

X/14/73-E

industry research and technology

WEEKLY

REPRODUCTION AUTHORIZED

Brussels, 9 January 1973

No. 171

- ** COMMUNITY INDUSTRIES WITH A TOTAL TURNOVER EXCEEDING 10,000 MILLION DOLLARS are concerned by the 12 directives on the elimination of technical barriers to industrial trade which were adopted last December by the Community Council of Ministers. ANNEX 1 gives details of these 12 DIRECTIVES, the adoption of which is a landmark in the implementation of the General Programme on the removal of barriers to trade.
- ** The Commission of the European Communities intends to make proposals for HARMONIZING THE STRUCTURE OF TAXATION OF COMPANIES AND THE PRINCIPAL RULES OF ASSESSMENT, in particular with a view to establishing a certain intelligibility of taxation. This it has recently stated in reply to a written question by Mr Glinne, a member of the European Parliament, concerning the amount of tax payable by companies in the various Member States. ANNEX 2 gives a comparison of taxation of companies in the nine Member States of the enlarged Community.

This bulletin is published by the Directorate General Press and Information of the Commission of the European Communities

For further information please apply to the

Commission of the European Communities
Directorate-General for Press and Information
Division for industrial and scientific information
200, avenue de la Loi
1040 Brussels - Tel. 3500 40

or any of the Information Offices of the European Communities (list inside cover)

The information and articles published in this Bulletin concern European scientific cooperation and industrial development in Europe. Hence they are not simply confined to reports on the decisions or views of the Commission of the European Communities, but cover the whole field of questions discussed in the different circles concerned.

PRESS AND INFORMATION OFFICES OF THE EUROPEAN COMMUNITIES

1 BERLIN 31
Kurfürstendamm 102
tel. 886 40 28

GENEVA
72, rue de Lausanne
tel. 31 87 30

LUXEMBOURG
Centre européen du Kirchberg
tel. 479 41

ROME
Via Poli, 29
tel. 689722 à 26

53 BONN
Zitelmannstraße 22
tel. 22 60 41

THE HAGUE
22, Alexander Gogelweg
tel. 33 41 23

NEW YORK 10017
277 Park Avenue
Tel. 371-3804

SANTIAGO DI CHILE
Edif. Torres de Tajamar-Apt. 40
Torre A, Casilla 10093
Avda Providencia 1072
Tel. 43872

1040 BRUSSELS
200, rue de la Loi
tel. 35 00 40

LONDON SW 1
23, Chesham Street
tel. 235 4904/07

PARIS 16e
61, rue des Belles-Feuilles
tel. 553 53 26

WASHINGTON, D.C. 20037
2100 M Street, N.W.
Suite 707
tel. (202) 206-5131

** The total COMMUNITY AID TO TECHNICAL RESEARCH IN THE IRON AND STEEL INDUSTRY granted by the European Coal and Steel Community (ECSC) between 1955 and 1972 is some 60 million units of account. This aid averaged 4.4 million units of account per year during the years 1962-71 and 61% of the total cost of the research financed. The total expenditure on iron and steel research in receipt of such Community aid can accordingly be estimated at about 7.2 million units of account per year, representing about 5% of the sums set aside each year for research by the Member States' iron and steel industries.

A new medium-term research programme on steel, taking into account the probable aims to be achieved in the next five or ten years, is to follow the first research programme, which covered the years 1967-70, and will provide the necessary guidelines in this sector. For this reason, the Commission of the European Communities has drafted, in conjunction with the competent experts and institutions and together with the representatives of the circles concerned, GENERAL MEDIUM-TERM DIRECTIVES ON RESEARCH AND DEVELOPMENT IN THE STEEL INDUSTRY, which it has forwarded to the ECSC Consultative Committee for an opinion and to the Council of Ministers for information. ANNEX 3 gives details.

** Work on the FORWARD STUDY OF PASSENGER TRANSPORT NEEDS BETWEEN LARGE EUROPEAN CONURBATIONS is to begin early in January 1973. This study, based on the programme of cooperation in the field of scientific and technical research (COST) of the European Communities, has been commissioned from the OECD, which will act in conjunction with the Commission of the European Communities and the European Conference of Ministers of Transport (ECMT) (see IRT No; 152).

** Nine countries are participating in the study, namely, Austria, France, Germany, Ireland, Italy, the Netherlands, Spain, Switzerland and the United Kingdom. Greece has also expressed its intention of taking part and is expected to join in the early months of 1973. It is probable that Belgium, whose geographical situation makes its participation in the study highly desirable, will also make known its decision during the first half of 1973.

The fields to be explored in the course of the work cover all the factors likely to influence the transport methods to be recommended for links between large conurbations in Europe: transport demand, technical supply possibilities, environmental requirements, urban and rural development and energy policy. This study will thus enable the participating countries to determine the consequences of the various possible transport strategies, to evaluate the prospects offered by the new systems and techniques and to examine the financial repercussions of the various investment options.

** In the Community, the only DEVELOPMENT PLANS FOR THE PETROCHEMICAL INDUSTRY and allied branches of the chemical industry are the French Sixth Plan (i.e., the reports relating to it) and the Italian "Piano chimico". These two plans have been drawn up by the public authorities in cooperation with the sectors concerned and set out, by way of guidance, targets for the industry. The Netherlands "Centraal economisch plan" is of a different character and is more in the nature of an economic projection for purposes of general forecasting.

../...

It is estimated that investments in the chemical industry in France during the period covered by the Sixth Plan (1971-75) will total about 27,000 million French francs (at the 1970 rate). In Italy, the "Programma di promozione dell'Industria chimica" gives an estimate of investments in the basic chemical industry for the period 1971-80 of 4,500,000 million lire calculated on 1970 prices. The investments approved during the four years 1968-71 amount to 2,370,000 million lire for the entire chemical industry.

These details have recently been supplied by the Commission of the European Communities in reply to a written question by Mr Oele, a member of the European Parliament, on development plans for the petrochemical and allied industries in the Community.

The Commission considers that unchanged and unlimited application of these plans will increase and prolong the difficulties arising out of the current overcapacity of the basic chemical and artificial fibre industries. In the Commission's view, it would be desirable in the immediate future for certain firms, particularly in Italy, to lay the accent more on rationalizing their existing structures and less on expanding sensitive sectors.

** After consulting the European Parliament, the Commission of the European Communities has adopted A RATE OF 0.29% FOR THE COAL AND STEEL COMMUNITY LEVIES. According to estimates, the levies should thus yield about 63.6 million units of account in 1973 for the Nine. It should be remembered that the levies on coal and steel production, which are a Community tax on these industries' production, form the bulk of the ECSC's own resources (see IRT No. 118).

IRT No. 171, 9 January 1973, p. 5

** The Commission of the European Communities recently concluded a contract with the Battelle Institute, Geneva, for the planning of a MODEL ON DEPENDABILITY OF ENERGY SUPPLY FOR THE COMMUNITY.

** The Commission of the European Communities has recently refused to exempt from the BAN ON RESTRICTIVE AGREEMENTS STIPULATED BY THE EEC TREATY an agreement on quotas to apply to the Netherlands cement market and an agreement between Belgian cement producers.

The Commission has also recently adopted a decision banning the price rules and conditions of sale applied by the members of the Netherlands wholesalers association "Vereniging van groothandelaren in sanitaire artikelen (GISA)", under which more than 75% of the sales of articles for sanitary installations would be controlled, and compelling the association in question to discontinue the infringement.

** The Commission of the European Communities has recently put in hand a study in the form of EXAMINATION OF THE NUCLEAR ENERGY POTENTIAL AND ITS CONTRIBUTION TO THE ECONOMIC DEVELOPMENT OF THE COMMUNITY, by different types of region.

** SCIENTIFIC AND TECHNICAL REPORTS recently published by the Commission of the European Communities include the following:

- Survey of fusion reactor technology - definition of problems (EUR 4873e - 300 pages - FB 400 - available in English).
- Annual progress report 1971 of the Central Bureau for Nuclear Measurements - Joint Nuclear Research Centre - Geel Establishment (Belgium) (EUR 4855e - 82 pages - FB 125 - available in English).

- Radioactive contamination of foodstuffs in the countries of the Community in 1970. (EUR 4858d/f/i/n - 66 pages - FB 100 - available in Dutch, French, German and Italian).
- Recommandations sur les mesures des irradiations reçues par les matériaux de structure de piles (Recommendations on the measurement of radiation-induced damage to reactor structural materials). (EUR 4867f - 10 pages - FB 25 - available in French).
- Studies on the radioactive contamination of the sea - Annual report 1971 (EUR 4865e - 162 pages - FB 210 - available in English).

These reports can be obtained from the Office for Official Publications of the European Communities, PO Box 1003, Luxembourg 1.

TWELVE DIRECTIVES ON THE ELIMINATION OF TECHNICAL BARRIERS
TO TRADE ARE ADOPTED BY THE COMMUNITY COUNCIL OF MINISTERS

Twelve Directives aimed at the removal of technical barriers to trade in industrial products and applicable to industries which together represent in the Community a turnover exceeding 10,000 million units of account (500,000 million Belgian francs), were adopted on 19 December 1972 by the Community Council of Ministers. This brings the number of Directives adopted under the General Programme for the removal of barriers to trade to 36 and the Council has expressed its intention of continuing the efforts undertaken over a number of years to remove these obstacles to the unification of the Community market (see in particular IRT Nos. 127 and 139).

The first Directive concerns electrical equipment for use within certain voltage limits (low voltage), i.e., all electrical equipment and accessories in current domestic and industrial use. It states in the first place that all equipment designed according to standards harmonized among the Nine must be admitted to use in all the countries of the enlarged Community. It may be noted that during December, concurrently with the Council decision, CENELEC (the European Committee on Electrical Standards) was set up; this is an extension of CENELCOM, which was a group of standardization bodies of the Six. This is the body which will be responsible for establishing the harmonized standards, within the scope defined by the Directive, thus rendering the Community principle of "reference to the standards", recognized for the first time by the Council, fully effective.

Mention may also be made of the three Directives on agricultural or forestry tractors, which represent the first steps in this sector, in particular the first of the three, concerning the acceptance of such tractors, which delineates the scope of Community action in a similar way to that followed in the Directive on the acceptance of

motor vehicles, adopted in 1969. Work in the tractor sector will, of course, continue along the same lines, and no doubt with the same drive, as that on motor vehicles.

Two other Directives, on dangerous preparations, have been issued. The first concerns "pure substances" and amends the Directive adopted in 1967 to take into account the most recent progress in science and technology; the second concerns "solvents". They give in particular specifications for packaging and labelling which are mandatory in the case of these products and the precautionary advice which should be attached to them, since care needs to be taken in view of the risks inherent in their transport, storage and utilization.

The Directive on cables, chains and hooks also deals with labelling specifications and is the first to be adopted in the lifting equipment sector.

The Directive on non-automatic weighing instruments and the Directive on length measurement, on the other hand, are two of an already considerable number of Directives on measuring instruments.

The Directive on methods of analysis of textile fibre ternary mixtures follows up and supplements the Directives already adopted in the textile sector.

Special mention should, however, be made of the two Directives on biodegradability of detergents, which state the principle of increasing the biodegradability of detergents to an average rate of 90% throughout the Community.

It should be remembered that no international body has yet been bold enough to lay down officially so high a level of biodegradability and that, apart from a gentlemen's agreement in force in the United Kingdom, the levels specified in the national regulations were lower than this percentage. Although this decision is made under the General Programme on the removal of

technical barriers to trade, it does show that the Community institutions are taking fully into account the protection of the consumer and the environment, the need for which had already been emphasized by the Commission when it submitted to the Council the programme on the implementation of Community measures concerning the environment.

In adopting these Directives, the Council has thus made clear its intention of continuing its work actively in a field which the enlargement of the Community renders both more important and more difficult. It has shown that the removal of technical barriers to trade mentioned in the final resolution of the Paris Summit as the first task to be accomplished in order to implement the Community's industrial policy cannot remain a vague principle but must lead to swift concrete action. The Commission therefore cannot but welcome this decision, which represents a further step towards the achievement of a unified Common Market.

TAXATION OF COMPANIES IN THE MEMBER STATES OF THE ENLARGED COMMUNITY

The Commission of the European Communities intends to make proposals for harmonizing the structure of taxation of companies and the principal rules of assessment, in particular with a view to establishing a certain clarity, as regards taxation. This it has recently stated in reply to a written question by Mr Glinne, a member of the European Parliament, on the amount of tax payable by companies in the various Member States.

Apart from certain special cases, notably that of small firms, the standard rates of taxation of companies in the nine Member States of the enlarged Community are currently as follows:

Belgium:

Standard rate: 30%, increased to 35% on the proportion of retained profits in excess of 5,000,000 Belgian francs. Since 1969, additional rates have also been charged. If these are taken into account, the actual rate for 1972 earnings is 37.80 or 43.80%, depending on whether the basic rate is taken as 30 or 35%.

France:

50%

Germany:

Undistributed profits: 51%; distributed profits: 15% (nominal rate) and 23.44% (actual rate). If account is taken of the counter-cyclical tax, these rates are respectively 52.53%, 15.45% and 24.14%. Companies also pay an annual tax on assets (standard rate 1%).

Italy:

There are two taxes on profits:

- a) A schedular tax plus an additional rate varying according to province. In Rome: a total of 42% in 1971 for a profit in excess of 100 million lire (32-42% for a profit below this figure);
- b) A tax assessed on capital (rate: 0.75-0.9375% including additional taxes) and on the proportion of the profits in excess of 6% of the capital and reserves (rate: 15-18.75% including additional taxes).

Luxembourg:

40%; companies also pay an annual tax on assets (rate: 0.50%).

Netherlands:

46%; (including additional taxes: 48.3% for the first half of 1972 and 47.38% for the second half of 1972).

United Kingdom:

40%

Denmark:

36%

Ireland:

Profits are subject to two taxes (income tax and corporation profits tax). The cumulative rate of these taxes is 49.95% of the profit.

The differences in rates between the States concerned are not accompanied by the same differences in tax burden for the following reasons:

- firstly, certain States have adopted measures in connection with personal income tax to ease the total tax burden on profits distributed by companies (Belgium, France, Ireland);
- secondly, rules of assessment, i.e., the rules under which the taxable profit to which the rate applies is determined, vary from State to State. The lack of clarity in these rules at present prevents valid comparisons from being made.

.....

THE GENERAL MEDIUM-TERM DIRECTIVES ON RESEARCH AND
DEVELOPMENT IN THE STEEL INDUSTRY

The total Community aid to technical research in the iron and steel industry granted by the Coal and Steel Community (ECSC) between 1965 and 1972 is some 60 million units of account. This aid is averaged 4.4 million units of account per year during the years 1962-71 and 61% of the total cost of the research financed. The total expenditure on iron and steel research in receipt of such Community aid can accordingly be estimated at about 7.2 million units of account per year, representing about 5% of the sums set aside each year for research by the Member States' iron and steel industries.

This Community aid is granted under Article 55 of the ECSC Treaty, which states that the Commission of the European Communities (at that time the High Authority) must promote technical and economic research relating to the production and increased use of steel and to occupational safety in this industry, in particular by allotting funds derived from the Coal and Steel Community levies with the assent of the Council of Ministers. The results of research thus financed are to be made available to all concerned in the Community.

The research financed by the Community at first related mainly to production techniques, with the aim of improving the economic viability of the Community's steel industry. Other focal points developed later; the automation of production processes; the characteristics of steel utilization, with a view to increasing its use; fundamental research, particularly in the field of physics of metals; and problems of management in the steel industry. Research concerning the environment, aimed at the economic elimination of the brown smoke emitted by converters, has also been promoted since 1968.

Community aid has thus made possible a whole series of research projects, the expenses of which could not have been borne by the firms alone. Moreover, it helped to a great extent to achieve closer collaboration between a number of research institutes of the Member States.

A first medium-term steel research programme for the Community was prepared for the years 1967-70. A new medium-term research programme, prepared for guidance and not selective which takes into account the probable aims to be achieved in the next five or ten years, is necessary as a means of orientation in this field. Accordingly, the Commission of the European Communities has drafted, in conjunction with the competent experts and institutions and together with the representatives of the circles concerned, general Directives on medium-term research and development in the steel industry, which it has forwarded to the Consultative Committee of the Coal and Steel Community (ECSC) for an opinion and to the Council of Ministers for information..

International competition currently calls for major efforts in research, as regards both modern production techniques and the improvement and optimization of product quality. Community research needs above all to be applied to the solution of future problems, taking into account the Community's interests and ensuring as wide a dissemination as possible of the knowhow obtained (in particular by offsetting the frequently necessary geographic concentration of the research programme by the participation of technicians from other parts of the Community).

Moreover, in the choice of future research projects more attention should be paid to research conducted by firms themselves, institutes, universities, and in particular to programmes subsidized by governments, especially in the field of metallurgy.

Provided that questions of competition do not militate against them and in this respect it should be remembered that certain matters of competition are of less importance today as between Community firms than as between Community firms and those in non-member countries, efforts should be made to achieve improved cooperation and hence improved mutual information. The result might be not only to speed up research but also to reduce errors of orientation.

It would also be useful for the research programme on steel, while pursuing the specific objectives of the industry, to be integrated harmoniously into the Commission's general research policy, so that the best use is made of the instruments to be created for its implementation and so that mutual transfers of information resulting from these two activities are encouraged.

In the guidelines which it has drafted for a medium-term research programme, the Commission presents a set of research subjects tailored to fit into a Community programme. These subjects are:

- the improvement or substitution of production processes

The competitiveness of the Community's steel industry will depend to a great extent on the early implementation of changes resulting from the amplification of research on promising production processes.

Priority should be given to solving a number of problems and meeting a number of needs which are currently encountered at the various stages of production, i.e., raw materials (alloying materials for steel, scrap, coke, other fuels, utilization of nuclear energy in steelworks); blast furnaces, direct reduction and foundry pig iron; steelworks (steelmaking, oxygen, electric and continuous steelworks, casting and solidification of steel); rolling mills; automation; measurements; processing and finishing.

- the improvement and optimization of product quality

It is to be anticipated that the sophisticated product (i.e., steels with advanced characteristics) will acquire an increasingly important place in competition with other materials. It is thus reasonable to consider that research oriented towards the product will be the priority field of technological innovation and profit. One of its repercussions, will probably be the necessity for parallel innovations in production equipment.

As a result, the Commission feels that energetic action should be taken in this field and that the effort made by firms should be supplemented by action which does not raise problems as regards industrial property.

The research should be devoted in particular to utilization properties (in particular the creation of a Community data bank for utilization properties); physical metallurgy (in particular dispersoid steels, thermomechanically processed steels, problems of deformation, the problem of grain size and grain boundaries, and the reactions of steel to the environment); steel utilization (basic research, research on problems of application, selective projects in certain key sectors, removal of technical barriers, technico-economic projects on problems of application, improvement of dissemination of information and drafting of recommendations).

Trend of aid granted for iron and steel research, by category

* = (millions of u.a.)

Category	* 1955-61		* 1962-66		* 1967-71		Total	%	1	2
		%		%		%				
Iron ore	2.8	28.6	1.9	9.2	0.7	3.0	5.4	10.0	-	-
Blast furnaces (incl. experimental furnace)	3.7 (2.1)	37.8 (21.4)	5.7 (4.7)	27.7 (22.8)	3.8 (1.3)	16.3 (5.5)	13.2 (8.1)	24.6 (15.1)	(-)	1.5 (-)
Sinters	0.6	6.1	-	-	0.7	3.0	1.3	2.4	-	0.6
Direct reduction	1.2	12.2	2.7	13.1	0.1	0.4	4.0	7.5	3.9	-
Steelworks	0.6	6.1	2.3	11.2	3.9	16.8	6.8	12.7	3.4	0.2
Rolling mills	0.1	1.0	2.6	12.6	3.2	13.7	5.9	11.0	-	5.4
Analyses and methods of measurement.	-	-	1.9	9.2	2.8	12.0	4.7	8.7	-	-
Utilization properties Physical metallurgy	-	-	1.7	8.3	4.1	17.7	5.8	10.8	-	-
Steel utilization	-	-	0.1	0.5	1.5	6.4	1.6	3.0	-	-
Miscellaneous	0.8	8.2	1.1	5.3	1.3	5.6	3.2	6.0	-	-
	5.8	100.0	20.6	100.0	23.3	100.0	53.7	100.0	7.3	7.7
			4.12		4.66		3.16		(13.6%)	(14.6%)

¹Including funds for the development of new production processes²Including funds for automation

