination of Rescue Organizations in accordance with the instructions given it at the session of December 1960.[3])

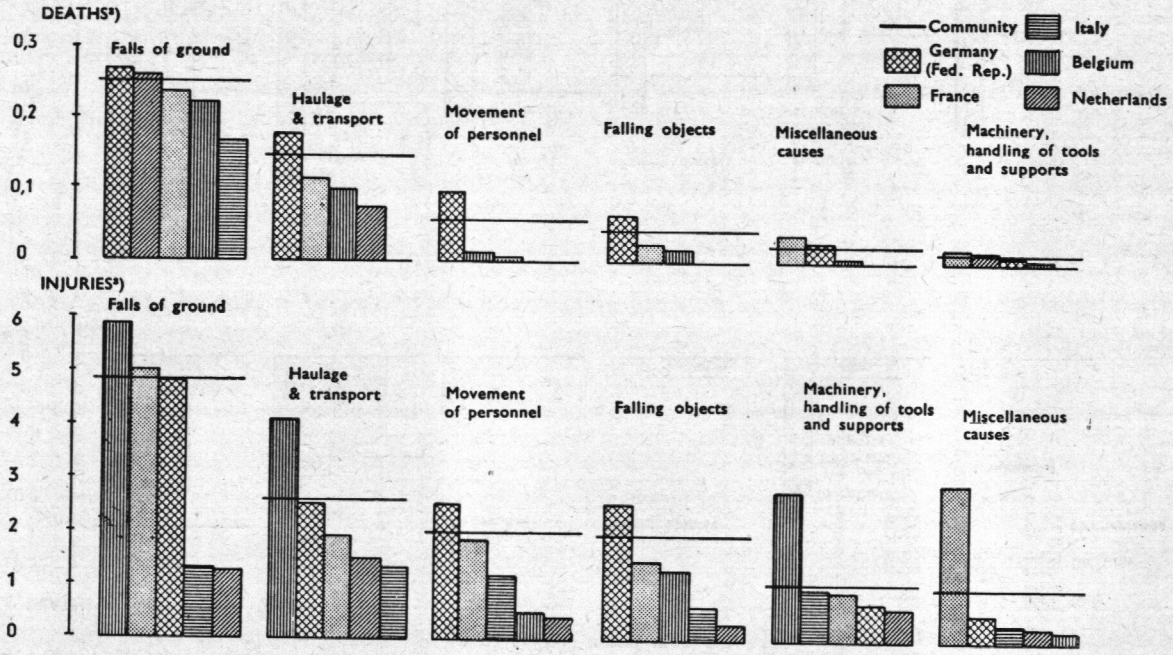
[1]) The self-rescuers at present available give protection only against carbon monoxide.

[2]) See *Ninth General Report*, No. 523.

[3]) See *Ninth General Report*, No. 525.

GRAPH No. 21

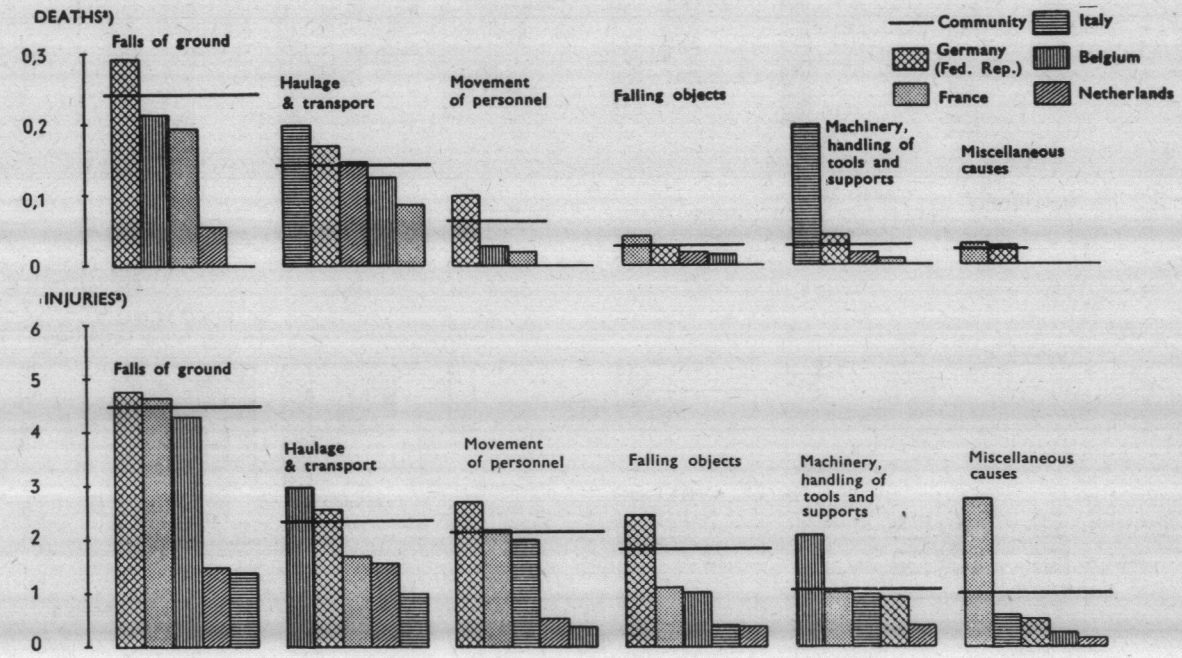
Death[1]) and Injury[2]) Rates below Ground in 1958
(per '000,000 hours worked)



[1]) Casualties died within eight weeks.
[2]) Casualties were unable to resume work below ground for at least eight weeks.
[3]) The scale adopted for deaths is different from that for injuries.

GRAPH No. 22

Death[1]) and Injury[2]) Rates below Ground in 1959
(per '000,000 hours worked)



[1]) Casualties died within eight weeks.
[2]) Casualties were unable to resume work below ground for at least eight weeks.
[3]) The scale adopted for deaths is different from that for injuries.

The report deals with the institution of a supranational emergency plan for mutual assistance, the improvement of respirators for use in rescue work, Customs procedure respecting rescue workers and duties payable on their equipment, and insurance cover for rescue workers operating outside their own country.

The Commission adopted resolutions on the first and fourth of these points.

Heat tolerances

612. The Commission commended to the High Authority the application for financial assistance submitted by the Centre National de Coordination des Centrales de Sauvetage in Charleroi, which is proposing to start research on the development of a simple method for establishing whether rescue workers and prospective rescue workers are physically capable of enduring intense heat.

Accident reports

613. The Commission discussed a supplementary report on the Bure-aux-Femmes accident referred to above, and a provisional report on an accident at Sainte-Fontaine, Lorraine, on August 1, 1961, which had involved seven casualties, including engineers (two miners had been buried by a sudden fall at the face, and shortly afterwards the rescue team were caught by a second).

THE WORKING PARTIES

614. The working parties and their subcommittees held a considerable number of meetings.

Several of these were occupied in preparing the regulations on guide testing and rescue operations which were adopted by the Commission on December 12, 1961.

We here enumerate the matters in hand which have not yet been brought before the Commission in plenary session.

Technical problems

615. The working parties studied the following subjects:

(a) propagation of underground combustion or fire by combustible substances inside electric cables with flame-proof sheathing;

(b) oils and lubricants;

(c) protection of electric networks below ground against fire and firedamp ignition, including ignition of sudden outburts of firedamp;

(d) construction and employment of high-tension circuit-breakers and contactors containing little or no oil, usable without risk in gassy areas;

(e) properties of certain materials which can be used to build fire-stoppings, and the design of such stoppings;

(f) methods of erecting temporary explosion-proof screens quickly in the intake airway of a road where fire has broken out;

(g) electromagnetic testing of winding-ropes;

(h) shock resistance of flexible and armoured cables;

(i) rubber sealing.

616. The studies on most of these matters involved practical testing.

Thus tests have been conducted — some of them with financial assistance from the High Authority — in connection with combustible substances inside electric cables, shock resistance of electric cables, fire-stoppings, rubber sealing, and oils and lubricants.

The Working Party on oils and lubricants, in co-operation with representatives of the petroleum and chemical industries, carried out some supplementary study work in continuation of that which had earlier culminated in its

report on the determination of criteria respecting non-flammable (hydraulic) fluids for mechanical transmission and the tests to be effected.[1])

Other tests are to be carried out in connection with the various technical problems listed. For example, observation of the propagation of fire or combustion by combustible substances inside electric cables is to be continued using a somewhat altered heating device.

Rescue operations

617. The Working Party on Co-ordination of Rescue Organizations drew up the skeleton layout for the yearly reports which are to be sent to it by all central rescue stations. The reports are to describe such aspects as the organization of rescue operations, the provision of closed-circuit respirators, the number of rescue operations undertaken, and the number of accidents attributable to the wearing of gas-protection apparatus.

Human factors

618. One of the four working parties responsible for the study of human factors, the Working Party on Medical Problems of Safety Policy, went in detail into the following six questions:

(a) the establishment of a legal obligation for all enterprises and groups of enterprises to run a medical department responsible for carrying out the pre-entry, special and routine examinations advocated by the Commission;

(b) the desirability or otherwise of requiring the medical department to deal only with the preventive side, and not with treatment of, or checking-up on, workers off sick, or with disablements resulting from disease or accident;

[1]) See *Ninth General Report*, No. 520.

(c) the qualifications and experience colliery medical officers should possess;

(d) the part to be played by the workers' representatives in the appointment of colliery medical officers;

(e) the status of the colliery medical officer (allowing him full independence);

(f) participation by the workers' representatives in the running of the colliery medical department.

INFORMATION SESSION ORGANIZED BY THE HIGH AUTHORITY

619. As part of its general information activities, the High Authority organized on March 27 and 28, 1961, an information session for some 80 trade-union leaders with special responsibilities in matters of mine safety from all the member countries.

Those taking part — for Belgium, members of safety and health committees, for France, miners' delegates, and so on — were given accounts of the work of the Commission in the fields of electrification, colliery medical services and hot workings.

First of all, there was an exchange of views and experiences on electrification, in plenary session. The delegates then divided into two working parties: the High Authority was given full details of their discussions, which dealt in particular with

(a) the levelling-up of laws and regulations concerning industrial medicine;

(b) the institution of special degrees for industrial medical officers, and the appointment of the latter by a joint employers' and workers' committee;

(c) arrangements to ensure that industrial medical officers work in complete independence of the social-security supervisory bodies.

As regards hot workings, the trade-unionists gave it as their opinion that all the departments responsible should

make it their foremost concern to maintain normal, atmospherically healthy conditions on the different jobs. Where this was not altogether possible, the temperature should at any rate not be allowed to rise above 32°C., and in addition

(a) each worker whom it was planned to employ in a hot working should undergo a medical examination beforehand;

(b) it should be forbidden to employ any worker aged less than 21 or more than 40 in such workings;

(c) work in hot workings should not be paid at contract or piece rates.

ANNEX ON FINANCE

(Situation as at December 31, 1961)

(Provisional figures)

On June 14, 1962, the High Authority fixed the *rate of the levy* for the financial year 1961-62, *i. e.* for the period running from July 1, 1961, to June 30, 1962.

The High Authority had discussed this question on May 30, 1961, with the members of the appropriate committees of the European Parliament and, in particular, with the Budgeting and Finance Committee. The latter, by a large majority, declared itself in favour of a levy of 0·30% as against the rate of 0·35% fixed in 1960. The Committee felt that a slight reduction in the rate was justifiable considering the funds at the High Authority's disposal, but that it was necessary to ensure that the High Authority would not be obliged to break into its reserves in times of favourable business conditions.

The budget estimates for the financial year 1961-62 are as follows.

		('000,000 E.M.A. units of account)
EXPENDITURE		
Administrative expenses and contributions to the expenses of the common institutions		14.18
Payments in respect of allocations for expenditure on research		10.80
Transfers to Special Reserve (for the financing of workers' housing)		6.50
Contributions to Pension Fund		3.50
Contribution to unallocated balance		1.42
Total expenditure:		36.40
REVENUES		
Proceeds of the levy		27.90
Other revenues		
Interest on bank deposits and investments	6·50	
Sundry receipts	0·50	
		7.00
Receipts for Pension Fund		1.50
Total revenues:		36.40

On the basis of these budget estimates, and taking into account the views expressed by the competent committees, the High Authority, by its Decision No. 8/61,[1]) fixed the rate of the levy at 0·30%.

[1]) See *Journal Officiel des Communautés Européennes*, of June 24, 1962, (Vol. IV No. 42).

I — REVENUES AND EXPENDITURES OF THE HIGH AUTHORITY

A — Revenues

1. PROCEEDS OF THE GENERAL LEVY

('000 E.M.A. units of account)

Country	Financial Year 1960-61			Financial Year 1961-62 (1st 6 months)
	1st 6 months	2nd 6 months	Total	
Germany (Fed. Rep. including Saar)	8,612	8,558	17,170	7,326
Belgium	1,334	1,341	2,675	1,306
France	3,537	3,928	7,465	3,209
Italy	1,581	1,573	3,154	1,500
Luxembourg	512	515	1,027	462
Netherlands	638	660	1,298	559
Community	16,214	16,575	32,789	14,362

2. OTHER REVENUES

('000 E.M.A. units of account)

Nature of Revenue	Financial Year 1960-61			Financial Year 1961-62 (1st 6 months)
	1st 6 months	2nd 6 months	Total	
Interest on bank deposits and investments	3,183	3,442	6,625	6,195[1])
Fines and interest on arrears	10	2	12	35
Receipts for Pension Fund	701	1,233	1,934	641
Sundry receipts	330	131	461	292
Balance of loan service	354	557	911	522
Total	4,578	5,365	9,943	7,685

[1]) During the first six months of the financial year the High Authority collected the amounts of interest which had been conditionally credited to it in preceeding years. This non-recurring revenue amounted to 2,355,000 units of account.

B — Expenditures

('000 E.M.A. units of account)

Nature of Expenditure	Financial Year 1960-61			Financial Year 1961-62 (1st 6 months)
	1st 6 months	2nd 6 months	Total	
Administrative expenses of the High Authority	4,306	5,293	9,599	4,603
Administrative expenses of the other Institutions	1,148	1,173	2,321	1,488
Expenditure on readaptation	4,260	2,693	6,953	802
Expenditure on technical research	1,617	1,696	3,313	2,217
Bank charges and issue costs	1,662[1])	135	1,797	488
Dibursements under pension scheme	140	127	267	92
Total	13,133	11,117	24,250	9,690

[1]) Compared with the provisional figures published in the *Ninth General Report*, the bank charges and issue costs are higher by 1.025 million units of account, which amount had previously been included in the loan service charges.

II — ALLOCATIONS TO OR WITHDRAWALS FROM RESERVE ACCOUNTS (INCL. THE SPECIAL RESERVE)

A — Determination of Balance to be Allocated

('000 E.M.A. units of account)

	Financial Year 1960-61	Financial Year 1961-62[1])
Total revenue	42,733	22,046
Total expenditures	24,249	9,689
Difference	18,484	12,357
Revaluation of DM and Hfl.	6,417	—
Balance to be allocated	24,901	12,357

[1]) First six months.

B — Allocations to or Withdrawals[1]) from Reserve Accounts (incl. the Special Reserve)

('000 E.M.A. units of account)

	Financial Year 1960-61	Financial Year 1961-62[2])
Guarantee Fund	—	—
Special Reserve	7,601	6,297
Allocations:		
for financing of readaptation operations	11,400	(802)
for financing of research projects	(1,040)	3,183
for loan service	(1,218)	271
Pension Fund	1,667	549
Allocation for administrative expenses (incl. unallocated balance)	6,491	2,859
	24,901	21,357

[1]) Amounts in brackets are withdrawals.
[2]) First six months.

III — SURPLUS FUNDS OF THE HIGH AUTHORITY AT THE END OF THE FINANCIAL YEAR

A — Funds which may Not be Used to Cover Budgetary Expenses

('000 E.M.A. units of account)

	Position as at 30-6-1961	Position as at 31-12-1961
Guarantee Fund	100,000	100,000
Special Reserve	35,873	42,170
Pension Fund	8,502	9,051
Total	144,375	151,221

B — Funds Allocated to Cover Budgetary Expenses

('000 E.M.A. units of account)

	Position as at 30-6-1961	Position as at 31-12-1961
Allocation for readaptation operations	44,654	43,852
Allocation for technical research	17,868	21,051
Unallocated balance	12,916	16,046
Total	75,438	80,949

IV — COMMITMENTS OF THE HIGH AUTHORITY FOR READAPTATION OPERATIONS

A — Non-Repayable Grants

('000 E.M.A. units of account)

Type of Operation	Credits opened since 1952[1])	Total paid out since 1952	Commitments outstanding as at 31-12-61[1])
1. *Readaptation*			
a) under Section 23 of the Convention	43,108	20,930	22,178
b) under Article 56 of the Treaty	3,734	86	3,648
2. *Emergency measures to deal with the coal crisis*			
a) Financing of pithead stocks	1,926	1,618	308
b) Special E.C.S.C. allowance for Belgian miners put on short time	6,400	5,218	1,182
Total	55,168	27,852	27,316
Breakdown by countries			
1. Germany	18,374	6,640	11,734
2. Belgium	19,844	11,142	8,702
3. France	4,504	1,326	3,178
4. Italy	12,100	8,706	3,394
5. Netherlands	38	38	—
6. Balance left over	308	—	308
Total	55,168	27,852	27,316

[1]) Including increase due to revaluation of the DM and Hfl.

B — Loans

('000 E.M.A. units of account)

Type of Operation	Credits opened since 1952[1])	Total paid out since 1952[1])	Repay-ments as at 31-12-61[1])	Loans out-standing as at 31-12-61[1])	Commit-ments out-standing as at 31-12-61
1. *Readaptation* under Section 23 of the Convention, for workers' housing at Assoilly	324	292	—	292	32
2. *Emergency measures to deal with the coal crisis* Financing of pithead stocks	5,328	5,328	41	5,287	—
Total	5,652	5,620	41	5,579	32

[1]) Including increase due to revaluation of the DM and Hfl.

V — COMMITMENTS OF THE HIGH AUTHORITY FOR TECHNICAL RESEARCH

A — Non-Repayable Grants

(000 E.M.A. units of account)

Industry or Type of Research	Commitments entered into since 1952[1])	Total paid out since 1952	Commitments outstanding as at 31-12-61[1])
Iron and steel industry	7,252	5,099	2,153
Coalmining industry	7,614	2,486	5,128
Ore-mining (iron and other ores)	5,330	1,959	3,371
Experimental housing schemes (Schemes I and II)	1,969	1,805	164
Industrial health, safety and medecine	8,118	2,822	5,296
Total	30,283	14,171	16,112

[1]) Including increase due to revaluation of DM and Hfl.

B — Loans

('000 E.M.A. units of account)

Type of Research	Commitments entered into since 1952[1])	Total paid out since 1952[1])	Repayments as at 31-12-61	Loans outstanding as at 31-12-61[1])	Commitments outstanding as at 31-12-61
Experimental workers' housing scheme II	2,955	2,955	38	2,917	—
Total	2,955	2,955	38	2,917	—

[1]) Including increase due to revaluation of DM and Hfl.

VI — BORROWINGS OF THE HIGH AUTHORITY

National currency	Year of issue	Interest % p.a.	Term (years)	Initial Amount: in currency concerned	Initial Amount: equivalent in E.M.A. units of account		Amount outstanding as at December 31, 1961 (equivalent in units of account)	
U.S. $	1954	3 7/8	25	$ 100,000,000	100,000,000		87,500,000	
U.S. $	1957	5 1/2	18	$ 25,000,000	25,000,000		25,000,000	
U.S. $	1957	5	3 - 5	$ 10,000,000	10,000,000		3,400,000	
U.S. $	1958	5	20	$ 35,000,000	35,000,000		35,000,000	
U.S. $	1958	4 1/2	3 - 5	$ 15,000,000	15,000,000		10,000,000	
U.S. $	1960	4 3/4 - 5	3 - 5	$ 10,000,000	10,000,000		10,000,000	
U.S. $	1960	5 3/8	20	$ 25,000,000	25,000,000		25,000,000	
						220,000,000		195,900,000
Hfl.	1961	4 1/2	5	Hfl. 10,000,000	2,762,431		2,762,431	
Hfl.	1961	4 1/2	20	Hfl. 50,000,000	13,812,155		13,812,155	
						16,574,586		16,574,586
Sfr.	1956	4 1/4	18	Sfr. 50,000,000	11,434,269		11,434,269	
Sfr.	1961	4 3/4	5	Sfr. 9,000,000	2,058,168		2,058,168	
Sfr.	1961	4 1/2	5	Sfr. 2,290,000	523,690		523,690	
						14,016,127		14,016,127
DM	1955	3 3/4	25	DM 50,000,000	12,500,000		10,765,325	
DM	1956	4 1/4	20	DM 2,977,450	744,362		643,129	
						13,244,362		11,408,454
Lfr.	1955	3 1/2	25	Lfr. 5,000,000	100,000		—	
Lfr.	1957	5 3/8	25	Lfr. 100,000,000	2,000,000		2,000,000	
Lfr.	1961	5 1/4	25	Lfr. 100,000,000	2,000,000		2,000,000	
Lfr.	1961	5	25	Lfr. 100,000,000	2,000,000		2,000,000	
						6,100,000		6,000,000
Bfr.	1955	3 1/2	25	Bfr. 200,000,000	4,000,000		3,576,000	
Bfr.	1955	3 1/2	25	Bfr. 20,000,000	400,000		357,600	
						4,400,000		3,933,600
					Total	274,335,075		247,832,767

VII — FUNDS EMPLOYED FOR LENDING OPERATIONS

Between April 1954 (when the first loan was raised in the United States) and the end of 1961, the High Authority had available for lending operations a total of 336.77 million units of account. These funds were derived from the following sources.

('000,000 E.M.A. units of account)

1. *Borrowed funds*		
Proceeds of loans	274.34	
Anticipatory redemption of loans granted to enterprises. The long lifetime of the original loans enabled the High Authority to relend these amounts for terms of up to 20 years.	10.73	
		285.07
2. *Interest received on investments*		
These revenues, for which the Treaty does not prescribe any particular use, are accumulated in the Special Reserve, and are at present being employed to help finance the building of workers' houses.		
Revenues under this head up to 31. 12. 61. aggregated		42.17
3. *Proceeds of the levy*		
Out of the allocations for readaptation assistance and research projects various sums were disbursed, with the approval of the Council of Ministers, in the form of loans instead of non-repayable grants (*e.g.* for experimental housing schemes and for the financing of pithead stocks). The amounts so authorized up to 31. 12. 61. aggregated		9.53
Total		336.77

VIII — OVERALL PICTURE OF LOAN OPERATIONS

(as at December 31, 1961)

('000,000 E.M.A. units of account)

	Loans from borrowed funds	Loans from the High Authority's own resources		Total
		from the Special Reserve	from other funds	
I. Amounts available	285.07	42.17	9.53	336.77
II. Amounts committed	276.72	27.60	9.32	313.64
III. Paid out	276.31	27.60	9.29	313.20
Redemption payments	37.25	0.67	0.50	38.42
Amounts outstanding as per balance-sheet at 31. 12. 61	239.06	26.93	8.79	274.78
IV. Amounts committed but not yet drawn down	0.41	—	0.03	0.44
V. Amounts not yet committed	8.35	14.57	0.21	23.13

IX — BREAKDOWN OF LOANS COMMITTED, BY TYPES OF INVESTMENT AND BY COUNTRIES

('000,000 E.M.A. units of account)

	Loans from borrowed funds	Loans from the High Authority's own resources		Total
		from the Special Reserve	from other funds	
1. *Type of Investment*				
Coalmining industry (including mine-owned coking-plants)	89.29			89,29
Pithead power-stations	46.31			46.31
Iron-ore mines and ore-preparation plants	22.25			22,25
Iron and steel industry	95.71			95·71
Housing for miners and steelworkers	22.72	27.28	—	50.00
Readaptation	—	—	5.65	5,65
Research (experimental housing schemes)	—	0.32	2,95	3.27
Other projects (European School)	—	—	0,72	0.72
Total	276.28	27.60	9.32	313.20
2. *Geographical Distribution*				
Germany (Fed. Rep., incl. Saar)	146.54	19.40	6.62	172.56
Belgium	30.83	0.91	0.45	32.19
France	56.57	4.14	0,99	61.70
Italy	40.74	0.92	0.23	41.89
Luxembourg	1.60	0.51	0.79	2.90
Netherlands	—	1.72	0,24	1.96
Community	276.68	27.60	9.32	313.20

X — SECURITIES FOR LOANS GRANTED FROM BORROWED FUNDS

(situation as at December 31. 1961)

('000,000 E.M.A. units of account)

1. Guarantees by Governments of member countries, plus negative-pledge clauses	33.04
2. Guarantees by Governments of member countries	10.77
3. Guaranties by banks	13.90
4. Guarantees by banks, plus mortgages	93.35
5. First mortgages	36.09
6. Second mortgages	2.97
7. Guarantees by industrial concerns, plus negative-pledge clauses	22.37
8. Guarantees by industrial concerns	26.57
9. Negative-pledge clauses	—
Total	239.06

XI — INDIRECT MEDIUM-TERM LOANS

These loans are granted to enterprises in the coalmining and steel industries by the banks in the Community countries on their own responsibility under special agreements concluded between the High Authority and the banks concerned.

Country	Year of issue	Term (years)	Amount in national currency ('000,000)	Amount outstanding as at 31-12-1961	
				('000,000 national currency)	(equivalent in '000,000 E.M.A. units of account)
Germany (Fed. Rep.)	1955	5	100,0	—	—
	1958	5	100.0	65.0	16.250
	1960	8	100.0	100.0	25,000
	1961	10	1.5	1.5	0.375
Saar	1957	5	5.3	1.66	0.415
	1961	8	15.0	15.0	3,750
Belgium	1956	5	242.0	—	—
	1957	5	81.0	24.0	0.480
	1958	5	125.0	81.75	1.635
	1961	5	372.5	372.5	7.450
France	1957	5	25.0	19.0	3.848
	1959	5	5.0	5.0	1.012
	1960	5	53.0	53.0	10.735
	1961	5	11.0	11.0	2.228
Italy	1956	5	4,000.0	—	—
	1958	5	500.0	—	—
	1959	5	600.0	—	—
	1961	5	5,100.0	5,100.0	8.159
Luxembourg	1955	5	100.0		
	1961	5	200.0	200.0	4.000
Netherlands	1957	5	2.7	—	—
				Total	85.337

STATISTICAL ANNEX

TABLE No. 1

World Hard-Coal Production

(*'000 metric tons*)

Continent	1950	1952	1956	1957	1959	1960	1961[1])
Europe, excl. U.S.S.R.	552,203	595,084	616,471	617,296	593,794	587,125	
of which: Community	217,280	238,883	249,092	247,888	234,908	233,947	229,973
United Kingdom	219,801	230,124	225,573	227,219	209,411	196,828	193,500
Eastern Europe							
Poland	78,001	84,440	95,635	94,095	99,106	104,438	107,000
others	23,018	25,209	29,091	29,847	32,880	34,072	
U.S.S.R.	185,225	215,009	304,002	328,502	365,220	374,993	372,000
Asia, excl. U.S.S.R.	121,125	153,548	207,634	243,701	465,778	548,565	
of which: China	40,900	63,528	105,992	130,730	347,800	420,000	
Japan	38,459	43,359	46,555	51,732	47,256	51,072	53,600
India	32,825	36,884	39,910	44,202	47,784	52,680	
Africa	30,085	32,311	39,372	40,905	42,076	43,269	
of which: Union of South Africa	26,473	28,065	33,602	34,764	36,452	38,172	39,800
The Americas	524,029	476,174	495,509	484,082	405,135	406,683	
of which: U.S.A.	505,327	457,600	477,993	467,595	389,996	391,526	376,700
Australia and Oceania	17,748	20,597	20,397	21,084	21,499	23,770	
World	1,430,415	1,492,723	1,683,385	1,735,570	1,893,502	1,984,405	

[1]) Provisional figures.

TABLE No. 2

Community Hard-Coal Production

(by countries and coalfields)

('000 metric tons)

Coalfield - Country	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961[1])
Ruhr	114,417	115,551	118,712	121,106	124,627	123,209	122,302	115,389	115,441	116,083
Aachen	6,439	6,588	6,857	7,062	7,208	7,619	8,020	7,894	8,188	8,356
Lower Saxony	2,422	2,333	2,466	2,560	2,572	2,328	2,260	2,303	2,425	2,211
Saar[2])	16,235	16,418	16,818	17,329	17,090	16,455	16,423	16,246	16,234	16,090
Germany (Fed. Rep.)	139,514	140,889	144,853	148,058	151,497	149,612	149,005	141,833	142,287	142,741
Campine	9,712	9,483	9,258	10,144	10,468	10,331	9,973	8,771	9,385	9,610
Southern Belgium	20,672	20,577	19,991	19,833	19,085	18,755	17,089	13,986	13,080	11,907
Belgium	30,384	30,060	29,249	29,978	29,555	29,086	27,062	22,757	22,465	21,516
Nord-Pas-de-Calais	29,406	27,554	28,705	29,101	28,583	28,725	28,858	29,249	28,940	26,926
Lorraine	12,210	12,001	12,996	13,157	13,286	14,297	14,971	15,142	14,703	14,011
Centre-Midi	13,157	12,606	12,299	12,705	12,899	13,373	13,586	12,957	12,092	11,239
Other mines[3])	592	427	405	372	362	400	306	258	226	181
France	55,365	52,588	54,405	55,335	55,129	56,795	57,721	57,606	55,961	52,357
Italy, all coalfields	1,089	1,126	1,074	1,136	1,076	1,019	721	735	736	741
Dutch Limburg	12,532	12,297	12,071	11,895	11,836	11,376	11,880	11,978	12,498	12,618
Community	238,883	236,961	241,653	246,401	249,092	247,888	246,390	234,908	233,947	229,973

[1]) Provisional figures.
[2]) From 1960 onwards, exclusive of the production of the small mines (1959 = 146,000 metric tons).
[3]) Non-nationalized mines.

N.B.
The figures are not wholly comparable as between one country and another, nor indeed, in the case of Germany, as between one coalfield and another, owing to differences in the breakdown of coal grades. The proportion of middlings and slurry produced in the Ruhr, Aachen, Lower Saxony and Dutch Limburg has been converted into terms of saleable coal; that produced in the Saar, Belgian, French and Italian coalfields is reckoned ton for ton for all grades.

TABLE No. 3

Short-Time Working in the Community Coalfields owing to Lack of Sales

Coalfield - Country	1958		1959		1960		1961	
	Average number of days not worked at the pits	Production forfeited ('000 m.t.)	Average number of days not worked at the pits	Production forfeited ('000 m.t.)	Average number of days not worked at the pits	Production forfeited ('000 m.t.)	Average number of days not worked at the pits	Production forfeited ('000 m.t.)
Ruhr	8·71	3,804	11·26	4,977	0·36	162	0·22	104
Aachen	1·73	52	2·70	80	—	—	—	—
Lower Saxony	0·02	0	4·42	41	—	—	—	—
Saar	5·00	278	18·47	1,085	11·47	673	—	—
Germany (Fed. Rep.)	7·83	4,134	11·35	6,183	1·61	835	0·17	104
Campine	14·59	556	59·26	2,269	35·78	1,343	17·69	675
Southern Belgium	22·46	1,577	50·04	3,432	27·97	1,747	1·99	96
Belgium	20·18	2,133	52·88	5,701	30·84	3,090	7·84	770
Nord-Pas-de-Calais	—	—	—	—	5·00	492	—	—
Lorraine	—	—	2·73	143	12·18	638	1·00	752
Centre-Midi	—	—	5·14	237	16·46	711	5·61	242
France	—	—	1·67	380	8·85	1,841	1·65	2.94
Sulcis (Italy)	58·76	180[1])	—	—	—	—	—	—
Dutch Limburg	—	—	—	—	—	—	—	—
Community	8·04	6,447	15·17	12,264	7·62	5,766	1·53	1,168

[1]) Estimated.

TABLE No. 4

Underground Output per Man/Shift in the Community Hard-Coal Mines

(by countries and coalfields)

(kilogrammes

Coalfield - Country	1938	1953	1957	1959	1960	1961[1])
Ruhr	1,970	1,486	1,614	1,886	2,102	2,246
Aachen	1,409	1,186	1,314	1,516	1,702	1,836
Lower Saxony	1,380	1,130	1,264	1,368	1,739	1,969
Saar	1,570	1,676	1,800	1,851	2,013	2,197
Germany (Fed. Rep.)	1,877	1,480	1,606	1,846	2,057	2,207
Campine	1,523[2])	(1,428)[3])	1,583	1,652	1,792	—
Southern Belgium	1,004[2])	(1,075)[3])	1,125	1,262	1,452	—
Belgium	1,085[2])	(1,164)[3])	1,253	1,388	1,577	1,714
Nord-Pas-de-Calais	1,136	1,277	1,506	1,507	1,562	1,610
Lorraine	2,014	2,088	2,310	2,424	2,580	2,705
Centre-Midi	1,176	1,343	1,634	1,680	1,789	1,913
Other pits	—	974	1,219	1,327	1,609	1,791
France	1,226	1,416	1,682	1,717	1,798	1,878
Sulcis	—	609	957	1,164	1,346	1,566
Dutch Limburg	2,371	1,567	1,499	1,617	1,789	2,055
Community [4])	—	1,421	1,563	1,745	1,919	2,061
Community [5])	1,590	1,413	1,560	1,743	1,917	2,059

[1]) Provisional figures.
[2]) Including shifts of supervisory personnel.
[3]) Estimated figures.
[4]) Exclusive of Sulcis.
[5]) Inclusive of Sulcis.

N.B.
The figures are not wholly comparable as between one country and another, nor, in the case of Germany, as between one coalfield and another (the Saar is different from the other three), owing to differences in the breakdown of production (see note to previous table) and in the length of shifts.

TABLE No. 5

Pithead Stocks of Hard Coal

('000 metric tons at end of year)

Coalfield - Country	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961[1])
Ruhr	445	783	617	540	653	684	7·817	9·444	5·159	5·774
Aachen	12	10	17	19	29	25	563	497	222	430
Lower Saxony	8	48	21	13	17	26	185	389	368	554
Saar	462	536	821	228	102	181	898	1,436	1,400	1,532
Germany (Fed. Rep.)	927	1,377	1,475	800	802	916	9,463	11,766	7,148	8,290
Campine	667	1,169	898	69	23	500	2,506	2,341	2,255	1,599
Southern Belgium	1,006	1,908	1,917	302	156	913	4,423	5,156	4,310	2,773
Belgium	1,673	3,077	2,815	371	179	1,413	6,928	7,496	6,565	4,373
Nord/Pas-de-Calais	1,553	2,036	2,995	1,759	1,416	1,559	2,450	3,710	4,532	3,700
Lorraine	1,181	1,391	2,032	1,790	1,458	1,498	2,612	3,795	4,764	4,524
Centre-Midi	1,442	2,292	2,769	2,417	1,636	1,506	2,308	3,438	3,903	3,618
France[2])	4,200	5,756	7,838	5,983	4,524	4,583	7,380	10,955	13,202	11,844
Italy, all coalfields	53	49	26	65	29	50	21	111	93	10
Dutch Limburg	237	213	287	292	259	312	746	864	655	551
Community	7,090	10,472	12,441	7,511	5,793	7,273	24,538	31,193	27,664	25,068
of which: low-grade fuels[3])	—	—	58%	75%	75%	65%	36%	34%	47%	—

[1]) Provisional figures.
[2]) Including stocks at non-nationalized mines.
[3]) Middlings, slurry and various other low-grade fuels.

TABLE No. 6

Production of Coke-Oven Coke

(Community)

('000 metric tons)

Year	Germany (Fed. Rep.)	Saar	Belgium	France	Italy[1])	Netherlands	Community
1952	37,233	3,888	6,407	9,216	2,350	3,285	62,379
1953	37,776	3,590	5,945	8,631	2,327	3,245	61,514
1954	34,921	3,666	6,147	9,220	2,499	3,381	59,833
1955	40,520	3,939	6,600	10,725	2,949	3,901	68,633
1956	43,435	4,206	7,270	12,249	3,411	4,238	74,809
1957	45,193	4,324	7,156	12,564	3,687	4,243	77,168
1958	43,439	4,175	6,906	12,468	3,360	4,081	74,431
1959	38,405	4,335	7,217	13,092	3,054	4,083	70,187
1960	44,541		7,539	13,605	3,725	4,518	73,929
1961[2])	44,294		7,252	13,464	3,876	4,555	73,442

[1]) Including Trieste from 1955 onwards.
[2]) Provisional figures.

TABLE No. 7

Stocks of Coke at Coking-Plants

(Community)

('000 metric tons)

Year	Germany (Fed. Rep.)	Saar	Belgium	France	Italy	Netherlands	Community
1952	110	18	101	187	52	63	531
1953	3,429	34	200	435	63	99	4,260
1954	1,984	19	127	375	58	82	2,645
1955	164	12	71	164	62	82	555
1956	178	20	87	175	50	68	578
1957	622	53	237	448	129	163	1,653
1958	5,316	51	276	708	321	342	7,015
1959	7,062	18	291	688	209	301	8,583
1960	5,475		270	576	111	221	6,653
1961[1])	4,973		266	733	160	297	6,429

[1]) Provisional figures.

TABLE No. 8

Community Hard-Coal Imports from Third Countries

('000 metric tons)

Country of destination \ Country of origin	U.S.A.	U.K.	Poland	U.S.S.R.	Other third countries	Total
Germany (Fed. Rep.)						
1953	3,421	1,521	76	—	27	5,045
1957	15,904	497	560	38	147	17,147
1960	4,368	395	506	38	153	5,461
1961	4,449	542	391	44	175	5,601
Belgium						
1953	664	420	—	46	2	1,133
1957	2,138	564	33	50	35	2,820
1960	800	132	—	2	—	934
1961	669	134	—	20	8	831
France						
1953	289	448	480	260	138	1,615
1957	6,903	742	1,281	605	169	9,701
1960	578	175	265	784	81	1,882
1961	648	414	225	933	143	2,363
Italy						
1953	1,609	1,704	613	46	249	4,222
1957	8,201	132	125	239	107	8,805
1960	4,428	124	812	496	306	6,166
1961	4,430	124	945	889	352	6,740
Netherlands						
1953	701	986	24	80	10	1,802
1957	4,581	697	—	69	37	5,384
1960	2,211	909	120	35	28	3,304
1961	1,661	1,296	133	23	20	3,134
Community						
1953	6,684	5,085[2])	1,193	432	426	13,823
1957	37,828[1])	2,635[2])	1,999	1,001	495	43,959
1960	12,386	1,734	1,703	1,355	568	17,747
1961	11,857	2,510	1,694	1,909	698	18,669

[1]) Including 87 to the Saar and 13 to Luxembourg.
[2]) Including 6 to Luxembourg in 1953 and 2 in 1957.

N.B.
For figures in respect of the years not listed in this table, see *Statistical Annexes* to the *Eighth* and *Ninth General Reports* or *Bulletin statistique, charbon et acier*.
The 1961 figures are provisional.

TABLE No. 9

Community Hard-Coal Exports to Third Countries

('000 metric tons)

Country of destination / Country of origin	U.K.	Scandi-navian-countries	Switzer-land	Austria	Other countries	Total
Germany (Fed. Rep.)[1]						
1953	26	548	405	1,778	507	3,264
1957	—	477	587	923	687	2,675
1960	—	306	776	983	613	2,678
1961	—	297	690	930	510	2,427
Saar						
1953	227	185	315	196	171	1,094
1957	83	—	371	64	40	557
Belgium						
1953	192	64	50	2	274	582
1957	616	77	161	—	1	855
1960	—	43	267	11	37	358
1961	—	159	280	9	234	682
France						
1953	116	229	267	129	140	881
1957	161	9	412	58	224	863
1960	—	—	247	19	203	469
1961	—	—	258	13	116	387
Netherlands						
1953	—	0	39	0	12	51
1957	—	20	121	5	4	149
1960	—	30	81	1	0	112
1961	—	23	47	1	1	72
Community						
1953	561	1,026	1,076	2,105	1,104	5,872
1957	859	582	1,651	1,050	957	5,099
1960	—	378	1,371	1,015	853	3,617
1961	—	479	1,275	953	861	3,568

[1]) German figures include exports from the Saar as from 1960.

N.B.

For figures in respect of the years not listed in this table, see *Statistical Annexes* to the *Eighth* and *Ninth General Reports* or *Bulletin statistique, charbon et acier.*

The 1961 figures are provisional.

TABLE No. 10

Community Coke Exports to Third Countries

('000 metric tons)

Country of destination / Country of origin	Scandinavian countries	Switzerland	Austria	Other third countries	Total
Germany (Fed. Rep.)					
1953	2,251	384	275	310	3,220
1957	1,787	420	362	291	2,860
1960	1,684	352	406	621	3,063
1961	1,488	302	339	770	2,899
Belgium					
1953	337	17	9	93	456
1957	197	11	0	9	217
1960	185	12	2	59	257
1961	140	14	2	22	178
France					
1953	21	29	2	19	71
1957	1	50	—	22	73
1960	—	33	1	6	40
1961	—	29	—	10	39
Italy					
1953	—	—	—	70	70
1957	—	—	—	3	3
1960	—	4	54	54	112
1961	—	2	98	43	143
Netherlands					
1953	427	113	—	37	577
1957	466	118	21	27	631
1960	380	115	37	36	568
1961	220	112	39	83	454
Community					
1953	3,036	543	290[1])	529	4,398
1957	2,450	600	383	351	3,785
1960	2,249	516	500	774	4,039
1961	1,848	459	478	928	3,713

[1]) Including 4,000 tons from the Saar.

N.B.
For figures in respect of the years not listed in this table, see *Statistical Annexes* to to the *Eighth* and *Ninth General Reports* or *Bulletin statistique, charbon et acier.*
The 1961 figures are provisional.

TABLE No. 11

Trade in Hard Coal and Hard-Coal Briquettes within the Community

(*'000 metric tons*)

Country of supply	Countries of destination	1952	1953	1954	1958	1960	1961[1])
Germany (Fed. Rep.)	Belgium	317	691	1,930	1,826	2,019	2,206
	France/Saar	3,706	3,828	4,256	4,490	6,729	6,350
	Italy	2,993	3,421	3,505	1,286	3,426	2,878
	Luxembourg	103	126	118	126	158	147
	Netherlands	2,143	2,544	3,028	2,001	2,917	2,961
	Total	9,262	10,611	12,837	9,729	15,250	14,542
Belgium	Germany (Fed. Rep.)	19	107	226	52	196	189
	France/Saar	1,228	1,830	1,597	1,279	772	705
	Italy	681	839	576	0	295	478
	Luxembourg	65	23	38	13	33	34
	Netherlands	574	1,070	2,166	868	781	923
	Total	2,567	3,869	4,603	2,212	2,076	2,329
France/Saar[2])	Germany (Fed. Rep.)	3,940	4,320	4,239	3,024	620	635
	Belgium	169	147	331	192	232	240
	Italy	214	471	417	40	33	40
	Luxembourg	155	129	132	115	48	25
	Netherlands	4	106	10	48	53	31
	Total	4,482	5,173	5,129	3,419	986	971

Netherlands	Germany (Fed. Rep.)	—	10	124	119	516	531
	Belgium	4	175	521	763	834	925
	France/Saar	—	74	386	498	1,128	1,297
	Italy	—	4	—	4	15	7
	Luxembourg	—	—	—	0	5	4
	Total	4	263	1,031	1,384	2,498	2,764
	Grand total	16,315	19,916	23,600	16,745	20,810	20,606
	of which:						
	Germany (Fed. Rep.)	3,959	4,437	4,589	3,195	1,332	1,355
	Belgium	490	1,013	2,782	2,781	3,085	3,371
	France/Saar	4,934	5,732	6,239	6,268	8,628	8,352
	Italy	3,888	4,735	4,498	1,330	3,769	3,403
	Luxembourg	323	279	288	254	245	210
	Netherlands	2,721	3,720	5,204	2,917	3,750	3,915

[1]) Provisional figures.

[2]) From 1960 onwards, the tonnages for the Saar are included in the figures for the Federal Republic of Germany.

N.B.

For figures in respect of the years not listed in this table, see *Statistical Annexes* to the *Eighth* and *Ninth General Reports* or *Bulletin statistique, charbon et acier.*

TABLE No. 12

Coke Trade within the Community

(*'000 metric tons*)

Country of supply	Countries of destination	1952	1953	1954	1958	1960	1961[1])
Germany (Fed. Rep.)[2])	Belgium	—	8	48	73	69	45
	France/Saar	3,442	2,768	2,212	3,383	3,893	3,920
	Italy	2	11	23	49	27	80
	Luxembourg	2,970	2,798	2,773	3,085	3,466	3,522
	Netherlands	179	270	346	194	336	291
	Total	6,593	5,855	5,402	6,784	7,791	7,858
Belgium	Germany (Fed. Rep.)	201	21	1	5	32	26
	France/Saar	197	—	451	331	371	399
	Italy	—	220	—	1	90	32
	Luxembourg	140	102	102	59	238	238
	Netherlands	5	22	8	14	—	—
	Total	543	365	562	410	731	695
France/Saar[2])	Germany (Fed. Rep.)	120	158	184	64	41	32
	Belgium	—	—	4	1	13	16
	Italy	—	—	—	39	29	17
	Luxembourg	—	—	—	—	—	—
	Netherlands	—	—	—	—	1	0
	Total	120	158	188	104	85	65

Netherlands	Germany (Fed. Rep.)	—	2	3	7	313	203
	Belgium	2	17	24	76	163	208
	France/Saar	518	448	565	612	834	1,194
	Luxembourg	234	203	246	370	383	320
	Total	754	670	838	1,072[3])	1,708[4])	1,962[5])
	Grand total	8,104	7,075	6,990	8,400	10,315	10,582
	of which:						
	Germany (Fed. Rep.)	321	181	188	76	387	261
	Belgium	2	25	76	150	245	269
	France/Saar[6])	4,251	3,463	3,228	4,357	5,097	5,515
	Italy	2	11	23	96	163	166
	Luxembourg	3,344	3,103	3,121	3,514	4,086	4,080
	Netherlands	184	292	354	208	337	291

[1]) Provisional figures.
[2]) From 1960 onwards, the tonnages for the Saar are included in the figures for the Federal Republic of Germany.
[3]) Including 7 to Italy.
[4]) Including 17 to Italy.
[5]) Including 37 to Italy.
[6]) Including some small tonnages delivered by Italy.

N.B.

For figures in respect of the years not listed in this table, see *Statistical Annexes* to the *Eighth* and *Ninth General Reports* or *Bulletin statistique, charbon et acier.*

TABLE No. 13

Stocks of Hard Coal and Hard-Coal Briquettes held by Consumers within the Community

('000 metric tons)

At end of period	Coking-plants[1])	Briquetting plants	Railways	Power-stations	Gas-works	Iron and steel industry	Other industries	Total
1953	1,311	439	1,484	2,393	1,167	312	3,666	10,772
1954	1,381	346	1,300	2,770	1,068	301	3,350	10,516
1955	1,798	318	1,036	3,092	1,055	347	4,332	11,978
1956	2,155	231	1,203	4,758	1,170	408	5,116	15,041
1957	2,678	482	1,879	6,734	1,966	423	5,646	19,808
1958	2,401	514	1,945	8,612	1,603	350	4,838	20,263
1959	2,437	370	1,308	7,345	1,161	274	3,972	16,867
1960	2,215	328	987	8,263	1,223	261	3,850	17,127
October 1960	2,237	346	1,165	8,492	1,355	243	4,078	17,916
October 1961	2,094	365	980	7,952	1,166	344	4,009	16,910

[1]) New series of figures as from 1960.

TABLE No. 14

Development of Coal Prices in the Community[1])

(Shown beside each price is the volatile-matter content declared by the producer for the type and size concerned. See note below.)

Product		Date	Ruhr		Aachen		Saar		Netherlands		Belgium[2])				Nord/ Pas-de-Calais		Lorraine	
											Cobechar sales		Independent sales					
Type	Size	Month and Year	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Anthra-cites	French nuts	Jun. 52	19·20	7-10	19·20	< 10					27·22	< 10		< 10	26·06	< 11		
		Apr. 53	22·80	7-10	24·06	< 10			21·60	10-14	27·60	< 10		< 10	26·57	< 11		
		Apr. 54	22·80	7-10	24·52	< 10			21·22	10-14	27·60	< 10		< 10	26·86	< 10		
		Jun. 55	22·97	7-10	25·49	< 10			22·37	9-12	30·00	< 10		< 10	27·83	< 10		
		Apr. 56	23·16	7-10	25·90	< 10			23·68	9-12	30·00	< 10		< 10	27·83	< 10		
		Apr. 57	24·08	7-10	27·49	< 10			25·39	9-12	33·60	< 10		< 10	27·83	< 10		
		Apr. 58	25·69	7-10	28·93	< 10			26·97	8-10	34·60	< 10		< 10	26·50	< 10		
		Apr. 59	25·69	7-10	28·93	< 10			27·63	8-10	34·60	< 10		< 10	26·95	< 10		
		Apr. 60	25·49	7-10	29·83	< 10			27·63	8-10	34·60	< 10	34·60	< 10	26·95	< 10		
		Jan. 61	25·49	7-10	29·83	< 10			27·63	8-10	34·60	< 10	34·60	< 10	26·95	< 10		
		Apr. 61	26·76	7-10	31·32	< 10			29·01	8-10	34·60	< 10	34·60	< 10	28·98	< 10		
		Jan. 62	30·48	7-10	31·32	< 10			29·01	8-10	34·60	< 10	34·60	< 10	28·98	< 10		
Low volatile	small nuts	Jun. 52	16·23	10-14	16·23	10-14					27·22	10-12½		10-12½	26·06	11-13		
		Apr. 53	19·37	10-14	20·63	10-14			21·60	10-14	27·60	10-12½		10-12½	26·57	11-13		
		Apr. 54	19·37	10-14	20·86	10-14			21·22	10-14	27·60	10-12½		10-12½	26·86	10-14		
		Jun. 55	19·54	10-14	21·95	10-14			21·45	11-14	30·00	10-12½		10-12½	27·26	10-14		
		Apr. 56	19·73	10-14	22·36	10-14			22·76	11-14	30·00	10-12½		10-12½	27·26	10-14		
		Apr. 57	20·65	10-14	23·37	10-14			24·47	10-13	33·60	10-12½		10-12½	27·26	10-14		
		Apr. 58	22·15	10-14	25·05	10-14			26·05	10-12	34·10	10-14		10-12½	25·79	10-14		
		Apr. 59	22·14	10-14	25·05	10-14			26·32	10-12	32·60	10-14		10-12½	26·34	10-14		
		Apr. 60	22·06	10-14	23·89	10-14			26·32	10-12	31·60	10-14	30·60	10-12½	26·34	10-14		
		Jan. 61	22·06	10-14	23·89	10-14			26·32	10-12	31·60	10-14	30·60	10-12½	26·34	10-14		
		Apr. 61	23·16	10-14	25·08	10-14			27·62	10-12	31·60	10-14	30·60	10-12½	26·95	10-14		
		Jan. 62	23·16	10-14	25·08	10-14			27·62	10-12	31·60	10-14	31·00	10-12½	26·95	10-14		

Semi-bituminous	singles	Jun.	52	11·65	14-19	11·65	14-19					17·22	16-20		16-20	16·51	13-22		
		Apr.	53	13·66	14-19	14·92	14-19			14·40	15-20	16·40	16-20		16-20	16·80	13-22		
		Apr.	54	13·66	14-19	14·35	16-19			14·40	15-20	16·40	16-20		16-20	17·14	14-22		
		Jun.	55	14·05	14-19	14·40	16-19			14·47	15-20	15·70	16-20		16-20	16·29	14-18		
		Apr.	56	14·25	14-19	14·82	16-19			14·47	15-20	15·70	16-20		16-20	16·29	14-18		
		Apr.	57	15·16	14-19	16·06	16-19			17·24	15-20	19·40	16-20		16-20	19·14	14-18		
		Apr.	58	16·32	14-20	17·39	16-19			18·55	14-18	20·10	18-20		18-20	17·07	14-18		
		Apr.	59	16·09	16-20	17·39	16-19			17·11	14-18	19·70	18-20	19·20	18-20	16·00	14-18		
		Apr.	60	15·77	16-20	16·91	16-19			15·53	14-18	17·60	18-20	17·60	18-20	16·00	14-18		
		Jan.	61	15·77	16-20	16·91	16-19			15·53	14-18	17·60	18-20	—	18-20	16·00	14-18		
		Apr.	61	16·56	16-20	17·76	16-19			16·09	14-18	17·60	18-20	—	18-20	16·00	14-18		
		Jan.	62	16·56	16-20	17·76	16-19			16·09	14-18	17·60	18-20	—	18-20	16·00	14-18		
High-volatile bituminous	No. 2 nuts (doubles)	Jun.	52	11·31	28-40			17·71	40-42			18·22	> 28½		> 28½	17·43	> 30	17·71	40-42
		Apr.	53	13·32	28-40			17·83	40-42			17·20	> 28½		> 28½	17·83	> 30	17·83	40-42
		Apr.	54	13·09	28-40			18·14	40-42			17·20	> 28½		> 28½	17·69	> 30	17·83	40-42
		Jun.	55	13·25	28-40			18·14	40-42			16·26	> 28½		> 28½	17·69	> 30	17·83	40-42
		Apr.	56	13·45	28-40			17·86	40-42			16·26	> 28½		> 28½	17·69	> 30	17·83	40-42
		Apr.	57	14·37	28-40			18·00	40-43			18·90	> 28½		> 28½	18·66	> 30	17·83	40-42
		Apr.	58	15·40	33-40			17·02	40-43			18·90	> 28		> 28	17·24	> 30	16·67	40-42
		Apr.	59	14·83	33-40			15·60	40-43			18·90	> 28	17·20	> 28	15·60	> 30	15·50	40-42
		Apr.	60	14·63	33-40			15·96	40-43			16·40	> 28	16·40	> 28	15·60	> 30	15·50	40-42
		Jan.	61	14·63	33-40			15·96	40-43			16·40	> 28	16·40	> 28	15·60	> 30	15·50	40-42
		Apr.	61	15·36	33-40			16·75	40-43			16·40	> 28	16·40	> 28	16·41	> 30	15·50	40-42
		Jan.	62	15·36	33-40			16·75	40-43			16·40	> 28	16·40	> 28	16·41	> 30	15·50	40-42

Table No. 14 (contd.)

Product		Date	Ruhr		Aachen		Saar		Netherlands		Belgium[2])				Nord/ Pas-de-Calais		Lorraine	
											Cobechar sales		Independent sales					
Type	Size	Month and Year	Price	V.M. %	Price	V. M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %	Price	V.M. %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
High-volatile bitu-minous	No. 5 nuts (grains)	Jun. 52	11·20	28-40			13·49	39-41			15·72	> 28½		> 28½	15·54	> 30	13·49	39-41
		Apr. 53	13·20	28-40			13·60	39-41			15·00	> 28½		> 28½	15·83	> 30	13·89	39-41
		Apr. 54	12·86	28-40			14·00	39-41			15·00	> 28½		> 28½	15·83	> 30	14·14	39-41
		Jun. 55	13·03	28-40			13·86	39-41			15·00	> 28½		> 28½	15·00	> 30	13·71	39-41
		Apr. 56	13·22	28-40			14·14	39-41			15·20	> 28½		> 28½	15·00	> 30	13·86	39-41
		Jan. 61	14·14	28-40			15·43	37-42			17·80	> 28½		> 28½	17·43	> 30	15·43	39-41
		Apr. 58	15·29	33-40			14·88	37-42			17·80	> 28		> 28	15·64	> 30	14·64	39-41
		Apr. 59	14·49	33-40			14·18	37-42			16·80	> 28	16·00	> 28	14·89	> 30	13·68	39-41
		Apr. 60	14·29	33-40			14·06	37-42			15·00	> 28	15·00	> 28	14·89	> 30	13·88	39-41
		Jan. 61	14·29	33-40			14·06	37-42			15·00	> 28	15·00	> 28	14·89	> 30	13·88	39-41
		Apr. 61	15·00	33-40			14·76	37-42			15·00	> 28	15·00	> 28	14·89	> 30	14·18	39-41
		Jan. 62	15·00	33-40			14·76	37-42			15·00	> 28	15·00	> 28	14·89	> 30	14·18	39-41
Bitu-minous	washed duff or coking fines	Jun. 52	10·86	19-28	10·86	> 19	13·26	33-40			14·32	19-28½		19-28½	13·89	22-30	12·51	36-39
		Apr. 53	12·63	19-28	13·89	> 19	13·54	33-40	13·37	20-25	14·20	20-28½		20-28½	14·40	22-30	12·63	36-39
		Apr. 54	12·17	19-28	13·43	> 19	13·97	33-40	12·88	20-25	14·06	20-28½		20-28½	14·26	20	13·00	36-39
		Jun. 55	12·34	19-28	13·49	> 19	13·83	33-40	12·89	20-25	13·82	20-28½		20-28½	13·70	18	12·66	36-39
		Apr. 56	12·53	19-28	13·90	> 19	14·00	33-40	12·89	20-25	13·82	20-28½		20-28½	13·70	18	12·66	36-39
		Apr. 57	13·45	19-28	14·91	> 19	14·86	33-40	14·47	20-25	17·30	20-28½		20-28½	14·57	18	14·00	36-39
		Apr. 58	14·49	18-30	15·96	> 19	15·12	33-40	15·26	20-25	16·70	20-28		20-28	13·95	18	13·69	36-39
		Apr. 59	14·49	18-30	15·96	> 19	14·79	33-40	14·34	20-25	15·70	20-28	15·60	20-28	13·88	18	13·58	36-39
		Apr. 60	14·47	18-30	15·94	> 19	15·66	33-40	13·42	20-25	14·60	20-28	15·30	20-28	14·08	18	14·18	36-39
		Jan. 61	14·47	18-30	15·94	> 19	15·66	33-40	13·42	20-25	14·40	20-28	15·30	20-28	14·08	18	14·18	36-39
		Apr. 61	15·19	18-30	16·74	> 19	16·44	33-40	13·88	20-25	14·40	20-28	15·30	20-28	14·08	18	14·18	36-39
		Jan. 62	15·19	18-30	16·74	> 19	16·44	33-40	13·88	20-25	14·40	20-28	14·60	20-28	14·08	18	14·18	36-39

Coke	large	Jun. 52	13·94		13·94		20·14								18·66		20·14
		Apr. 53	15·26		16·52		20·29		16·55						18·80		20·29
		Apr. 54	14·80		16·06		19·71		16·04						18·80		29·29
		Jun. 55	15·23		16·72		19·43		16·32						18·09		19·57
		Apr. 56	16·24		17·49		20·14		17·89						18·09		19·57
		Apr. 57	17·72		18·96		20·86		19·47						20·23		21·00
		Apr. 58	19·10		20·90		21·19		20·92						19·76		21·43
		Apr. 59	19·10		20·90		20·47		20·13						19·04		20·86
		Apr. 60	19·07		20·88		21·71		18·55						19·66		21·48
		Jan. 61	19·07		20·88		21·71		19·07						19·66		21·48
		Apr. 61	20·03		21·92		22·80		19·75						19·66		21·48
		Jan. 62	20·03		21·92		22·80		19·75						19·66		21·48
Taxes to be added to above prices		1952	4·16%		4·16%		9·11%		4·16%		4·50%		4·50%		7·93%		7·93%
		1953	4·16%		4·16%		9·11%		4·16%		4·50%		4·50%		7·93%		7·93%
		1954	4·16%		4·16%		9·11%		4·16%		4·50%		4·50%		7·93%		7·93%
		1955	4·16%		4·16%		9·11%		4·16%		4·50%		4·50%		7·93%		7·93%
		1956	4·16%		4·16%		11·11%		5·26%		5·00%		5·00%		9·29%		9·29%
		1957	4·16%		4·16%		11·11%		5·26%		5·00%		5·00%		11·11%		11·11%
		1958	4·16%		4·16%		11·11%		5·26%		5·00%		5·00%		11·11%		11·11%
		1959	4·16%		4·16%		4·16%		5·26%		5·00%		5·00%		11·11%		11·11%
		1960	4·16%		4·16%		4·16%		5·26%		5·00%		5·00%		11·11%		11·11%
		1961	4·16%		4·16%		4·16%		5·26%		5·00%		5·00%		11·11%		11·11%
		1962	4·16%		4·16%		4·16%		5·26%		1·00%		1·00%		11·11%		11·11%

[1]) The prices, expressed in E.M.A. 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.

[2]) At the end of December 1958, three Campine enterprises resumed their commercial independence, each thereafter lodging price-schedules of its own. Other enterprises subsequently did the same, the total number thus selling independently being at one time twelve. By January 1, 1961, however, nine of the twelve, including the largest, had rejoined Cobechar.

N.B.

The prices shown for 1952 are those charged in the home markets. Export prices, even to those other Community countries which at that date did not yet form part of the Common Market, were for the most part a good deal higher. This system of dual pricing was abolished on the introduction of the Common Market. Before the introduction of the Common Market the prices of the Ruhr and Aachen coalfields were quoted for delivery "f.o.t. Ruhr basing-point". The change in the method of quoting to "f.o.t. colliery" reduced the delivered price for customers located nearer to the colliery than to the basing-point. This was, for instance, the case for the majority of the customers of the Aachen coalfield.

Since the contribution to the miners' housing fund (which was levied for seven years at varying rates) has been abolished, the amounts payable to the fund at the time, together with the compensation levy invoiced over and above the schedule prices, have been added to the prices of Ruhr and Aachen products as shown in earlier Reports. All the prices above are thus basis prices as invoiced to customers, and are more easily intercomparable.

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 No. 15

Comparative Movement of Coal Prices in the Different Coalfields of the Community

	1953 = 100										Ruhr prices in 1953 = 100									
	1953	1954	1955	1956	1957	1958	1959	1960	1961 Apr.	1962	1953	1954	1955	1956	1957	1958	1959	1960	1961 Apr.	1962
Ruhr																				
Anthracite	100	100	101	102	106	113	113	112	117	134										
Low-volatile	100	100	101	102	107	114	114	114	120	120										
Semi-Bituminous	100	100	103	104	111	119	118	115	121	121										
High-volatile bitum. No. 2 nuts	100	98	99	101	108	116	111	110	115	115										
High-volatile bitum. No. 5 nuts	100	97	99	100	107	116	110	108	114	114										
Washed fines, bitum.	100	96	98	99	106	115	115	115	120	120										
Coke	100	97	100	100	116	125	125	125	131	131										
Aachen																				
Anthracite	100	102	106	108	114	120	120	124	130	130	106	108	111	112	114	113	113	117	117	103
Low-volatile	100	101	106	108	113	121	121	116	122	122	107	108	112	113	113	113	113	108	108	108
Semi-bituminous	100	96	97	99	108	117	117	113	119	119	109	105	102	104	106	107	108	107	107	107
Washed fines, bitum.	100	97	97	100	107	115	115	115	121	121	110	110	109	111	111	110	110	110	110	110
Coke	100	97	101	106	115	127	127	126	133	133	108	109	110	108	107	109	109	109	109	109
Saar																				
High-volatile bitum. No. 2 nuts	100	102	102	100	101	95	87	90	94	94	134	139	137	133	125	111	105	109	109	109
High-volatile bitum. No. 5 nuts	100	102	102	104	113	109	104	103	109	109	103	109	106	107	109	97	98	98	98	98
Bituminous fines	100	103	102	103	110	112	109	116	121	121	107	115	112	112	110	104	102	108	108	108
Coke	100	97	96	99	103	104	101	107	112	112	133	133	128	124	118	111	107	114	114	114
Netherlands																				
Anthracite	100	98	104	110	118	125	128	128	134	134	95	93	97	102	105	105	108	108	108	95
Low-volatile	100	98	99	105	113	123	122	122	128	128	112	110	110	115	118	118	119	119	119	119
Semi-bituminous	100	100	100	100	120	129	119	108	112	112	105	105	103	102	114	114	106	98	98	97
Bituminous fines	100	94	94	94	105	111	104	100	104	104	109	106	104	103	108	105	99	93	93	91
Coke	100	97	99	108	118	126	122	112	119	119	108	108	107	110	110	110	105	97	100	99

Belgium (Cobechar sales)																				
Anthracite	100	100	109	109	122	125	125	125	125	125	121	121	131	130	140	135	135	136	129	114
Low-volatile	100	100	109	109	122	124	118	114	114	114	142	142	154	152	163	154	147	143	136	136
Semi-bituminous	100	100	96	96	118	123	120	107	107	107	120	120	112	110	128	123	122	112	106	106
High-volatile bitum. No. 2 nuts	100	100	95	95	110	110	110	95	95	95	129	131	123	121	132	123	127	112	107	107
High-volatile bitum. No. 5 nuts	100	100	100	101	119	119	112	100	100	100	114	117	115	115	126	116	116	105	100	100
Bituminous fines	100	99	97	97	122	118	111	103	101	101	112	116	112	110	129	115	108	101	95	95
Belgium (Independent sales)																				
Anthracite								125	125	129								136	129	117
Low-volatile								111	111	112								139	132	134
Semi-bituminous							117	107	—	—							119	112	—	—
High-volatile bitum. No. 2 nuts							100	95	—	95							116	112	107	107
High-volatile bitum. No. 5 nuts							107	100	—	100							110	105	100	100
Bituminous fines							110	108	108	103							108	106	101	96
Nord-Pas-de-Calais																				
Anthracite	100	101	105	105	105	100	101	101	109	109	117	118	121	120	116	103	105	106	108	95
Low-volatile	100	101	103	103	103	97	99	99	101	101	137	139	140	138	132	116	119	119	116	116
Semi-bituminous	100	102	97	97	114	102	95	95	95	95	123	125	116	114	126	105	99	101	97	97
High-volatile bitum. No. 2 nuts	100	99	99	99	105	97	87	87	92	92	134	135	134	132	130	112	105	107	107	107
High-volatile bitum. No. 5 nuts	100	100	95	95	110	99	94	94	94	94	120	123	115	113	123	102	103	104	99	99
Bituminous fines	100	99	95	95	101	97	96	98	98	98	114	117	111	109	108	96	96	97	93	93
Coke	100	100	96	96	108	105	101	105	105	105	123	127	119	111	114	103	100	103	98	98
Lorraine																				
High-volatile bitum. No. 2 nuts	100	100	100	100	100	93	87	87	87	87	134	136	135	133	124	108	105	106	101	101
High-volatile bitum. No. 5 nuts	100	102	99	100	111	105	98	100	102	102	105	110	105	105	109	96	94	97	95	95
Bituminous fines	100	103	100	100	111	108	108	112	112	112	100	107	103	101	104	94	94	98	93	93
Cokes	100	100	96	96	103	106	103	106	106	106	133	137	128	121	119	112	109	113	107	107

N.B.
The very steep drop in the March 1958 indices for the Saar, Nord/Pas-de-Calais and Lorraine coalfields reflects the incidence on the prices of French and Saar coal in the Community of the application to coal, on October 28, 1957, of the French currency measures known as "Operation Twenty per Cent". Similarly, the very steep drop in the January 1959 indices for the same areas (Saar, Nord-Pas-de-Calais and Lorraine, reflects the incidence on the prices, expressed in E.M.A. units of account, of the French currency adjustments of December 27, 1958. Conversely, the rises in the April 1961 indices for the Western German and Netherlands coalfields reflect the incidence on the prices of the revaluation of these two countries' currencies in March 1961 (approx. 15%).

TABLE No. 16

Development of Pithead Prices for Certain Types and Grades of Belgian Coal[1])

(Belgian francs per metric ton)

Period	Gras B > 28% V.M. 30-50 mm.			Gras A > 20-28% V.M. washed fines 0-10 mm.			3/4 Gras > 18-20% V.M. 20-30 mm.		Maigres > 10-14% V.M. 10-20 mm.		Anthracite > 10% V.M. 20-30 mm.		1/2 Gras briquettes 14-18% V.M. 10-14% ash	
	Campine		South	Campine		South								
	Cobechar sales	Independent sales		Cobechar sales	Independent sales		Cobechar sales	Independent sales	Cobechar sales	Independent sales	Cobechar sales	Independent sales	Cobechar sales	Independent sales
January 1, 1953	911		911	736			861		1,361		1,361		881	
March 15, 1953	860		860	710			875		1,380		1,380		870	
November 1, 1953	860		860	703			820		1,380		1,380		870	
April 1, 1954	860		860	703			820		1,380		1,380		870	
June 16, 1955	813		813	691			785		1,500		1,500		870	
June 8, 1956	813		813	720			810		1,500		1,500		915	
October 1, 1956	890		890	810			885		1,555		1,555		1,010	
January 11, 1957	905		905	825			910		1,585		1,585		1,025	
April 1, 1957	945		945	865			970		1,680		1,680		1,100	
November 6, 1957	945		980	865		885	1,005		1,705		1,730		1,120	
May 2, 1958	945		980	835		855	1,005		1,705		1,730		1,090	
January 1, 1959[2])	945	860	980	785	780	805	985	960	1,705		1,730		990	
June 15, 1959	860	860	895	730	730	765	915	915	1,630		1,730		965	
January 16, 1960	820	820	855	730	730	765	915	880	1,630		1,730	1,730	965	915
January 16, 1961	820	—	855	720	765	755	915	—	1,580	1,530	1,730	1,730	965	915
January 16, 1962	820	820	855	720	730	755	915	—	1,580	1,580	1,780	1,780	965	915
Variation between Jan. 1, 1953 and Bfrs	+ 34		+ 69	+ 149		+ 169	+ 144		+ 344		+ 344		+ 239	
Nov. 6, 1957 %	+ 3·7		+ 7·6	+ 20·8		+ 23·6	+ 16·7		+ 25·3		+ 25·3		+ 27·1	
Variation between March 15, 1953 Bfrs	+ 85		+ 120	+ 155		+ 175	+ 325		+ 325		+ 325		+ 250	
and Nov. 6, 1957 %	+ 9·9		+ 14	+ 21·8		+ 24·6	+ 14·9		+ 23·6		+ 23·6		+ 28·7	
Variation between March 15, 1953 Bfrs	—40	—40	— 5	+10	+20	+ 45	+40	—	+200	+200	+400	+400	+95	+45
and Jan. 16, 1962 %	— 4·7	—4·7	— 0·6	+ 1·4	+2·8	+ 6·3	+ 4·6	—	+ 14·5	+14·5	+ 29	+29	+10·9	+5·2

[1]) Names of types are those adopted on November 6, 1957.

[2]) At the end of December 1958, three Campine enterprises resumed their commercial independence, each thereafter lodging price-schedules of its own. Nine other enterprises subsequently did the same and have remained independent (contrary to what was stated in the *Ninth General Report*).

TABLE No. 17

Price of U.S. Coal
(slack/coking fines)

($ *per metric ton*)

Period	Price f.o.b. U.S. port[1])	Average freight-charge Hampton-Roads-Rotterdam[2])	Price c.i.f. ARA[3])
1953			
March	10.38	4.83	15.21
June	10.38	4.31	14.69
September	9.55	3.90	13.45
December	9.55	4.11	13.66
1954			
March	8.57	4.66	13.23
June	8.57	4.56	13.13
September	9.06	5.11	14.17
December	9.06	6.88	15.94
1955			
March	9.84	6.79	16.63
June	9.84	8.13	17.97
September	11.27	9.19	20.36
December	11.27	9.30	20.57
1956			
March	11.51	10.09	21.60
June	11.51	10.00	21.51
September	11.51	9.92	21.43
December	11.76	15.05	26.81
1957			
March	11.76	9.72	21.48
June	11.51	6.79	18.30
September	11.27	3.30	14.57
December	10.83	3.55	14.38
1958			
March	9.84	3.00	12.84
June	9.84	3.21	13.05
September	9.84	3.10	12.94
December	9.84	3.68	13.52
1959			
March	9.84	2.94	12.78
June	9.84	2.87	12.71
September	9.84	2.87	12.71
December	9.84	3.74	13.58
1960			
March	9.60	3.51	13.11
June	9.60	3.59	13.19
September	9.60	3.51	13.11
December	9.60	3.51	13.11
1961			
March	9.60	3.51	13.11
June	9.60	3.63	13.23
September	9.60	4.27	13.87
December	9.60	3.43	13.03
1962			
January	9.60	3.10	12.70

[1]) Estimated.
[2]) Mean between maximum and minimum figures charged during the month in respect of single voyages.
[3]) ARA = Amsterdam-Rotterdam-Antwerp.

TABLE No. 18

Destination of Exports from the Principal Oil-Producing areas in 1960

('000,000 metric tons)

	Caribbean	Middle East	U.S.S.R. & Eastern European countries	Indonesia	Africa, excl. Egypt
Crude	67	203	9	12	9·8
Petroleum products	74	29	13·7[1])	8·5	—
Total	141	232	22·7	20·5	9·8
Destination					
U.S.A.	66	17	—	4	
Canada	15	7	—	—	
Other countries in the Americas	27	3	1·9	—	
Western Europe	29	135	17·2	2	9·8
((of which Community)	(11·5)	(85)	(9·5)	—	(9)
Africa	4	11	2	—	—
Australia and New Zealand	—	8	—	5	—
Japan	—	26	1·3	3	—
Other East-Asian countries	—	25	0·3	6·5	
Total	141	232	22·7	20·5	9·8

[1]) Approximate figure for net exports by Eastern European countries to other countries. Total exports by U.S.S.R. alone amounted to 17 million metric tons

TABLE No. 19

Movement of Elements of Price c.i.f. Europe of Middle-East Crude[1])

($ *per metric ton*)

	July 1956	April 1959		August-Sept. 1960		January 1962	
	Posted price	Posted price	Less 5% rebate[2])	Posted price	Less 15% rebate[2])	Posted price	Less 10% rebate[2])
Persian Gulf price of Kuwait crude	12.50	12.10	11.50	11.50	9.80	11.50	10.40
— AFRA[3])	10.60	8.90	—	7.60	—	7.30	—
— Spot rate[4])	—	—	3.60	—	4.30	—	4.10
Price c.i.f. Rotterdam	23.10	21.00	15.10	19.10	14.10	18.80	14.50
— AFRA[3])	8.20	6.60	—	5.70	—	5.50	—
— Spot rate[4])	—	—	2.90	—	3.40	—	3.30
Price c.i.f. Naples	20.70	18.70	14.40	17.20	13.20	17.00	13.70

[1]) Rounded figures. Kuwait crude taken as an example.
[2]) Average rebates; estimated.
[3]) Average freight rate assessment (covers long-term charters, consecutives and single voyages).
[4]) Very short term charters, single voyages (as per Lloyds' List).

TABLE No. 20

Movement of Elements of Prices c.i.f. Europe of Heavy Fuel Oil[1])

($ *per metric ton*)

	July 1956	February 1958		February 1959		August 1960		January 1962	
	(a)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
F.o.b. Caribbean[2])	15	15	14.50	13.30	11	13.30	10.80	13.30	10.80
AFRA	6.2	5.80	—	5.10	—	4.20	—	4.00	—
Spot rate	—	—	2.80	—	2.0	—	1.70	—	1.90
C.i.f. Rotterdam	21.2	20.80	16.90	18.40	13.0	17.50	12.50[3])	17.30	12.70[3])
F.o.b. Persian Gulf		13.70	13	11.30	9.60	10.30	9.20	10.30	9.20
AFRA		7.70	—	6.70	—	5.70	—	5.50	—
Spot rate		—	3.90	—	3.40	—	3.—	—	3.30
C.i.f. Naples		21.40	16.90	18.00	13.00	16.00	12.20[4])	15.80	12.50

[1]) Rounded figures.
[2]) F.o.b. prices in columns headed (a) are posted prices at source.
F.o.b. prices in columns headed (b) are less average rebate on posted prices.
[3]) Cf. Platt's quotations: Channel Port Index Low $12.45 per metric ton (Aug. 1960) and $13.50 (January 1961), and European f.o.b. — barge price $12.50 (Aug. 1960).
[4]) According to *World Petroleum* for September 1960, the price of Eastern European products c.i.f. Naples then stood at $11.65 per metric ton.

TABLE No. 21

Community Position as regards Iron Ore

('000,000 metric tons Fe content)

Availabilities and requirements	1957	1958	1959	1960	1961[1])
Production of saleable ore	24·3	24·1	24·9	26·9	26·5
Imports	13·5	13·0	12·4	18·8	19·5
Availabilities	37·8	37·1	37·3	45·7	46·0
Consumption	35·8	34·8	37·9	44·5	45·4
Exports	0·33	0·27	0·3	0·3	0·3
Requirements	36·1	35·1	38·2	44·8	45·7
Stock changes	+1·7	+2·0	—0·9	+0·9	+0·4

[1]) Estimated.

TABLE No. 22

Production of Crude Iron Ore in the Community

('000 metric tons)

Period	Germany (Fed. Rep.)	Belgium	France	Italy	Luxembourg	Community
1952	15,408	132	41,184	1,320	7,248	65,292
1953	14,621	100	42,924	1,429	7,168	66,242
1955	13,039	81	44,362	1,601	5,887	64,970
1955	15,682	106	50,885	2,151	7,204	76,028
1956	16,928	144	53,359	2,650	7,594	80,675
1957	18,320	138	58,525	2,610	7,843	87,435
1958	17,984	124	60,186	2,145	6,636	87,075
1959	18,063	142	61,597	2,045	6,509	88,356
1960	18,869	160	67,723	2,138	6,978	95,868
1961	18,866	113	67,408	2,063	7,458	95,910
Difference between 1960/1961 (in %)	—0·0	—29·4	—0·5	—3·5	+6·9	+0·0
1961						
1st quarter	4,728	27	17,779	519	1,735	24,782
2nd quarter	4,790	31	17,292	520	1,923	24,555
3rd quarter	4,780	33	15,320	566	1,997	22,698
4th quarter	4,568	22	17,019	458	1,804	23,870

TABLE No. 23

Iron-Ore Stocks in the Community

('000,000 metric tons Fe content)

Stocks	End of 1955	End of 1956	End of 1957	End of 1958	End of 1959	End of 1960	End of 1961[1])
Stocks at works							
Germany (Fed. Rep.), Belgium, Italy, Netherlands	3·3	4·4	5·5	6·5	5·7	6·6	7·2
France, Saar, Luxembourg	1·2	1·2	1·4	1·7	1·6	1·1	1·1
Stocks at mines	1·3	1·1	1·5	2·2	2·4	2·5	2·5
Total Community stocks	5·8	6,7	8·4	10·4	9·7	10·2	10·8

[1]) Estimated.

TABLE No. 24

Iron-Ore Trade within the Community

('000 metric tons)

Country of supply	Countries of destination	1952	1953	1958	1959	1960	1960 first nine months	1961 first nine months
Germany (Fed. Rep.)[1]	Belgium/Luxembourg	—	—	1·6	2·5	2·8	2·0	2·1
	France[2]	51·6	57·6	36·8	14·6	2·1	1·9	5·4
	Italy	1·2	1·2	1·6	1·1	1·2	1·0	0·2
	Netherlands	0·0	0·0	0·4	1·3	1·5	1·0	3·6
	Total	52·8	58·8	40·4	19·5	7·6	5·9	11·3
Belgium/Luxembourg	Germany (Fed. Rep.)[1]	434·4	267·6	17·4	0·0	0·2	0·2	1·1
	France[2]	10·8	614·4	94·0	121·7	128·2	90·0	126·6
	Total	445·2	882·0	111·4	121·7	128·4	90·2	127·7
France[2]	Germany (Fed. Rep.)[1]	379·2	340·8	1,110·1	4,838·7	9,779·6	7,283·1	7,145·3
	Belgium/Luxembourg	8,395·2	9,001·2	13,616·5	14,721·2	16,828·9	12,652·4	11,778·3
	Netherlands	132·0	187·2	51·6	15·5	6·2	3·2	—
	Total	8,906·4	9,529·2	14,778·2	19,575·4	26,614·7	19,938·7	18,923·6
	Total[3]	9,404·4	10,470·0	14,941·6	19,719·5	26·719·2	20,040·2	19,103·3
	of which[4]:							
	Germany (Fed. Rep.)[1]	813·7	608·4	1,139·1	4,841·0	9,793·0	7,288·4	7,178·3
	Belgium/Luxembourg	8,395·3	9,001·2	13,618·1	14,723·9	16,831·7	12,654·4	11,781·6
	France[2]	62·4	672·0	130·8	136·7	130·6	92·2	138·5
	Italy	1·2	1·2	1·6	1·1	1·2	1·0	0·2
	Netherlands	132·0	187·2	52·0	16·8	7·7	4·2	4·7

[1]) Including the Saar as from July 6, 1959.
[2]) Including the Saar up to July 5, 1959.
[3]) Including some small tonnages delivered by Italy and the Netherlands.
[4]) Estimate based on deliveries.

N.B.
For the years 1954-1957, see previous General Reports.

TABLE No. 25

Iron-Ore Imports from Third Countries

(*'000 metric tons*)

Country of origin	1954	1958	1959	1960	1960	1961
					first six months	
Spain	554·5	1,158·7	860·6	1,646·2	1,270·5	1,049·0
Greece	19·3	101·8	44·0	147·4	114·9	95·2
Norway	720·7	760·6	584·7	961·5	728·1	724·3
Sweden	7,689·1	10,627·3	10,846·2	13,183·0	9,787·8	10,183·0
Turkey	126·0	348·2	273·6	376·1	304·6	194·7
Algeria	653·3	863·4	533·9	1,289·7	983·9	873·4
Liberia	245·0	953·6	1,187·9	1,635·1	1,190·6	1,276·8
Marocco[1])	200·5	508·2	284·9	800·6	618·5	423·8
Tunisia	278·1	338·2	271·5	299·2	253·1	195·7
British West Africa	19·1	647·4	676·4	760·0	542·2	738·9
India	183·0	175·7	91·4	180·5	94·8	91·1
Portuguese possessions in Asia	575·1	1,387·1	1,375·9	2,872·8	2,089·4	1,863·3
Canada	724·3	1,736·6	1,385·5	2,050·1	1,597·0	1,505·2
Brazil	308·1	692·2	985·1	1,778·7	1,251·3	2,265·0
Chile	38·8	150·1	193·3	583·2	334·8	648·2
Peru	—	722·2	730·2	1,524·7	1,042·0	1,307·9
Venezuela	9·6	1,869·6	1,688·7	2,741·3	2,090·4	1,837·8
Other countries	245·7	716·7	654·5	1,361·9	1,065·3	589·2
Total	12,590·5	23,757·9	22,668·3	34,192·0	25,359·2	26,480·2

[1]) Maroccan territory: from 1954 to 1958, the former French and Spanish zones; as from January 1, 1959, the area bounded by the present frontiers.

N.B.
For the years 1954-1957, see previous General Reports.

TABLE No. 26

Community Balance-Sheet for Pig-Iron and Scrap Supplies

('000,000 metric tons)

Availabilities and consumption	1955	1956	1957	1958	1959	1960	1961[1])
Steel							
Production	52·63	56·80	59·81	57·99	63·1	72·84	73·3
Pig-Iron							
1. Consumption by steelworks	37·27	39·88	41·22	40·43	44·14	50·71	50·75
2. Stock changes	+ 0·10	+ 0·12	+ 0·55	+ 0·34	— 0·31	— 0·08	+ 0·35
3. Availabilities for foundries	3·74	3·74	3·45	3·21	3·31	3·99	4·05
4. Production	41·04	43·57	45·11	43·51	46·68	54·04	54·60
5. Net imports	+ 0·07	+ 0·17	+ 0·11	+ 0·47	+ 0·46	+ 0·58	+ 0·55
Scrap							
6. Consumption by steelworks	20·91	22·98	24·90	23·73	25·69	29·61	29·85
7. Consumption by blast-furnaces	4·02	4·36	3·91	3·17	2·90	3·03	2·88
8. Steel works' own arisings	13·66	14·69	15·56	15·96	16·82	19·26	19·53
9. Recovery from the Common Market[2])	10·36	10·51	10·74	10·24	12·40	13·12	12·83
10. Sales by iron and steelworks	0·73	0·90	1·15	1·23	1·30	1·56	1·47
11. Imports required from third countries[2])	1·64	3·04	3·66	1·93	0·67	1·82	1·83
12. Imports[2])	2·62	2·89	3·90	2·08	0·89	1·8	2·08
13. Stock changes	+ 0·98	— 0·15	+ 0·24	+ 0·15	+ 0·22	— 0·02	+ 0·24

[1]) Partly based on estimates.

[2]) Shipbreaking scrap and certain types of high-cost scrap recovered within the Community, which, during the price-compensation period, were included in the import figures, are now included in the tonnages of Scrap Recovery from the Common Market in order to make the figures more readily comparable. These types of scrap amounted to 300,000-330,000 metric tons per annum for the years 1955-1958.

TABLE No. 27

Scrap Trade between Community Countries[1])

('000 metric tons)

Country	1954	1958	1959	1960	1960 first 6 months	1961 first 6 months
Deliveries to other Community countries by:						
Germany (Fed. Rep.)[2])	676	859	978	1,227	552	668
Belgium / Luxembourg	142	136	247	436	258	170
France[3])	916	559	1,186	1,318	774	463
Italy	0	0	2	2	1	0
Netherlands	118	172	269	342	182	202
Community	1,852	1,726	2,682	3,324	1,767	1,503
Purchases from other Community countries by:						
Germany (Fed. Rep.)[2])	287	87	349	467	267	195
Belgium / Luxembourg	136	198	153	173	61	123
France[3])	65	360	257	337	172	245
Italy	1,342	1,063	1,877	2,264	1,242	916
Netherlands	22	18	46	84	25	24
Community	1,852	1,726	2,682	3,324	1,767	1,503

[1]) Customs figures; deliveries calculated from import statistics.
[2]) Including the Saar as from July 6, 1959.
[3]) Including the Saar up to July 5, 1959.

N.B.
For the years 1955-1957, see previous General Reports.

Development of Pig-Iron Prices in the Community

(showing maximum and minimum prices)

($ per metric ton exclusive of taxes)

Quality	Period	Germany (Fed. Rep.)	Belgium	France	Italy	Netherlands
Phosphorus foundry pig-iron	May 1953	65·40 Ober-	60 Mousson	60 Longwy	68.80 Naples	57 Beverwijk
	Oct. 1954	65.40 hausen	56	60	64	57
P = 1·0%—1·4%	Aug. 1957	75.67[1])	74	69.05[1])	89.60 Trieste	74.25
Mn = 0·6%	Jan. 1960	75.67 (61.37)	57	64.11 (61.29)	64 Trieste	74.25
(Minus rebate)	Jan. 1961	75.67 (61.37)	57	64.11 (61.29)	64	61.75
	Jan. 1962	79.44 (62.04)	57	64.11 (61.29)	64	64.82
Hematite foundry pig-iron	May 1954	62.29 Ober-	70.30 Charleroi	70.71 Longwy	68.80 Genoa	67.50 Beverwijk
P = 0·08—0·12%	Oct. 1954	69.29 hausen	70.30	66.86	64 Genoa	67.50
Mn 0·7—1·5%	Aug. 1957	80.70[1])	83.90	86.29[1])	91.20 Trieste	83
Netherlands						
P = 0·06—0·08%	Jan. 1960	80.70 (66.40)	68.—	74.34 (69.44)	65.60	83
(Minus rebate)	Jan. 1961	80.70 (66.40)	68.—	74.34 (69.44)	65.60	70.50
	Jan. 1962	84.72 (67.32)	68.—	74.34 (69.44)	65.60	74.—
Hematite steelmaking pig-iron	May 1953	58.29 Siegen	64.20 Charleroi	62.43 Longwy	64 Genoa	61.44 Beverwijk
	Oct. 1954	54.77	58.70	58.86	59.20 Genoa	61.44
P = 0·08—0·12%	Aug. 1957	69.37[1])	80.10	82.57	88 Genoa	81.75
Mn 2—3%						
Netherlands 0·10 max.	Jan. 1960	69.37 (60.24)	63.—	65.83	57.60 Piombino	81.75
(Minus rebate)	Jan. 1961	52.57 (43.43)[2])	63.—	65.83	57.60	69.25
	Jan. 1962	55.20 (52.80)[2])	63.—	65.83	57.60	72.69
Ferro-manganese	May 1953	203.91 Ober-	211 Langer-	177.71 Outreau	240 Aosta	—
	Oct. 1954	203.91 hausen	167 brugge	166.57	240	—
	Aug. 1957	246.20[1])	240	203.10[1])	284.80	—
	Jan. 1960	246.20	145.—	141.79	164.—	—
	Jan. 1961	165.71	145.—	141.79	164.—	—
	Jan. 1962	174.—	145.—	141.79	164.—	—

[1]) December 1957.
[2]) Basing-point Oberhausen.

N.B.
The figures in brackets are the prices less rebates.

TABLE No. 29

External Trade in Pig-Iron with Third Countries

('000 metric tons)

	1954	1958	1959	1960	1960 first eight months	1961 first eight months
Imports	300	648	772	968	641	602
Exports	360	204	316	387	260	215
Net imports	—60	444	456	581	381	387

TABLE No. 30

The Community's Internal Trade in Pig-Iron

('000 metric tons)

	1954	1958	1959	1960	1960 first eight months	1961 first eight months
Deliveries to other Community Countries by[1]*:*						
Germany (Fed. Rep.)[2]	180	224	174	341	227	376
Belgium/Luxembourg	45	43	62	72	51	41
France[3]	126	131	239	323	214	231
Netherlands	100	75	85	119	82	83
Community	451	473	560	855	574	731
Purchases from other Community Countries by[1]*:*						
Germany (Fed. Rep.)[2]	76	55	113	171	117	108
Belgium/Luxembourg	162	204	273	311	205	234
France[3]	106	148	116	140	88	120
Italy	97	62	51	218	154	262
Netherlands	10	4	7	15	10	7
Community	451	473	560	855	574	731

[1]) Customs statistics: deliveries calculated from import statistics.
[2]) Including the Saar as from July 6, 1959.
[3]) Including the Saar up to July 5, 1959.

N.B.
For the years 1955-1957, see *Ninth General Report.*

TABLE No. 31

Pig-Iron and Ferro-Alloys Production

('000 metric tons)

Year	Germany (Fed. Rep.)	Saar	Belgium	France	Italy	Luxembourg	Netherlands	Community
1952	12,877	2,550	4,775	9,772	1,143	3,076	539	34,732
1953	11,654	2,382	4,228	8,664	1,254	2,719	591	31,492
1954	12,512	2,497	4,573	8,838	1,298	2,800	610	33,128
1959	18,393	3,209	5,965	12,438	2,121	3,411	1,139	46,676
1960	25,739		6,520	14,005	2,715	3,713	1,347	54,039
1961	25,431		6,456	14,396	3,090	3,774	1,455	54,591

TABLE No. 32

Trend in New Orders for Rolled Products according to Origin

('000 metric tons)

Year	Home market[1]s)	Other Community countries[1])	Third Countries
1954	24,738	4,827	7,854
1955	27,307	5,101	7,321
1956	27,492	4,644	9,876
1957	27,028	5,162	7,029
1958	23,958	4,299	9,249
1959	31,460	7,111	11,877
1960	34,437	8,239	9,759
1961[2])	32,324	8,180	10,105

[1]) The Saar included with W. Germany from 1959 onwards.
The Saar included with France up to and including 1958.

TABLE No. 33

New Orders for Rolled Products, Deliveries by Works and Orders in Hand

(*'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
1960	52,435	52,753	13,152
1961	50,610	53,749	10,255

TABLE No. 34

Rate of Utilization of Steel-Production Capacities

(*in %*)

	1955	1956	1957	1958	1959	1960	1961
Germany (Fed. Rep.)	97·0	97·7	95·2	82·1	88·4	96·5	91·7
Saar	95·9	98·5	97·1	96·4	97·5		
Belgium	94·3	93·8	87·9	80·8	87·2	88·9	84·5
France	93·9	95·0	94·6	93·4	93·9	96·7	93·6
Italy	94·3	92·6	91·5	80·1	84·3	94·3	97·1
Luxembourg	98·7	98·5	97·0	93·6	93·7	104·1	99·0
Netherlands	96·9	97·3	93·3	92·5	90·4	93·5	90·0
Community	95·7	96·1	93·9	85·9	89·6	95·5	92·4

N.B.
Since the steelworks 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 figures for 1955 and 1956. France and Belgium, particularly the latter, had a number of strikes in 1957.

TABLE No. 35

Community and World Production of Crude Steel (1952-1961)

Country	in '000 metric tons							
	1952	1953	1954	1955	1956	1957	1958	1959
Germany (Fed. Rep.) (without the Saar)	15,806	15,420	17,435	21,336	23,189	24,507	22,785	25,824
Saar	2,823	2,682	2,805	3,166	3,374	3,466	3,485	3,613
Belgium	5,170	4,527	5,003	5,894	6,376	6,267	6,007	6,434
France	10,867	9,997	10,627	12,631	13,441	14,100	14,633	15,197
Italy	3,535	3,500	4,207	5,395	5,911	6,787	6,271	6,762
Luxembourg	3,002	2,658	2,828	3,226	3,456	3,493	3,379	3,663
Netherlands	693	874	937	979	1,051	1,185	1,437	1,670
Community	41,896	39,658	43,842	52,627	56,798	59,805	57,997	63,161
United Kingdom	16,681	17,891	18,817	20,108	20,991	22,047	19,873	20,511
United States	87,766	104,118	82,140	108,647	107,575	105,148	79,114	87,066
U.R.S.S.	34,492	38,128	41,434	45,271	48,698	51,043	54,868	59,951
Eastern Europe[2])	11,225	12,695	13,044	14,211	15,329	16,153	17,394	18,850
Japan	6,988	7,662	7,750	9,408	11,106	12,576	12,118	16,628
China	1,350	1,770	2,230	2,850	4,520	5,250	8,000	13,350
Other countries	14,847	15,245	16,368	19,752	21,836	23,916	23,857	27,975
World[3])	215,245	237,167	225,625	272,693	286,849	295,873	273,280	307,489

[1]) Provisional figures.
[2]) Eastern Germany, Bulgaria, Poland, Roumania, Czechoslovakia, Hungary.
[3]) Estimated.

1960	1961[1]	Increase 1960/1961 in %	in % of world production 1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
34,100	33,457	— 1·9	7·3 1·3	6·5 1·1	7·7 1·3	7·8 1·2	8·1 1·2	8·2 1·2	8·3 1·3	8·4 1·2	9·9	9·2
7,181	7,002	— 2·6	2·4	1·9	2·2	2·1	2·2	2·1	2·2	2·1	2·1	1·9
17,300	17,599	+ 1·7	5·0	4·2	4·7	4·6	4·7	4·8	5·4	4·9	5·0	4·8
8,219	9,125	+10·8	1·6	1·5	1·9	2·0	2·0	2·3	2·3	2·2	2·4	2·5
4,084	4,113	+ 0·7	1·4	1·1	1·3	1·2	1·2	1·2	1·2	1·2	1·2	1·1
1,942	1,968	+ 1·3	0·3	0·4	0·4	0·4	0·4	0·4	0·5	0·5	0·6	0·6
72,836	73,265	+ 0·6	19·4	16·7	19·5	19·3	19·8	20·2	21·2	20·5	21·2	20·1
24,694	22,439	— 9·3	7·7	7·5	8·3	7·4	7·3	7·5	7·3	6·8	7·2	6·2
91,920	91,140	— 0·8	40·8	43·9	36·4	39·8	37·5	35·5	28·9	28·3	26·8	25·1
65,292	71,200	+ 8·3	16·1	16·2	18·4	16·6	17·0	17·2	20·1	19·5	19·0	19·5
21,240	22,900	+ 3·6	5·2	5·4	5·8	5·2	5·3	5·5	6·4	6·1	6·2	6·1
22,138	27,600	+27·7	3·2	3·2	3·4	3·5	3·9	4·2	4·4	5·4	6·4	7·8
16,500	21,000	+27·3	0·6	0·7	1·0	1·0	1·6	1·8	2·9	4·3	4·8	5·8
28,908	34,514	+19·3	7·0	6·4	7·2	7·2	7·6	8·1	8·8	9·1	8·4	9·5
343,500	363,600	+ 5·8	100	100	100	100	100	100	100	100	100	100

N.B.
Corrections made to figures in the *Ninth General Report.*

TABLE No. 36

Crude-Steel Production (by manufacturing processes)
(Community)

('000 metric tons)

Year	Basic Bessemer	Acid Bessemer	Open-hearth	Electric-furnace	Other processes	Total
1953	20,886	234	15,387	3,106	48	39,661
1954	22,633	216	17,387	3,592	14	43,842
1955	27,520	246	20,477	4,370	12	52,625
1956	29,388	252	22,103	5,035	17	56,796
1957	30,156	249	23,597	5,731	71	59,804
1958	29,282	240	22,121	5,712	643	57,998
1959	32,217	171	23,418	6,343	1,010	63,159
1960	35,920	187	27,539	7,577	1,612	72,835
1961[1])	35,442	189	27,077	8,157	2,400	73,265

[1]) Provisional figures.

TABLE No. 37

Production of High-Grade and Special Steels
(Community)

('000 metric tons)

Year	Germany (Fed. Rep.)[1])	Benelux	France[2])	Italy[3])	Community
1954	1,301	106	1,082	630	3,119
1955	1,755	168	1,296	838	4,057
1956	2,048	202	1,400	882	4,532
1957	1,905	183	1,494	1,006	4,588
1958	1,822	110	1,453	1,112	4,497
1959	2,152	133	1,237	1,293	4,815
1960	2,968	199	1,470	1,337	5,974
1961	2,855	216	1,544	1,580	6,195

[1]) Including the Saar as from July 1, 1959.
[2]) Including the Saar up to June 30, 1959.
[3]) Corrected figures as from January 1960.

TABLE No. 38

Production of Finished Products by types of Product
(Community)

('000 metric tons)

Type of product	1952	1953	1958	1959	1960	1960	1961
Permanent-way material	1,432	1,497	1,610	1,392	1,405	1,405	1,390
Heavy sections	2,723	2,549	3,258	3,475	4,010	4,010	4,335
Light sections	10,033	8,859	11,408	12,656	14,533	14,533	14,925
Wire-rod	2,844	2,491	4,069	4,827	5,381	5,381	5,374
Tube semis	973	980	1,482	1,602	1,953	1,953	1,979
Hoop and strip	2,273	1,848	3,227	3,991	4,650	4,650	4,368
Plate 3 mm. and over	4,288	4,547	6,977	6,831	7,819	7,819	7,997
Sheet under 3 mm.	3,947	3,789	7,634	8,538	10,354	10,354	10,009
Coils (finished products)	2	50	229	448	687	687	633
Total	28,515	26,610	39,894	43,760	50,792	50,792	51,010

[1]) For the years 1954-1957, see *Ninth General Report.*

TABLE No. 39

Trade in Iron and Steel Products within the Community
(Treaty products including pig-iron)

Country of supply	Country of destination	1952
Germany (Fed. Rep.)[1]	Belgium/Luxembourg	88·8
	France[2]	9·6
	Italy	62·4
	Netherlands	141·6
	Total	302·4
Belgium/Luxembourg	Germany (Fed. Rep.)[1]	532·8
	France[2]	14·4
	Italy	135·6
	Netherlands	571·2
	Total	1,254·0
France[2]	Germany (Fed. Rep.)[1]	243·6
	Belgium/Luxembourg	70·8
	Italy	121·2
	Netherlands	45·6
	Total	481·2
Italy	Germany (Fed. Rep.)[1]	0·5
	Belgium/Luxembourg	0·8
	France[2]	0·1
	Netherlands	1·0
	Total	2·4
Netherlands	Germany (Fed. Rep.)[1]	9·6
	Belgium/Luxembourg	51·6
	France[2]	3·6
	Italy	3·6
	Total	68·4
	Grand Total	2,108·4
	of which[3]*:*	
	Germany (Fed. Rep.)[1]	786·5
	Belgium/Luxembourg	212·0
	France[2]	27·7
	Italy	322·8
	Netherlands	759·4

[1]) Including the Saar as from July 6, 1959.
[2]) Including the Saar up to July 5, 1959.
[3]) Estimates based on deliveries.

('000,000 metric tons)

1953	1954	1959	1960	1960	1961
				first 8 months	
118·8	119·7	188·0	219·5	140·5	186·6
28·8	117·6	816·2	1,780·0	1,156·6	1,240·1
79·2	150·3	268·9	657·2	344·2	637·2
220·8	384·0	575·0	751·5	467·4	505·5
447·6	771·6	1,848·1	3,408·2	2,108·7	2,569·4
478·8	652·5	1,125·9	1,478·2	995·2	788·9
73·2	303·4	590·2	963·4	593·3	658·4
145·2	119·4	173·1	284·0	159·0	215·9
546·0	711·0	656·2	735·6	475·2	453·6
1,243·2	1,786·2	2,545·4	3,461·2	2,222·7	2,116·8
543·6	863·4	1,443·0	1,369·5	931·1	945·7
184·8	138·3	308·4	401·1	258·8	335·1
253·2	249·9	374·1	459·2	250·0	432·5
108·0	69·3	152·8	164·3	101·2	113·8
1,089·6	1,320·9	2,278·3	2,394·1	1,541·1	1,827·2
0·0	1·8	27·3	32·5	21·4	27·6
0·0	0·0	14·0	3·1	2·4	0·9
3·6	6·0	69·5	84·5	61·7	18·8
1·2	0·0	7·5	10·4	9·9	0·0
4·8	7·8	118·3	130·5	95·4	43·3
57·6	160·2	319·0	430·0	298·5	220·0
36·0	59·4	67·2	74·4	46·5	63·1
12·0	27·3	63·4	100·4	65·7	67·2
8·4	20·4	22·2	55·4	38·6	31·4
114·0	267·3	471·8	660·2	449·3	381·7
2,899·2	4,153·8	7,261·9	10,054·2	6,417·2	6,938·4
1,080·0	1,677·9	2,915·2	3,310·2	2,246·2	1,982·2
339·6	317·4	577·6	698·1	448·2	585·7
117·6	454·2	1,539·3	2,928·3	1,877·3	1,980·5
468·0	540·0	838·3	1,455·8	791·8	1,317·9
876·0	1,164·3	1,391·5	1,661·8	1,053·7	1,073·0

N.B.
For the years 1955-1958, see *Ninth General Report.*

TABLE No. 40

Steel Trade within the Community

('000 metric tons)

Period \ Product or Group of products	Ingots and semis	Coils	Permanent-way material	Wire-rod	Joists and sections over 80 mm.	Merchant bars and other sections	Hoop and strip	Plate	Sheet	Total Treaty products	Total non-Treaty products
1954	550	192	74	315	337	1,059	286	348	453	3,615	210
1959	869	552	87	556	443	1,484	498	688	1,478	6,656	443
1960	1,439	766	86	663	648	1,879	609	941	1,996	9,027	532
1960 first eight months	941	481	69	435	400	1,212	379	574	1,280	5,772	337
1961 first eight months	960	454	68	469	498	1,327	405	766	1,202	6,149	384

[1]) Figures based on deliveries.

N.B.
For the years 1955-1958, see *Ninth General Report.*

TABLE No. 41

Community Steel Exports to Third Countries

('000 metric tons)

Period \ Product or Group of products	Ingots and semis	Coils	Permanent-way material	Wire-rod	Joists and sections over 80 mm.	Merchant bars and other sections	Hoop strip	Plate	Sheet	Total Treaty products	Total non-Treaty products
1954	631	10	278	287	592	2,187	233	757	1,105	6,080	1,338
1959	1,033	128	287	655	911	3,542	341	1,287	2,396	10,580	2,458
1960	937	220	365	620	778	3,487	402	1,354	2,596	10,758	2,774
1960 first eight months	552	156	286	420	526	2,328	259	879	1,755	7,161	1,805
1961 first eight months	680	79	231	428	496	2,311	247	709	1,513	6,694	1,726

N.B.
For the years 1955-1958, see *Ninth General Report.*

TABLE No. 42

Community Imports of Iron and Steel Products from Third Countries[1])
(by countries of origin)

('000 metric tons)

Country of destination \ Country of origin	Austria	U.K.	Sweden	U.S.A. and dependencies	Eastern Europe and U.S.S.R	Other third countries	Total
Germany (Fed. Rep.)[2])							
1954	127	20	25	28	1	12	213
1959	260	171	54	68	149	98	799
1960	313	140	68	100	191	237	1,049
1960[3])	206	101	42	63	134	132	678
1961[3])	190	74	64	52	60	108	548
Belgium / Luxembourg							
1954	27	10	22	26	34	29	148
1959	51	34	9	7	125	24	249
1960	81	21	11	15	116	45	290
1960[3])	57	16	8	9	79	33	202
1961[3])	42	17	5	9	44	14	131
France[4])							
1954	4	3	7	17	—	6	37
1959	2	4	8	1	9	13	37
1960	9	8	7	12	8	99	145
1960[3])	4	3	5	10	5	47	74
1961[3])	12	9	5	1	1	156	184
Italy							
1954	214	42	8	75	43	22	404
1959	201	36	4	26	309	78	655
1960	260	30	15	78	538	289	1,210
1960[3])	194	21	9	41	357	170	792
1961[3])	143	39	16	97	309	261	865
Netherlands							
1954	2	64	1	66	4	8	145
1959	9	55	4	35	7	18	129
1960	9	70	3	75	18	30	204
1960[3])	8	53	1	52	10	13	137
1961[3])	6	55	3	26	12	52	154

TABLE No. 42 (contd.)

('000 metric tons)

Country of origin / Country of destination	Austria	U.K.	Sweden	U.S.A. and dependencies	Eastern Europe and U.S.S.R	Other third countries	Total
Community							
1954	375	136	63	214	78	81	947
1959	524	300	79	137	599	231	1,869
1960	672	269	105	279	872	700	2,897
1960[3])	469	194	65	175	585	395	1,883
1961[3])	393	194	93	185	426	591	1,882

[1]) Treaty products, exclusive of old rails, including pig-iron.
[2]) Including the Saar as from July 6, 1959.
[3]) First 8 months.
[4]) Including the Saar up to July 5, 1959.

N.B.
For the years 1955-1958, see *Ninth General Report.*

TABLE No. 43

Community Exports of Iron and Steel Products to Third Countries[1])
(by countries of destination)

('000 metric tons)

Country of destination / Country of origin	North America	Central and South America	U.K.	Sweden	Eastern Europe and U.S.S.R.	Other European countries	Overseas territories of member States[2])	Asia	Africa less territories of member States	Other areas	Total
Germany (Fed. Rep.)[3])											
1954	77	237	31	180	40	533	0	305	35	2	1,440
1959	590	716	68	171	314	946	13	581	48	5	3,451
1960	347	423	101	234	370	1,241	20	662	61	10	3,468
1960[4])	269	270	75	149	187	735	14	447	30	6	2,182
1961[4])	177	343	7	113	198	849	8	416	46	5	2,162
Belgium/Luxembourg											
1954	300	522	64	230	64	618	126	380	139	40	2,484
1959	1,144	513	28	227	106	725	101	518	144	12	3,517
1960	714	461	126	265	319	797	63	780	139	41	3,706
1960[4])	511	312	82	188	216	536	50	513	86	23	2,517
1961[4])	498	269	31	138	139	535	27	430	96	11	2,174
France[5])											
1954	149	345	71	85	107	536	457	184	160	15	2,126
1959	522	326	19	98	254	642	368	512	145	11	2,896
1960	251	227	63	97	290	638	473	408	196	23	2,666
1960[4])	188	161	47	67	189	423	316	285	121	15	1,812
1961[4])	195	191	8	60	186	490	288	269	135	3	1,825

Italy											
1954	0	43	8	—	2	31	—	1	5	2	90
1959	30	102	13	10	202	107	1	53	9	2	529
1960	22	102	23	8	285	205	3	87	26	8	769
1960[4])	21	54	22	0	217	147	3	70	9	6	549
1961[4])	1	90	0	8	134	108	2	32	24	5	404
Netherlands											
1954	4	19	92	62	—	100	3	12	5	3	299
1959	42	60	160	60	—	122	7	48	2	1	503
1960	28	48	190	55	25	127	8	47	9	0	537
1960[4])	28	32	143	40	5	66	5	35	6	—	360
1961[4])	1	14	75	30	49	124	4	40	3	2	342
Community											
1954	530	1,166	265	556	215	1,834	587	883	345	62	6,440
1959	2,328	1,716	289	566	875	2,542	490	1,713	349	30	10,896
1960	1,362	1,261	503	659	1,289	3,008	567	1,983	430	83	11,146
1960[4])	1,017	829	369	444	814	1,907	388	1,350	252	50	7,420
1961[4])	872	907	121	349	706	2,106	329	1,187	304	26	6,907

[1]) Treaty products, exclusive of old rails, including pig-iron.
[2]) Without Morocco and Tunisia as from January 1, 1959.
[3]) Including the Saar as from July 6, 1959.
[4]) First 8 months.
[5]) Including the Saar up to July 5, 1959.

N.B.
For the years 1955-1958, see *Ninth General Report.*

TABLE No. 44

Development of Average Schedule Prices for Finished Steel Products[1])

(Price indices for the Community: 1953 = 100)

Country	May 20, 1953	Jan. 1, 1954	April 1, 1954	Jan. 1, 1955	Jan. 1, 1956	Jan. 1, 1957	July 1, 1957	Jan. 1, 1958	Jan. 1, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962
						Basic Bessemer						
Germany (Fed. Rep.)	101	96	96	97	99	104	104	109	110	108	108	111
Belgium	100	100	95	96	109	111	117	117	103	113	113	106
France	99	99	96	96	96	101	104	97	92	92	98	98,5
Luxembourg	99	99	96	96	102	108	113	114	111	111	111	111
Netherlands	100	100	95	102	110	114	119	119	105	114	111	114
Community	100	98	96	96	100	104	106	106	101	102	104	105
						Basic Steel[2])						
U.K.	86	86	86	86	92	103	103	113	112	111	107	108
U.S.A.	88	92	92	96	104	112	119	119	140	124	124	124
						Open-hearth						
Germany (Fed. Rep.)	93	89	89	90	94	101	101	106	106	105	104	108
Belgium	103	103	95	95	109	112	120	120	102	113	113	103
France	96	96	94	94	102	107	110	101	92	92	95,5	96
Italy	116	116	114	113	117	130	130	125	115	111	113	105
Netherlands	94	94	89	95	102	110	112	110	103	107	107	110
Community	100	98	96	97	102	110	111	111	105	103	105	105
						Basic Steel[2])						
U.K.	76	76	76	77	81	91	91	100	98	98	94	95
U.S.A.	78	81	81	84	91	99	105	105	109	109	109	109

[1]) Taken from the most representative schedules in the market.

[2]) The Basic Steel produced in the United Kingdom and the United States may be regarded as a quality half-way between the basic Bessemer (Thomas) and open-hearth qualities produced in the Community.

N.B.

Since a price index is involved, the same weighting is used with regard to the various products for each year and for each country of the Community, the United Kingdom and the United States. This weighting corresponds to that now in use in the Community and the United Kingdom but differs slightly from that actually employed in the United States. The same weighting as between products is also used for the Community, but the average Community price of each product takes into account each Community country's share in the total production of the product concerned. For this reason it is not possible to recalculate the Community index from the indices for the individual countries.

TABLE No. 45

Development of Basis Prices for Rolled Products in the Community, the U.K. and the U.S.A.

(exclusive of taxes)

($ *per metric ton*)

Product		Germany (Fed. Rep.)					Belgium				
		Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962	Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962
Reinforcing bars		99.20	96.45	96.45	96.45	101.30[a]	108	85[1])	99	99	92-101[b])
Merchant bars	b.B.	—	99.20	99.20	99.20	104.15	110	90[1])	104	104	102-104[b])
	o/h	109.05	109.05	109.05	109.05	114.50	132	100[1])	119	119	112-119[b])
Joists	b.B.	96.90	96.90	96.90	96.90	101.75	114	100[1])	107	107	99-107[b])
	o/h	106.75	106.75	106.75	106.75	112.10	136	115[1])	122	22	109-122[b])
Wire-rod	b.B.	101.70	101.70	101.70	101.70	106.10	108	102	110	110	94-110[b])
	o/h	111.55	111.55	111.55	111.55	116.40	123	117	125	125	104-125[b])
Hoop and strip	b.B.	112.90	112.90	112.90	112.90	113.05	107	107	109	109	109
	o/h	126.40	126.40	126.40	124.35	123.60	129	129	131	131	127
Plate	b.B.	109.05	106.50	106.50	106.50	111.85	130	100[1])	122	122	102-122[b])
	o/h	122.75	119.75	119.75	119.75	125.75	142	112[1])	138	138	112-138[b])
Sheet (hot-rolled)	b.B.	135.10	135.10	132.55	132.55	133.20	136	136	136	136	136
	o/h	146.50	146.50	144	144	145.20	148	148	148	148	148
Sheet (cold-rolled) (1—<1.10 mm.)	b.B.	156.70	156.70	153.85	153.85	154.30	150.3	150.3	150.3	150.3	150.3
	o/h										
Basing-points:		Oberhausen For plate: Essen For sheet: Siegen					Seraing [1]) Clabecq				

a) Reinforcing bars I.
b) Varies from works to works.
See also Remarks at end of table.

TABLE No. 45 (contd.)

($ *per metric ton*)

Product		France					Italy				
		Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962	Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962
Reinforcing bars		86.70	82.40	82.40	89.30	89.30	116.8-120(c)	96-99.6(c)	105.6-108.8(c)	108.8-112(c)	96-99.20(c)
Merchant bars	b.B.	—	—	—	—	—	—	—	—	—	—
	o/h	104.40	95.20	92.50	99.20	99.20	121.6-137.6(c)	104-121.6(c)	110.40-115.20(c)	110.40-115.20(c)	107.2-112(c)
Wire-rod	b.B.	87.70	83.40	83.40	90.40	92.85	—	—	—	—	—
	o/h	105.75	96.45	96.45	100.50	103.45	137.6	120	107.20-113.60(c)	107.20-113.60(c)	108.80-110.4(c)
Hoop and strip	b.B.	90.65	86.15	86.15	93.35	93.35	—	—	—	—	—
	o/h	105.20	95.95	95.95	100	100	132	112	121.60	121.60	116.80
Plate	b.B.	95.50	90.70	90.70	96.65	96.65	—	—	—	—	—
	o/h	114.35	104.30	104.30	108.70	108.70	139.2	131.2-136(c)	115.2-121.6(c)	118.40-121.60(c)	108.80-118.4(c)
Sheet (hot rolled)	b.B.	102.35	97.25	97.25	102.70	102.70	—	—	—	—	—
	o/h	120.85	110.20	110.20	114.80	114.80	171.2	152	140.8	140.80	132.80-137.60(c)
Sheet (cold-rolled)	b.B.	120.80	114.05	114.05	119.15	119.15	—	—	—	—	—
	o/h	138.55	126.35	126.35	132	132	172	158.4	163.2	168	136
Sheet (cold-rolled) (1-<1.10 mm)	b.B.	137	129.35	129.35	135.20	135.20	177.6	174.4	174.4	179.20	156.80
Basing-points:		Thionville For plate and sheet: Montmédy					Novi Ligure				

(c) According to product or size.

TABLE No. 45 (contd.)

($ per metric ton)

Product		Luxembourg					Netherlands				
		Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962	Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962
Reinforcing bars		100	100	100	100	103	103	88.4	108.80	102.45	106.25
Merchant bars	b.B.	—	—	—	—	100	107.5	98.85	109.75	107	111.05
	o/h	—	—	—	—	—	116.25	112.50	117.50	117.50	123.35
Joists	b.B.	106	104	104	104	104	—	—	—	—	—
	o/h	—	—	—	—	—	—	—	—	—	—
Wire-rod	b.B.	106	100	103	103	103	116.25	105.50	111.75	111.75	117.30
	o/h	—	—	—	—	—	118	110	115.50	115.50	121.25
Hoop and strip	b.B.	107	107	107	107	107	111.75	111.75	114.25	114.25	117.30
	o/h	—	—	—	—	—	122.50	123.75	126.25	126.25	123.35
Plate	b.B.	124	118	118	118	118	115	100	107.50	107.50	103
	o/o	—	—	—	—	—	127.50	112.50	115	115	120.70
Sheet (hot-rolled)	b.B.	135.60	138.60	138.60	138.60	138.60	142.85	131.60	131.60	131.60	132.85
(2.75-3 mm.)	o/h	—	—	—	—	—	148	141.75	141.75	141.75	143.55
Sheet (cold-rolled) (1-<1.10 mm.)		150.30	150.30	150.30	150.30	105.30	160.15	146.35	146.35	146.35	147.65
Basing-points:		Belval For plate and sheet: Dudelange					For merchant bars: Utrecht For wire-rod and hoop and strip: Alblasserdam/Zwijndrecht For plate and sheet: Velsen-Beverwijk				

TABLE No. 45 (contd.)

($ *per metric ton*)

Product		United Kingdom					U.S.A.				
		Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962	Jan. 1, 1958	Jan. 30, 1959	Jan. 1, 1960	Jan. 1, 1961	Jan. 1, 1962
Reinforcing bares		107.7	106.7	104.05	104.05	105.15	119.60	125.10	125.10	125.10	125.10
Merchant bars	b.B.	106.35-113.2	104.95-111.85	104.95-111.85	100.15-107.90	101.20-109.0	116.30-119.60	121.25-125.10	121.25-125.10	121.25-125.10	121.25-125.10
Joists	b.B.	105.80	104.40	104.40	99.60	100.60	116.30	121.25	121.25	121.25	121.25
Wire-rod	o/h	109.50	108.45	108.45	105	106.30	135.60	141.10	141.10	141.10	141.10
Hoop and strip	o/h	113.60	109.55	109.55	99.90	108.90-116.45	108.60	112.45	112.45	112.45	112.45
Plate	o/h	112.60	111.20	111.20	106.40	107.50	112.45	116.85	116.85	116.85	116.85
Sheet (hot-rolled) (2.75-3 mm.)	o/h	131.75	129	126.25	126.25	127.55	136.15	140	140	140	140
Sheet (cold-rolled)	o/h	143.45	140.70	137.95	137.95	139.40	149.90	154.85	154.85	154.85	154.85
Basing-points:		Price delivered place of destination, less transport costs					Pittsburgh				

Observations on Table 45

This table shows the basis prices. The pricing bases are intercomparable as between the Community countries.

In comparison with British and American prices there are certain differences, which are quite considerable in the case of steel sheet, and certain extras have therefore been included in the above prices to make them broadly comparable.

The British basis prices are for delivery at place of destination. A flat transport rate of $4.80 per ton has been deducted to make them comparable with the prices in the other countries.

Turnover tax deducted: Germany 4%, Netherlands 5%.

It must be borne in mind that all German and Netherlands dollar prices automatically rose by 4·8% in March 1961 as a result of the revaluation of the mark and guilder. The quotation of identical dollar prices for January 1961 and in January 1962 thus in fact represents a 4·8% drop in the mark or guilder price.

As regards the movement of internal Community prices for rolled products in 1961, the following points must also be taken into account.

Federal Republic

In Germany, the revaluation of the mark was followed by a 5% reduction in the prices of semis for sheet, hot-rolled wide strip, and hoop and strip, and of the two latter products when rolled. In the case of hoop and strip adjustments were at the same time made in the extras for size, those for widths under 100 mm. being for the most part slightly increased and a number of those for greater widths considerably reduced. The effects of the revaluation were also approximately offset with regard to sheet and tinplate, and in some cases to galvanized sheet.

Belgium

Slight adjustments were made about half-way through the year in the extras for size for merchant bars, sections and wire rod.

Two new producers lodged schedules for electrolytically-galvanized tinplate. The one Belgian firm which had previously made this product thereupon reduced its schedule prices (which had remained unchanged since 1958) by between 5 and 14%, according to quality and thickness, though without fully aligning them with those of the two newcomers.

In October, a number of "outsiders," wishing to keep in line with the trend of the market, introduced sizeable reductions for concrete-reinforcing rods (7-10%), wire-rod (15-18%) and sheet and medium plate (4-6%), in order to bring their prices closer to the French level. Lastly, one works also reduced its price for semis by 10%, and another its price for hot-rolled wide strip by 6·5%.

France

Following the rationalization of the French rolling programme for merchant bars, by means of in some cases substantial increases in the extras for size and a revision of the extras and rebates for quantity, fresh standards and extra charges for quality

were also introduced for most rolled products, and the range of the quality extras was extended by alignment with open-hearth.

Prices for tinplate of 0.18-0.23 mm. thickness were reduced in March by an average of 3·3%; the current prices per metric ton for galvanized products were then fixed overall on the basis of a standard surface area of 100 sq. m., and their overall level reduced by a further 3·3%.

At the same time, prices of sections and broad-flanged beams were increased by 3%; while extras for size for narrow hoop and strip were raised and those for greater widths were reduced, the net average result of the changes being an increase of 8·6%. A 2·5% increase was also made in the basis prices and extras for permanent way material.

Italy

In the first half of the year a 30% rebate was introduced on quality extras for ship plate in respect of orders for 1,500 metric tons and over. The Ilva Company reduced its price for hoop and strip of over 80mm. width by 8% and for medium plate by 3·4%, and allowed a rebate of Lit. 5,000 (—5·7%) on commercial heavy plate. Cornigliano introduced a reduction of 2·5% for hot-rolled wide strip and 4·2% for hot-rolled sheet.

Following the concentration between Ilva and Cornigliano to form the new Italsider concern, rolled-products prices were cut in July by from 1·5% to 17%, according to product, the mean reduction working out at 4%. The prices for products more particularly concerned, such as reinforcing rods and flats, were again reduced in the following month by a further 2·3-4·8%. Other Italian enterprises gradually moved in the same direction, though not all of them lowered their prices to the level of Italsider's. The disparities between Italian and other Community prices, while still in some cases very considerable, have shrunk appreciably as a result of these operations: indeed in quite a number of instances Italian prices are now down to about the general level.

At the end of the year, Italsider reduced its prices for cold-rolled wide strip by 3% and in addition to the existing specification rebates reintroduced the quantity discounts in respect of most flat products, which had been cancelled in July.

Luxembourg

As in Belgium, some adjustments have been made in extras for size in respect of merchant bars and sections and of wire-rod. In addition, slight changes have been introduced in the prices for reinforcing rods.

Netherlands

The revaluation of the guilder was followed by a considerable reduction of tinplate prices, ranging from 8 to 16% according to quality and thickness, to bring them level with the quotations of British competitors.

The price of commercial heavy plate was reduced by 1·7% and that of open-hearth ship plate by 3-4%, by means of increases in the rebates allowed. Sheet prices were lowered by 3-6%, and extras for size by 5-7%, while the range of prices not subject to extras was extended. About the middle of the year prices for hot-rolled strip were reduced by 10% and for hoop and strip by 2-5%, and in October further reductions of 7·1 and 5·8% were made in the basis prices of commercial heavy and medium plate respectively.

TABLE No. 46

Long-Term Trend of Community Export Prices

Market Prices f.o.b. Antwerp

($ *per metric ton*)

Average price for the month according to product or destination	Merchant bars	Wire rod	Plate	Cold-rolled sheet 1 mm.
1953 May	93	87	115	147
1954 January	82	84	102	128-151
1955 January	102-110	105-110	106-110	145-152
1956 January	115-128	115-120	130-140	150-157
1957 January	125-134	115-118	165-175	150
1958 February	97-101	103-105	118-122	170
1959 January	81-83	84-88	81-87	135
1960 January	110-114	132-140	106-112	up to 225
1961 January	99-102	105-107	97-101	142-150
1961 October	92-93	86-88	89	123
1962 January	94-96	88-90	89-92	116-121

TABLE No. 47

Basis Prices for Exports to Third Countries[1])

($ *per metric ton f.o.b. port of shipment*)

	Community (overall)				
	Market prices				
	Febr. 1958	January 1959	January 1960	January 1961	January 1962
Reinforcing bars	81-84	75-78	105-110	92-97	77-84
Merchant bars	97-101	81-83	110-114	99-102	94-96
Joists	98-103	80-83	101-102	94-96	94-95
Wire-rod	103-105	84-88	132-140	105-107	88-90
Hoop and strip	110-113	94-98	110-112	109-111	92-94
Plate	118-122	81-87	106-112	97-101	89-92
Sheet (hot-rolled) (2.75 - < 3 mm.)	150-50	122	158-163	131-138	106-115
Sheet (cold-rolled) (1 mm.)	170	135	up to 225	142-150	116-121

[1]) Corrections made to figures in the *Ninth General Report.*
[2]) According to width.
[3]) According to country of destination.

United Kingdom

Published prices

February 1958	January 1959	January 1960	January 1961	January 1962
112.65	107.50	110.35	110.35	110.35
115.80-	109.75-	109.75-	109.75-	109.75-
152.95	116.65	116.65	116.65	116.65
146.05	109.20	109.20	109.20	109.20
		No price		
123.45-	123.45-	123.45-	123.45-	123.45-
124.85	124.85	124.85	124.85	124.85
2)	2)	2)	2)	
161.90	116	116	114.65	114.65
148.10	148.10	148.10	148.10	
164.65	164.65	164.65	164.65	
3)	3)	3)	3)	
145.50	145.50	145.50	145.50	132.30
165.35	165.35	165.35	165.35	

N.B.

This table shows the development of basis prices. The bases on which these are fixed in the Community, the United Kingdom and the United States respectively are sometimes appreciably different, chiefly in the case of sheet. Prices given in this table for sheet include extras, which makes them broadly comparable. Prices are those of basic Bessemer (Thomas) quality for the Community, and of "basic open-hearth steel" for the United Kingdom and the United States.

TABLE No. 47 (contd.)

($ per metric ton f.o.b. port of shipment)

	United States				
	Published prices				
	Febr. 1958	January 1959	January 1960	January 1960	January 1962
Reinforcing bars	129·40	128.30	127	127	127
Merchant bars	128.10-131.60	133.15-135.60	131.85-134.25	131.85-134.25	126.30-134.25
Joists	128.10	133.15	131.85	131.85	126.30
Wire-rod	140.20	144.85	146.15	146.15	146.15
Hoop and strip	119.25	119.25	117.95	117.95	114.65
Plate	123.25	128.10	126.75	126.75	118.60
Sheet (hot-rolled) (2.75 - < 3 mm.)	140.85	143.10	141.75	141.75	141.75
Sheet (cold-rolled) (1 mm.)	159.60	158.10	156.75	156.75	156.75

TABLE No. 48

Half-Yearly Tariff and Quota Changes

(total or partial suspension of import duties on certain Treaty products entering the Community from third countries)

(metric tons)

	Product / Country	Reduced-duty quotas			Duty-free quotas			
		Pig-iron containing vanadium and titanium	Coils under 1.50 m. wide	Bearing-quality steels	Grain-oriented electrical sheet (wattage loss below 0.75 w.)	Special wire-rod for rubber types	Special wire-rod for springs	Coils of special alloy steel, 1000-1300 mm. wide and up to 6 mm. thick
	Duty reduced or Duty suspended (D.S.)	1%	3%	4%	Duty suspended	Duty suspended	Duty suspended	Duty suspended
1st six months, 1961	Germany (Fed. Rep.)	no quantitative restriction	60,000	2,500	2,500	250	4,000	—
	Belgium/Luxembourg		10,000	—	250[1])	2,500	200	—
	France		10,000	—	—	2,500	—	—
	Netherlands		—	—	600	—	—	—
	Italy		60,000	—	2,500	—	—	—
2nd six months, 1961	Germany (Fed. Rep.)		50,000	2,500	2,500	250	4,000	—
	Belgium/Luxembourg		10,000	—	250[1])	2,500	200	—
	France		10,000	—	—	2,500	—	—
	Netherlands		—	—	550	—	—	—
	Italy		65,000	—	2,400	1,000	—	—
1st six months, 1962	Germany (Fed. Rep.)		35,000	2,500	1,750	250	4,000	1,000
	Belgium/Luxembourg		7,000	—	250[1])	2,500	200	—
	France		7,000	—	—	2,250	—	—
	Netherlands		—	—	500	—	—	—
	Italy		35,000	—	1,750	1,500	—	—

[1]) Belgium only.

TABLE No. 49

Net Increase in Production Potential

(based on compulsory declarations of investment projects)

Sector	Production	Production potential 1960	Declarations received during					
			1956	1957	1958	1959	1960	1961
Coalmining industry								
Pits	Hard coal ('000 m.t.)	251,460	2,560	5,786	10,220	786	325	890
Coking-plants (mine-owned)	Coke ('000 m.t.)	56,000	3,846	220	545	—	2,180	—
Coking-plants (independent)	Coke ('000 m.t.)	4,400	281	196	—116	—	—	—
Pithead power-stations	Install. capacity ('000kW)	8,406[1])	688	285	386	750	517	988
Hard-coal briquetting plants	Hard-coal briquettes ('000 m.t.)	18,440	—	—	460	430	—	100
Iron ore mines	Crude ore ('000 m.t.)	101,300	150	1,725	1,800	200	—	2,800
Iron and Steel industry	('000 m.t.)							
Coking-plants (steelworks-owned)	Coke	23,900	2,246	917	174	267	1,630	—
Preparation of burden	Sinter	36,290	6,605	3,290	8,350	6,823	15,070	10,110
Blast-furnaces	Pig-iron	57,310	4,614	2,445	2,431	2,431	7,270	4,390
Steelworks: a) Basic Bessemer	Basic Bessemer steel	37,180	2,534	1,225	1,288	105	—4,330[2])	440
b) L/D and similar	L/D and similar steel	2,000	—	895	680	420	16,920	5,150
c) Open-hearth	Open-hearth steel	28,660	1,757	108	339	294	— 280[2])	260
d) Electric-furnace	Electric-furnace steel	8,400	850	174	274	210	890	670
Rolling-mills: a) for semis	Billets	—	4,881	425	1,200	2,670	2,700	2,330
b) for hot-rolled wide strip	Coils	10,980	—	—	—	—	6,420	2,680
c) for sections	Sections (finished prod.)	30,390	547	60	315	621	2,950	1,450
d) for flats	flat products (finished)	25,560	1,946	114	916	2,734	5,340	2,490
Galvanizing and tinning plants	Galvanized sheets and tinplate	—	—	—	—	—	250	725
Power-stations (at works)	Installed cap. ('000 kW)	3,122[1])	106	48	89	15	—	194

[1]) Installed capacity as at the beginning of the year 1961.
[2]) Certain steelworks are replacing all or some of their basic Bessemer or open-hearth plants by oxygen steelmaking plant.

TABLE No. 50

Personnel Employed in the Community Coalmining and Iron and Steel Industries

('000)

Industry	September 30, 1960				September 30, 1961			
	Workers	Apprentices	Salaried employees	Total	Workers	Apprentices	Salaried employees	Total
Coalmining Industry								
Germany (Fed. Rep.)[1]	415.8	25.3	52.1	493.2	398.0	20.3	51.6	469.9
Belgium	97.1	1.8	11.7	110.6	85.1	1.7	11.1	97.9
France[2]	186.0	5.1	25.8	216.9	175.6	4.4	24.9	204.9
Italy	3.4	—	0,5	3.9	3.2	—	0.5	3,7
Netherlands	48.7	2.9	7.5	59.1	46.9	2.5	7.7	57.1
Community	751.0	35.1	97.6	883.7	708.8	28.9	95.8	833.5
Iron and Steel industry								
Germany (Fed. Rep.)[1]	215.1	7.2	30.0	252.3	215·8	7·3	32·1	255·2
Belgium	54·5	—	7·9	62·4	55·0	—	8·2	63·2
France	131·3	3·1	26·3	160·7	132·6	3·5	27·7	163·8
Italy	52·9	0·1	7·5	60·5	55·7	0·2	8·1	64·0
Luxembourg	19·4	0·3	2·1	21·8	19·5	0·3	2·2	22·0
Netherlands	9·2	0·5	4·2	13·9	9·7	0·5	5·0	15·2
Community	482·4	11·2	78·0	571·6	488·3	11·8	83·3	583·4
Iron-ore mines								
Germany (Fed. Rep.)	16·7	0·6	2·3	19·6	16·0	0·4	2·3	18·7
Belgium	0·0	—	0·0	0·0	0·0	—	0·0	0·0
France	23·4	0·8	3·3	27·5	22·7	0·7	3·4	26·8
Italy	2·9	—	0·3	3·2	2·8	—	0·3	3·1
Luxembourg	2·1	—	0·2	2·3	2·0	—	0·2	2·2
Community	45·1	1·4	6·1	52·6	43·5	1·1	6·2	50·8
Community Total	1,278·5	47·7	181·7	1,507·9	1,240·6	41·8	185·3	1,467·7

[1]) Including the Saar.
[2]) Including non-nationalized mines.

TABLE No. 51

Movement of Manpower Wastage in the Coalmining Industry

Underground workers (exclusive of apprentices) leaving collieries

Country	Total, wastage				*of which:* workers giving notice and leaving of their own accord			
	1957	1959	1960	1961[1])	1957	1959	1960	1961[1])
	Absolute figures							
Germany (Fed. Rep.)	113,200	83,900	79,500	82,500	71,100	37,000	40,900	41,800
Belgium	52,800	35,200	32,900	29,100	38,700	20,100	18,400	18,400
France	25,700	21,800	18,700	19,200	12,700	8,000	6,400	7,200
Italy	600	100	400	300	—	—	—	—
Netherlands	5,100	3,200	2,700	3,300	3,400	1,500	1,400	2,000
Community	197,400	144,200	134,200	134,400	125,900	66,600	67,100	69,400
	In % of average labour force for the year							
Germany (Fed. Rep.)	31·8	25·4	26·6	29·5	20·1	11·2	13·7	15·—
Belgium	51·4	38·8	42·4	43·4	37·7	22·1	23·7	27·5
France	18·7	16·2	14·7	16·2	9·2	5·9	5·0	6·1
Italy	13·6	3·8	16·7	14·3	—	—	—	—
Netherlands	16·7	10·6	9·4	11·9	10·9	5·0	4·9	7·3
Community	31·2	24·5	25·1	27·2	20·0	11·3	12·5	14·0

Underground workers (exclusive of apprentices) leaving the industry

Country	Absolute figures				in % of average labour force for the year			
Germany (Fed. Rep.)	50,200	44,500	41,300	40,000	13·9	13·5	13·8	14·3
Belgium	30,500	16,600	14,000	13,600	29·7	18·2	18·0	20·3
France	19,100	14,500	10,300	11,900	13·9	10·7	8·1	10·1
Italy	400	100	400	300	9·1	3·8	16·7	14·3
Netherlands	4,000	2,200	1,800	2,400	13·1	7·3	6·2	8·7
Community	104,200	77,900	67,800	68,200	16·4	13·2	12·7	13·8

[1]) Estimate for the year based on first nine months.

TABLE No. 52

Movement of Cost of Living in the Community Countries[1])

(Consumer-price index — General index)

(1953 = 100)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	
									January	September
Germany (Fed. Rep.)[2])	100	100	102	105	107	110	112	113	114	116
Belgium[3])	100	101	101	104	107	108	110	110	110	112
France[4])	100	100	101	103	105	122	129	134	136	138
Italy	100	103	105	109	110	113	113	115	117	118
Luxembourg[3])	100	101	101	102	106	107	107	108	108	109
Netherlands	100	104	105	106	108	115	117	121	122	124

[1]) *Source: Bulletin Général de statistique* of the Statistical Office of the European Communities. The indices for 1960 and 1961 have been recalculated on the basis of 1953 = 100.

[2]) Exclusive of the Saar up to 1959.

[3]) Exclusive of rents.

[4]) Paris.

TABLE No. 53

Trend in Direct Hourly Wages and Total Hourly Wage Costs in the Coalmining Industry[1])

(underground and surface)

(Index: 1953 = 100)

Country	1954		1955		1956		1957		1958		1959		1960		1961		
															Direct hourly wage		
	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	1st qtr.	2nd qtr.	3rd qtr.
Germany (Fed. Rep.)[4]) [5])	103	104	112	113	124	120	134	134	137	146	139	154	147	163	156	159	166
Germany (Fed. Rep.)[4]) [6])					132		144		146		148		156		165	168	175
Belgium	101	101	103	105	114	112	130	134	132	139	132	137	134	140	134	136	139
France	102	102	112	113	121	126	137	145	154	163	161	174	167	189	171	172	175
Italy	102	106	110	117	120	128	124	134	127	149	132	149	141	165	144	150	150
Netherlands	110	110	118	122	126	135	144	154	154	162	156	162	169	174	178	178	188

[1]) For definition, see *Les Salaires et les Charges Sociales dans les Industries de la Communauté*, Luxembourg, May 1956, Vol. 1, section on wage costs and employers' labour charges (pp. 10-14).

[2]) For wages in absolute figures from 1953 to 1960 inclusive, see *Mémento de Statistiques*, and for 1961, *Bulletin Statistique, Charbons et autres sources d'énergie.*

[3]) Indices for hourly wages allow for pay in respect of off-days granted in lieu of a general reduction in working time.

[4]) Including the Saar from 1960 onwards.

[5]) Exclusive of shift bonus.

[6]) Inclusive of shift bonus.

TABLE No. 54

Trend in Direct Hourly Wages and Total Hourly Wage Costs in the Iron and Steel Industry[1])

(Index: 1953=100)[2])

Country	1954		1955		1956		1957		1958		1959		1960		1961		
	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage		
															1st qtr.	2nd qtr.	3rd qtr.
Germany (Fed. Rep.)[3])	104	103	114	114	124	124	139	138	146	145	154	153	169	166	179	182	183
Belgium	104	103	110	110	121	122	131	134	132	136	137	140	145	151	144	145	147
France	104	103	118	116	130	131	139	142	159	165	167	176	186	192	195	197	203
Italy	106	105	110	107	120	121	124	123	130	132	138	138	150	150	147	152	149
Luxembourg	102	99	110	107	120	121	135	135	139	138	142	138	152	148	155	157	156
Netherlands	107	111	119	130	124	144	139	157	143	165	149	166	169	189	171	180	193

[1]) For definition, see *Les Salaires et les Charges Sociales dans les Industries de la Communauté*, Luxembourg, May 1956, Vol. I, section on wage costs and employers' labour charges (pp. 10-14).

[2]) For wages in absolute figures from 1953 to 1960 inclusive, see *Mémento de Statistiques*, and for 1961, *Bulletin Statistique, Sidérurgie*.

[3]) Including the Saar from 1960 onwards.

TABLE No. 55

Trend in Direct Hourly Wages and Total Hourly Wage Costs in the Iron-Ore Mines[1])

Index: 1953=100)[2])

Country	1954		1955		1956		1957		1958		1959		1960		1961		
															Direct hourly wage		
	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	Direct hourly wage[3])	Total cost	1st qtr.	2nd qtr.	3rd qtr.
Germany (Fed. Rep.) [3])	105	108	115	119	126	129	139	143	143	154	147	159	163	177	183	186	188
Germany (Fed. Rep.) [4])					135		150		153		159		173		194	197	199
France (East)	103	104	116	118	130	138	143	152	160	174	165	182	177	196	183	182	182
Italy	106	105	111	109	115	114	116	118	121	126	128	131	137	148	137	138	141
Luxembourg	101	100	105	104	112	117	122	126	125	130	128	130	132	136	126	127	129

[1]) For definition, see *Les Salaires et les Charges Sociales dans les Industries de la Communauté*, Luxembourg, May 1956, Vol. I, section on wage costs and employers' labour charges (pp. 10-14).

[2]) For wages in absolute figures from 1953 to 1960 inclusive, see *Mémento de Statistiques*, and for 1961, *Bulletin Statistique, Sidérurgie.*

[3]) Exclusive of shift bonus.

[4]) Inclusive of shift bonus.