EUROFER

Annual Report

1999

The European Confederation of Iron and Steel Industries (EUROFER) was founded in 1976. Members and Associate Members are steel companies and national steel federations throughout the European Union and the Central and Eastern European Countries.

In 1999, 149 million tonnes of crude steel were produced by the European Union Member Companies of EUROFER. This represents about 96% of the total production in the European Union. The Associate Members with 25 million tonnes of crude steel represent 92% of the production of the Central and Eastern European Countries.

The objectives of EUROFER are the co-operation amongst the national federations and companies in all matters, which contribute to the development of the European steel industry and the representation of the common interests of its members vis-à-vis third parties, notably the European institutions and other international organisations.

Contents

Introduction

At the beginning of 1999 the steel industry in the EU was still suffering from the poor market conditions provoked by the huge trade distortions in the previous year which resulted from the regional crises in Asia and Russia. A massive import surge accompanied by clear cases of dumping led to a collapse of prices which were at their lowest point in the first months of 1999. However, in the course of the year demand recovered and prices gradually improved. This trend is continuing and accelerating in the year 2000 founded on sound economic fundamentals in the European economy and the improved international context. Crude steel production in the EU this year will therefore show a considerable increase over that of 1999 and the financial results of companies will be much improved.

The process of consolidation of the industry continued in 1999. Further mergers, co-operation and strategic partnerships on a global scale are to be expected. The challenge of fast-changing market conditions, competitive pressure and the on-going concentration within major consuming sectors obliges the industry to seek all possible synergies and to achieve the economies of scale required to operate in a global market.

Moreover, the growing internationalisation of the steel market has highlighted the importance of assuring the conditions of fair trade. The recent crisis demonstrated that the application of the rules governing fair trade are at present neither equitable in some instances nor efficient in others. Eurofer therefore is advocating, in the context of the new WTO Round a greater harmonisation of the implementation of the existing Anti-dumping Agreement.

The steel industry is committed to sustainable development and a continuous improvement of its environmental performance, and it has an excellent track record in this respect. Steel is the world's most recycled material. The use of ferrous scrap as a raw material helps in preserving natural resources and in keeping the environment clean. Another example is the steady reduction of energy requirements and carbon dioxide emissions achieved over many decades. This development has been driven so far that the limits set by the laws of physics are being approached.

The Kyoto Protocol for reduction of greenhouse gas emissions provides a challenge for the steel industry. Some further reduction of carbon dioxide emissions can be achieved by future investments in new plants and processes, but the potential is limited as mentioned above. A carbon energy tax is unlikely to result in reduction of carbon dioxide emissions. Its effect on the industry would be to push up input costs, not reduce unit energy consumption. Such a tax would also reduce the funds available for investment in research and development and in other projects necessary for improved energy efficiency. The steel industry instead supports voluntary or negotiated agreements at national level for further improvement of energy efficiency.

Prof. Dr. Ekkehard Schulz
President

Dietrich von Hülsen
Director General

General Economic Development

For the EU, 1999 was a comparatively modest year in terms of economic growth. The economic difficulties internationally translated in the first half of the year into a fall in trade volumes and a loss of business confidence. As inventory levels were reduced and investment growth weakened, so industrial production fell. However, domestic demand provided a solid basis for economic expansion, even in the first semester, reflecting the underlying strength of the European economy.

The elements which had acted as a drag on growth largely dissipated in the course of the second half of the year and recovery took hold rapidly, with the highest contribution to growth coming from the acceleration in exports.

Private consumption, although down slightly on the previous year, remained quite strong throughout 1999. Favourable domestic demand conditions, particularly in the second half of the year, and rising capital profitability stimulated investment growth which, especially for machinery and equipment, accelerated strongly towards the end of the year.

Development of Certain Elements of the EU Economy
(yearly variations in %)

	1998	1999	2000 (forecast)
GDP	2.7	2.3	3.4
Private consumption	3.0	2.8	2.8
Investments	5.7	5.1	5.6
of which Investments in equipment	9.7	6.7	7.5
Exports	5.9	4.0	8.2
Imports	8.9	6.1	7.7
Employment	1.3	1.3	1.3
Unemployment rate	9.9	9.2	8.5
Inflation	1.3	1.2	1.8

Source: Official data and estimations of the European Commission

Fiscal policy was mildly supportive of growth, as were the record low interest rates and the continuing comparative weakness of the euro vis-à-vis the US dollar.

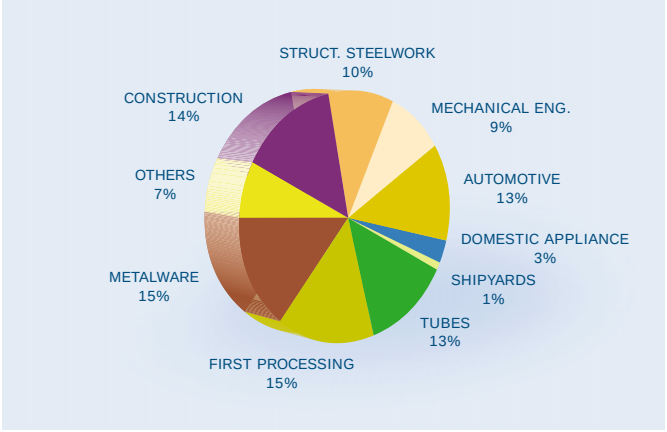
On the basis of these factors, GDP growth was considerably higher than had been forecast when the year began.

Steel Market

Consumption

Despite declining for the first three quarters of 1999, real consumption for the year as a whole was only just below the generally satisfactory levels of 1998. The acceleration of real consumption in the last months of 1999 went some way to improving the results for the year as a whole. However, it did not completely offset the fall in demand in the first semester caused by the downturn in export orders and industrial output in the European economy as a whole.

Share of Consumption by Steel-using Sector

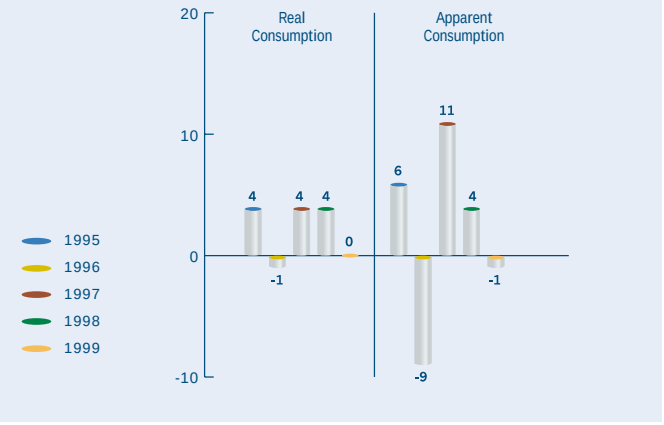


The activity of steel-using sectors in 1998 was considerably higher than the rest of the economy. The relative fall in activity in 1999 has to be seen in that context. Equally, it was those sectors most exposed to changed conditions on international markets and investments – machinery and equipment, first processing activities – that suffered the most from the effects of the crisis in emerging markets. However, they were also the most responsive to the changing trading conditions and growing confidence of the second part of the year.

Several sectors experienced difficulties in the course of the year linked to circumstances particular to their industries. For example, the large diameter tubes sector saw a sharp contraction of activity as projects in the energy sector dried up in response to the drop in oil prices, and shipbuilding in Europe showed a steep decline in activity: both of which had negative effects on the market for quarto-plate.

Other sectors, such as the automotive sector, showed a surprising resilience and 1999 was notable for the sharp recovery in the construction sector after several years of poor levels of activity.

Real and Apparent Steel Consumption: Yearly Variation (in %)

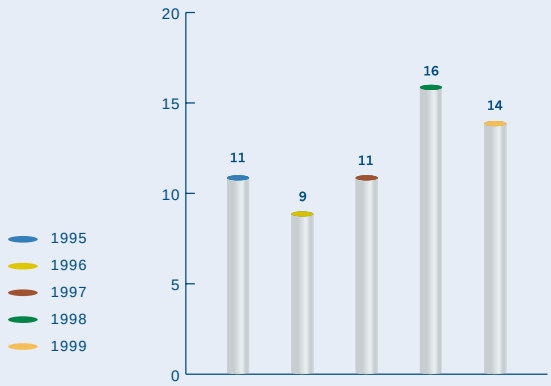


Apparent consumption fell back sharply in the first 6-months of 1999 but nevertheless remained at comparatively high levels in relation to the development of real demand. Deliveries of domestic producers did fall substantially, but stocks proved difficult to reduce due, in part, to the continued presence of large quantities of imports on European markets.

Imports

The record import levels of 1998 went beyond the absorption capability of the EU market and led to its destabilisation. Import pressure remained extremely high in 1999. While total tonnages coming in did reduce from 16 million tonnes of finished ECSC products in 1998 to 14 million tonnes in 1999, imports still remained 30% higher than in 1997.

ECSC Products Excluding Semis: Imports (million tonnes)



Source: Comext - Eurostat

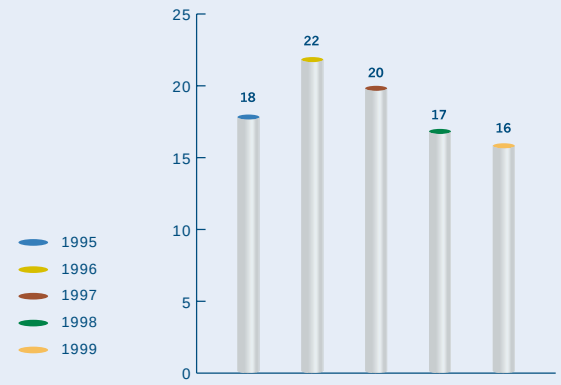
A striking characteristic of import development in 1999 was the beginning of the withdrawal of the non-traditional suppliers, who had appeared on EU markets as a result of the Asian crisis and who imported mainly flat products. Imports from Asia fell by 42% in 1999. This, however, coincided with an improvement in the construction sector and in the market for light long products in Europe, which led to a rapid expansion of long products imports. In addition, generally improving market conditions in the EU in the second half of last year led to a return to the market of those producers who had withdrawn when faced with deteriorating prices and overstocking at the end of 1998 and beginning of 1999.

1999, therefore, was characterised by a declining trend in flat products imports (which however began to change in the course of the second semester, particular for hot rolled coil, as market conditions improved), and by a rising trend for long products which partly offset the falls experienced in flat. Imports of flat products fell to 9 million tonnes, down by 2.5 million tonnes, or 24%. Imports of long products rose by 1 million tonnes or 27%, to 5 million tonnes.

Exports

The acceleration of recovery in Asia in the course of the second half of 1999 led to an improvement in international demand. Exports to Asia resumed, growing by 23%. However, total exports of steel products from the EU fell again, but this fall was less than in previous years and reflected the particularly difficult conditions on export markets at the beginning of the year and the strong domestic market at the end of 1999. Exports of finished products fell by 865 Kt, or 5%, to 16.1 million tonnes.

ECSC Products Excluding Semis:
Exports (million tonnes)



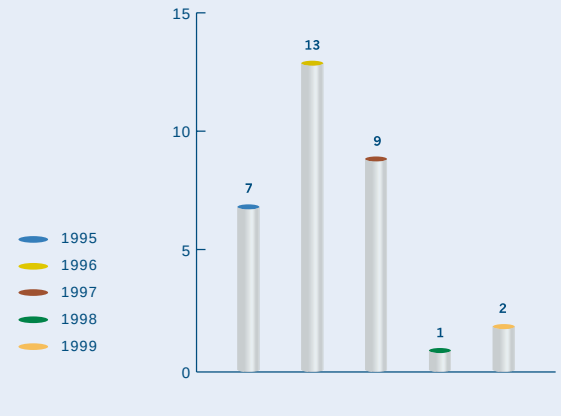
Source: Comext - Eurostat

Opportunities on export markets grew substantially in the course of the second semester of 1999, and this is expected to continue into this year.

Trade Balance

For the first time ever, the EU lost its trade surplus in ECSC steel products in 1998. Similarly, in 1999 if all ECSC products are taken into account, including semis, then there is a trade deficit of just over one million tonnes. In terms of finished products alone, a surplus of 1.6 million tonnes will have been maintained, which is only a slight improvement on the previous year and compares with previous years when typically the surplus was around 10 million tonnes.

ECSC Products Excluding Semis:
Trade Balance (million tonnes)



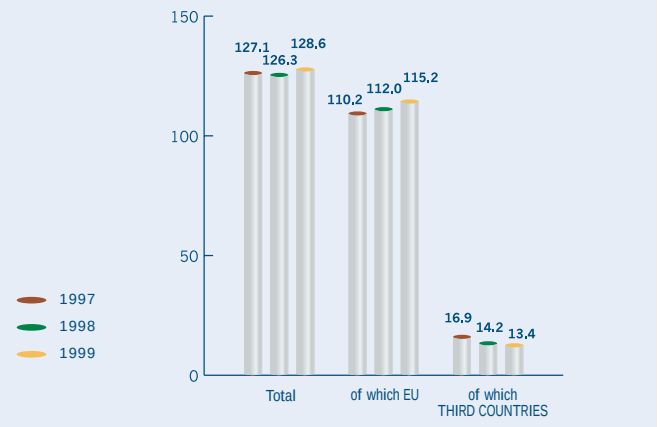
Source: Comext - Eurostat

DELIVERIES OF CARBON STEELS

Total deliveries within the European Union and to third countries of rolled finished products in carbon steel (defined as non-alloy and alloy steels other than stainless) increased by 1.8% [1]. In spite of falling prices in the first half of the year, deliveries within the European Union increased by 2.9%.

The decrease of the exports to third countries (-5.6%) showed a smaller reduction than in the two preceding years.

Carbon Steels:
Total Deliveries (million tonnes)

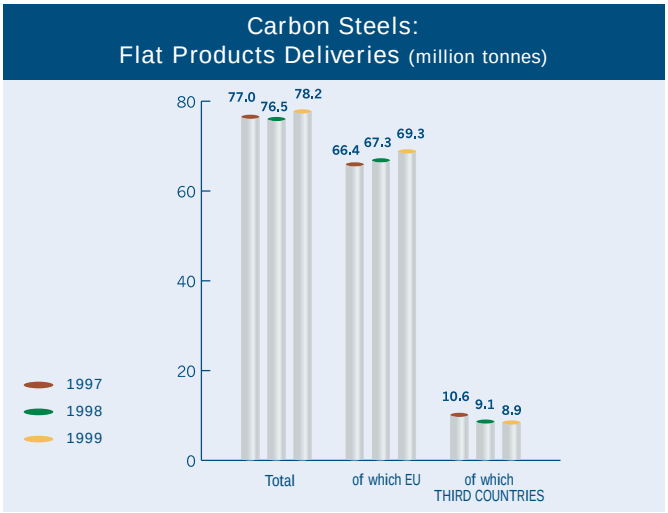


Flat Products

After two years of strong growth rates (15% in 1997 and 7% in 1998) the apparent consumption of flat products in the European Union showed a small reduction (-0.6%) in 1999.The recovered market share of the European mills, due to lowered imports from third countries combined with a normalisation of stocks, led however to deliveries within the EU increasing by 3%.

Prices in 1999 fell to a historical low level. As from the second quarter, the downward trend was reversed and price recovery started with the third quarter.

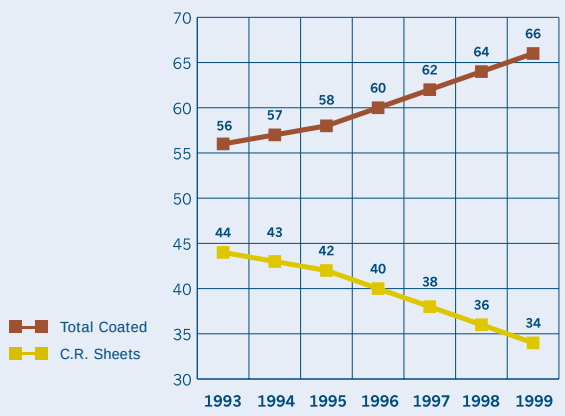
Carbon Steels:
Flat Products Deliveries (million tonnes)



Compared to 1998, deliveries of hot rolled flat products (+ 7%) and coated sheet (+ 6%) showed a positive development. On the other hand a reduction of deliveries was observed for black plate/tin plate (-6%) and electrical sheet (-2%). The low activity of tubemakers led to a fall in quarto-plate/wide flats deliveries by 6%.

[1] Figures now include the deliveries of two Scandinavian producers and can therefore not be compared with those of the annual reports of the preceding years.

Carbon Steels:
Delivery Structure of Cold Rolled Products (in%)



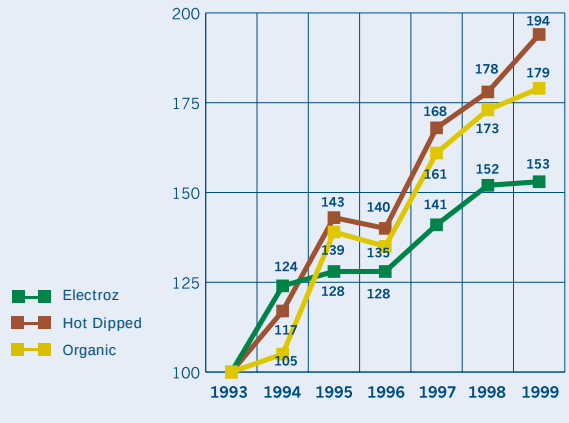
Deliveries of cold rolled sheets have been decreasing since 1998, but the reduction in 1999 (-1%) was less than the previous year.

The ongoing substitution of uncoated cold rolled sheet by coated material continued in 1999. During the last six years, the structure of total cold rolled products deliveries changed by 10% in favour of coated sheets.

Also during the last six years, deliveries of hot dipped galvanized sheets have nearly doubled within the European Union. This is mainly due to increased consumption of this product in the automotive sector. Deliveries of electrozinc were unchanged for the first time during the last three years.

Exports to third countries dropped by 2.2%, remaining nearly at the same level as 1998.

Carbon Steels: Development of Coated Products
Deliveries within the EU (index)

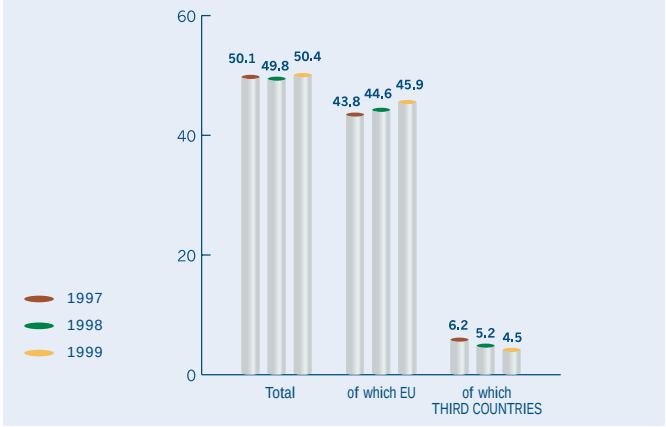


Long Products

The market supply of long products within the EU increased by 5%. As in the past, this was due to the extended market share of third country imports. Deliveries of the European producers increased by 2.9%.

At the beginning of 1999, prices were at their lowest levels. Although the recovery started during the second quarter, by the end of the year they had still not returned to the levels of the first half of 1998.

Carbon Steels:
Long Products Deliveries (million tonnes)



Deliveries within the EU were strong for railway material (+11%) and heavy sections (+10%). Wire rod increased by 4% and reinforcing bars by 1%. Sheet piling deliveries fell by 2% and merchant bars by 1%.

Exports to third countries fell by 13.5%, mainly because prices in most world markets remained unattractive up to mid-1999. The improved situation in South East Asia and the strong position of the US dollar significantly contributed to their recovery by the end of the year.

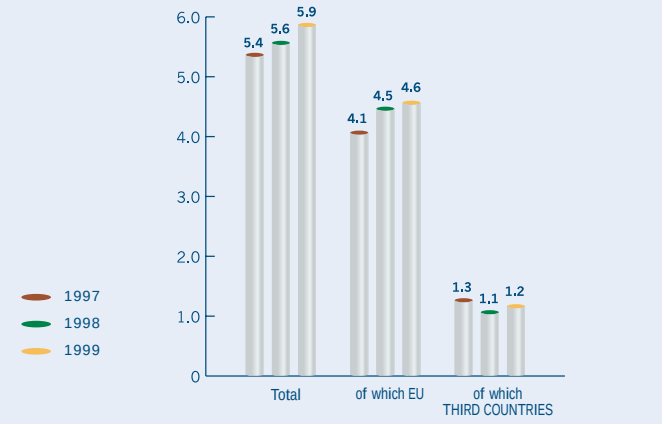
DELIVERIES OF SPECIAL STEELS

During the major part of 1999, the negative trend which had been spotted in the second half of 1998 under the influence of the Asian financial crisis continued to affect apparent consumption of special steels in general.

In the first half of 1999, total special steels sales decreased by 7.3% compared to the satisfactory level of the same period in 1998. As a consequence, activity and price levels in Europe came under considerable pressure. As from the third quarter of 1999, with signs of economic recovery and sustained growth in real consumption, demand and order bookings by the EU producers started to pick up again and total deliveries in the fourth quarter of 1999 improved by 6.5% compared to the fourth quarter of 1998.

For the whole year, total deliveries by the EU special steels producers decreased by 2.9%. For the year 2000, the outlook is clearly positive with a high activity level in most of the market segments. For the main categories of special steels (stainless steels, alloy engineering, tool and high speed steels), the situation was the following :

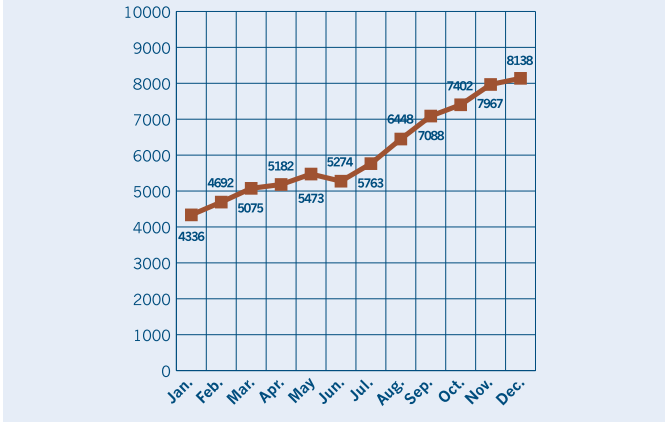
Stainless Steels:
Development of Deliveries (million tonnes)



Stainless Steel Deliveries:	+4.7%
of which to EU markets:	+3.2%
of which to export markets:	+10.7%

For stainless steels, 1999 was also characterised by sluggish demand in the first half-year (- 0.2%) followed by a strong expansion of supplies to the EU and export markets in the second half of the year (+ 10.3%). This was driven by robust growth of real consumption in Europe, the need to rebuild inventories and the export opportunities propelled by the strong US dollar and high demand in Asia and America. This trend is continuing in 2000 where European producers are recording long delivery lead times and full capacity use. A significant price recovery has been noticed, which mirrors the dramatic price increase of raw materials, especially of nickel.

Nickel:
Development of Quotations (US $/tonne)



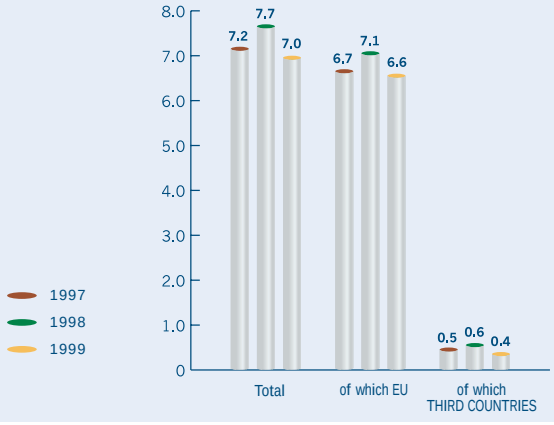
Source: Metal Bulletin

Alloy Engineering, Tool and High Speed Steels:	–9.3%
of which to EU markets:	–7.7%
of which to export markets:	–28.1%

Regarding alloy engineering, tool and high speed steels, the slowdown in demand which had started in the second half of 1998 continued significantly during the major part of 1999; total sales during the January – September 1999 period fell by 13% compared to the same 1998 period. This was mainly due to the continuation of the destocking process and a slower activity in user sectors linked to investment goods, which was not compensated by the sustained activity level in the automotive industry.

As from the fourth quarter of 1999, with business confidence improving world-wide, a clear upturn in apparent consumption took place on the EU market and total sales increased by 4.9% compared to the fourth quarter of 1998. The recovery in price and volume terms has, so far, been confirmed for year 2000 business.

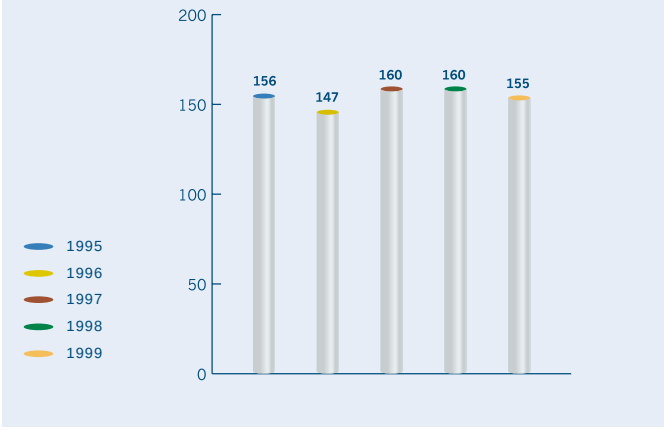
Alloy Engineering, Tool and High Speed Steels:
Development of Deliveries (million tonnes)



CRUDE STEEL PRODUCTION

Despite the strong recovery in crude steel production levels in the last quarter of the year, production for the year as a whole in the EU fell by 3% reflecting the difficult market conditions which existed for much of the year both in the EU itself and on international markets.

EU Crude Steel Production
(million tonnes)



Source: Eurostat

EU Crude Steel Balance
(million tonnes)

	1996	1997	1998	1999	2000 (forecast)	99/98 % changes	2000/99
Real consumption	139.2	149.8	157.6	157.0	159.0	–0.4	1.3
Stocks: merchants/users	–3.7	1.0	3.0	–2.0	–1.0	--	--
Apparent Consumption	135.5	150.8	160.6	155.0	158.0	–3.5	1.9
Imports	12.2	14.3	21.4	19.0	19.0	–11.2	0.0
Exports	27.9	23.9	20.0	19.0	20.0	–5.0	5.3
Balance	15.7	9.6	–1.0	0.0	1.0	--	--
Stocks: works	–4.6	–1.0	2.0	0.0	0.0	--	--
Crude Steel Production	146.6	159.4	159.6	155.0	159.0	–2.9	2.6

Source: Official data and estimation of the European Commission (rounded figures)

1999 saw the beginning of the consolidation of recovery in the steel markets in Russia and South East Asia which had collapsed as a result of the financial crisis of the previous two years. Steel production rose strongly. The notable exception to this was Japan, where production levels remained low in response to continued weakness in the domestic economy.

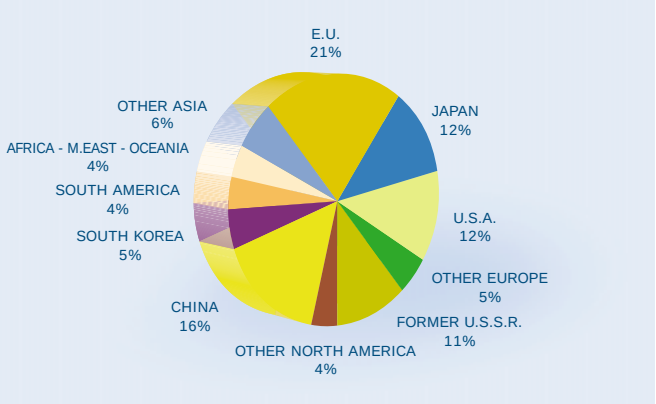
The USA, suffering from the impact of the Asian crisis, saw a pattern of production not dissimilar to that of the EU with a reduction in the first half of the year, followed by an accelerating improvement in the second.

World Crude Steel Production
(million tonnes)

	1998	1999	% 1999/1998
World	777	788	1.4
Europe	207	198	–4.3
of which EU 15	*160*	*155*	*–3.1*
Former USSR	74	86	16.2
Asia	298	308	3.4
of which China	*115*	*124*	*7.8*
of which Japan	*94*	*94*	--
of which South Korea	*40*	*41*	*2.5*
North and Central America	130	130	--
of which USA	*99*	*97*	*–2.0*
South America	36	35	–2.8
Africa, Middle East and Oceania	32	31	–3.1

Source: IISI

World Crude Steel Production
Geographical Breakdown



Trade Policy

The effects of the Asian crisis, which began in July 1997, and which led directly to the exceptional rise in import levels in the EU in 1998, lingered on in 1999. Indeed, the impact in terms of market conditions and, in particular, on prices, reached its deepest point in the first half of 1999, although by that time imports had receded from their peak, since the overstocking and price collapse for which they bear the responsibility rendered the market unattractive to importers. Nevertheless, the European industry continued to pay the price for the excessive level of, often dumped, imports in the previous years.

This situation threw into perspective the difficulties which the industry of the EU has in having full and timely access to its own trade defence instruments and to the shortcomings of these instruments. It highlighted the need to ensure the consistent and balanced application by the EU authorities of the Community anti-dumping regulations. Anti-dumping is essentially a technical procedure - the cases filed by the European industry demonstrated the need for disengaging these procedures from the political dimension in Europe.

The response of the European steel industry to the crisis in its markets in 1998 and 1999 was measured. It consisted of the filing of a small number of cases targeting key products (hot rolled coil, quarto plate and wire rod) and was limited to the worst practitioners on the market. The crisis in European markets began in 1998 and reached its deepest point in 1999. Nevertheless a final decision on the first cases introduced - for hot rolled coil – did not come until 13 months after the opening of investigations, that is not until the very end of 1999. This demonstrated that:

- *the current regulations on anti-dumping impose comparatively cumbersome requirements on EU industry which makes the preparation of cases lengthy and difficult. Taken together with the long investigation period of the Commission this means that relief for the affected industry comes too late.*

- *the risk of political interference in the implementation of the procedure is great. Rather than judging each case on its technical merits, too often cases are assessed by either or both the Commission and Member States using political criteria.*

It became clear, therefore, in the course of the year that certain actions are necessary in order to reform the anti-dumping practices of the European Union in order to make them more effective:

- *to improve objectivity and to take the politics out of anti-dumping, a possible solution could be the creation of an agency to take decisions on injury and consumer interest;*

- *given the current lengthy procedures, there should be an early provisional determination of injury, before provisional determination of dumping.*

The rash of trade cases across the world in 1999 also highlighted the lack of a full and harmonised implementation of the WTO Agreement on anti-dumping by all countries. While the WTO sets the framework, the transposition in national laws and the application of the rules varies from country to country. The failure to launch the so-called Millennium Round in Seattle in December meant that this issue could not be properly addressed. Neither the Commission nor European industry is advocating that the WTO Agreement on anti-dumping be re-opened. The dangers of placing a wholesale revision of the anti-dumping Agreement on the negotiating table in the context of a comprehensive round are clear. However, a greater harmonisation of the implementation of the existing agreement by WTO members, preferably towards the EU anti-dumping standards as a minimum, is desirable. Only in this way would the excessive use of anti-dumping measures as a means of harassment or of closing the market be avoided, while ensuring that the more liberal aspects of the regulation in force in the EU - aspects such as the lesser duty rule and Community interest - are adopted by all. This would ensure that European industry is not placed at a disadvantage vis-à-vis its major competitors, some of whom benefit from a national legislation which, while apparently consistent with the letter of WTO rules is nevertheless used in a highly protectionist way.

Blanket filing of trade cases is one example of trade laws misuse. Recourse to the WTO safeguard clause, when there is no "significant overall impairment in the position of a domestic industry", as happened in 1999 in the US with the safeguard proceedings regarding wire rod and welded line pipe, is another illustration of abuse of trade laws. EUROFER will strongly support that the European Commission requests the judgement of a WTO panel on this issue to avoid that recourse to safeguard measures, that should only take place in exceptional circumstances, becomes an alternative to anti-dumping cases. EUROFER is also looking forward to constructive decisions from the WTO Dispute Settlement Body on the use of the US 1916 Act to restrict access to the US market. Likewise, EUROFER expects that the WTO will put an end to the US Administration's practice that arbitrarily penalises with countervailing duties the exports of companies which have been privatised at market price, when these companies had received government subsidies, prior to privatisation.

EUROFER will be working to put forward the industry position on this subject, as on others, in the light of the expected relaunch of negotiation for the new Round in 2000-2001.

However, EUROFER remains convinced that the 1998 import crisis has demonstrated that present trade defence instruments do not offer the means to deal

effectively and appropriately with the problems the world steel market was faced with in these circumstances. Accordingly, in 1999 EUROFER initiated a dialogue with other key actors in the world steel market, to foster approaches that would make it possible to better address the structural problems of countries in transition and to design measures providing for consultations, to help avoid dangerous trade developments and the occurrence of injury.

Raw Materials

Iron Ore

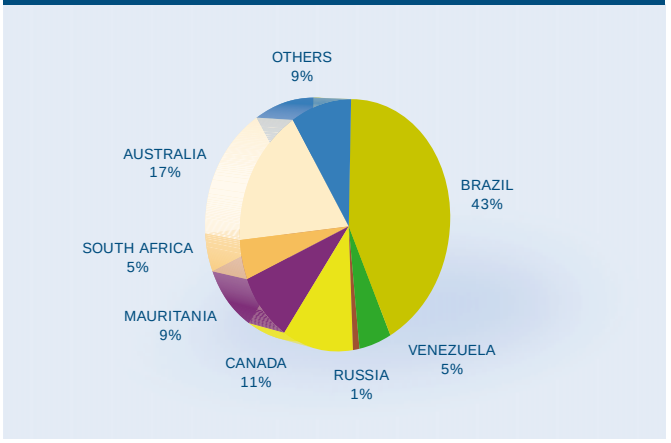
There were fairly substantial falls in prices for iron ore in the course of the year. Falls were in the order of 11% for fines and of 12% in the lump premium. The premium for pellets fell by 18%. This reflects the poor outlook for iron-making in Japan and the EU for 1999 at the beginning of the year. Iron production fell by 3% in the year as a whole, to 93 million tonnes. The price falls reflect especially the more difficult situation in the first half of the year which caused uncertainty for the year as a whole. However, the steel market and, indeed, iron and steel production picked up considerably in the second semester, leading to a result for the year which was much improved on the forecasts made earlier.

Seaborne traded iron ore world-wide in 1999 was 410 million tonnes compared to 415 million tonnes in 1998 and 428 million tonnes in 1997.

Supply sources for iron ore expanded further in 1999 with, notably, the Hammersly Yandi project coming on-stream and producing 10 million tonnes compared with a projected 5 million tonnes output.

The Ferteco port expansion was completed. This will increase capacity by 10 million tonnes a year.

EU Receipts of Imported Iron Ore



Source: Eurostat

Coal

Prices to the EU fell by 18% in the course of the year. Imported coal is continuing to assume the place of domestic sources in the EU. The supply pattern of imports remained broadly unchanged with, however, US coal continuing to lose market share as it failed to meet the competitive conditions on the market.

Scrap

Throughout much of 1999, the scrap market was relatively calm with prices low in relative terms and moving only within a narrow range.

Demand levels for scrap, however, remained quite high due to the strong improvement in activity levels in the construction sector.Together with rapidly rising output in other sectors consuming long products, this meant that EAF (electric arc furnace) production levels, while lower than the previous year, remained relatively high at 59 million tonnes, despite the downturn experienced in the steel market generally in the first half of 1999.

As economic conditions improved in the second half of the year, steel production rose rapidly and EAF output increased further. Consumption of scrap for the year was approximately 78 million tonnes.

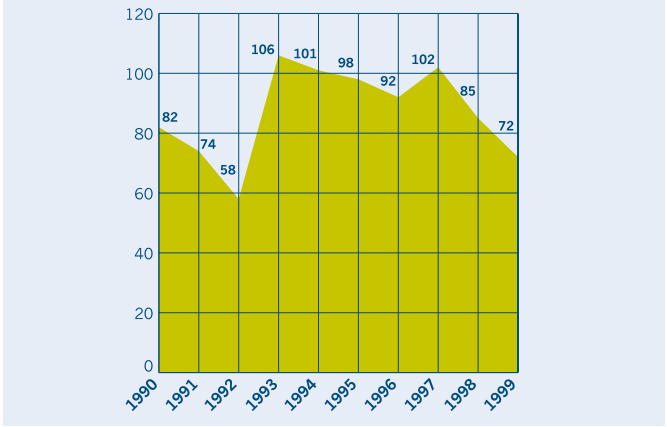
Supplies of scrap remained unproblematic throughout most of the year – there were few constraints and stock levels were high with some episodic shortages of prime obsolete scrap due to high demand.

The key to the stability of the European market was the relative lack of demand for scrap on export markets and hence reduced pressure on supplies in the EU. This situation changed at the end of the year, with prices rises being triggered by rising export demand – demand which had as its origin not just the improving international economic picture as the effects of the Asian crisis receded and Asian buyers returned to the scrap market, but also the threat to scrap supplies, which the imposition of an export tax in Russia and the threatened imposition of a quota system on exports from the Ukraine represented.

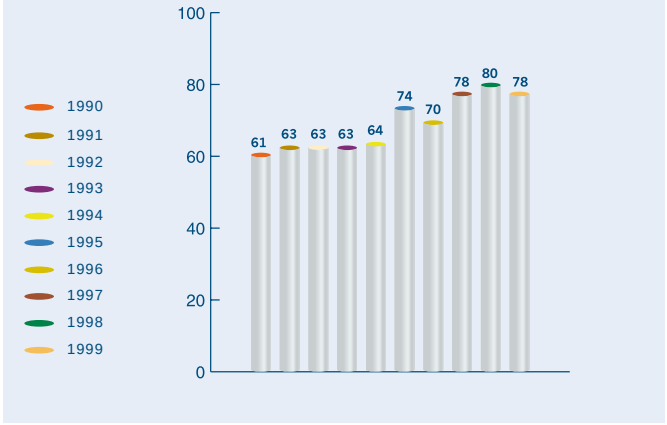
Since direct exports from these countries to the EU represent almost 4 million tonnes, 50% of the total scrap imports into the EU, the potential impact was substantial, especially since the exports of these countries to Turkey would also be affected and could have triggered the return of Turkey to the Rotterdam market.

Coming at a time when international demand was strong and when supplies from the US to the international market were less sure, these measures did result in some tension on the scrap market at the end of the year. Fortunately, this tension proved to be relatively short-lived. However, the threat from these measures still persists despite strong intervention

Scrap (Demolition Quality): Prices EU Market (€/t)

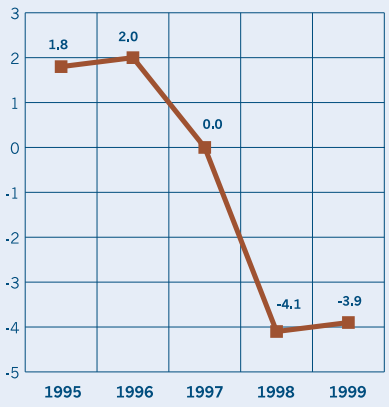


Scrap: EU Consumption (million tonnes)



Source: Eurostat

Scrap:
EU Trade Balance (million tonnes)



Source: Eurostat

by the European Commission which won the support of the Member States for a cut in quotas of imports of finished products from Russia as a response to this breach of the EU-Russian bilateral agreement on steel products.

Discussion continues on the waste – non-waste issue (see chapter Technology and Environment). EUROFER continues to work closely with the scrap industry to convince the European authorities and Member States to clearly identify the point at which processed scrap can leave the waste cycle.

Investments

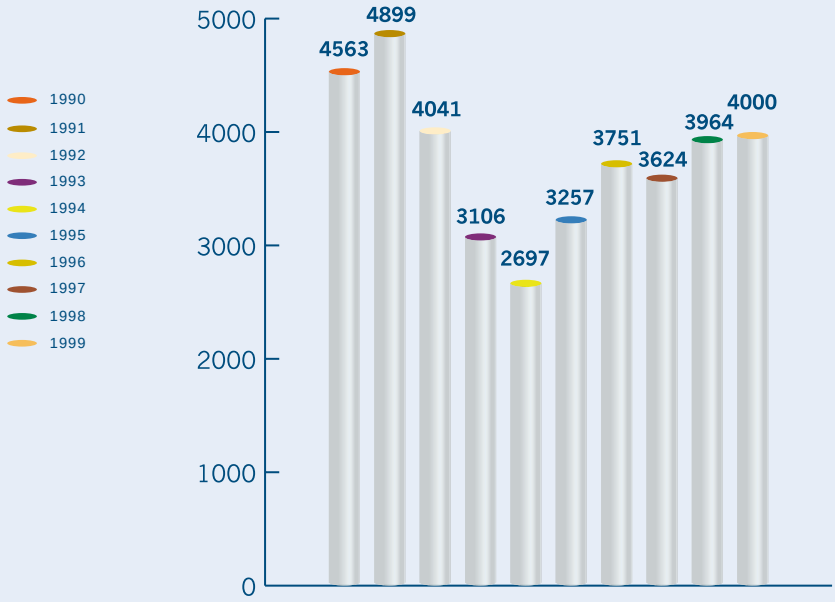
The strong rise in investment levels in 1998 – up by 9.4% - compared with 1997 took place in the context of a deteriorating economic and market situation.

Given these difficulties, it is all the more remarkable that investment levels in 1999 showed relative stability compared with the very positive figures of the previous year, rising by 0.9%. This underlines the commitment to continued capital expenditure by steel companies despite the cyclical nature of the industry.

Given the drop in production levels in 1999, clearly the investment per tonne of crude steel production rose sharply (to 27.8 € / tonne – an increase of 9%).

Investment in the early production stages (coking, sintering and iron-making) is always one of the biggest single areas for investment expenditure – representing about 17% of the total. Expenditure in this area rose very sharply in 1999, by almost 60% compared with the level of the previous two years. This reflects especially major investments in new sintering plants in Germany and blast furnace renewal in Italy together with raised expenditure in The Netherlands and Belgium.

Investments Expenditure (M€)



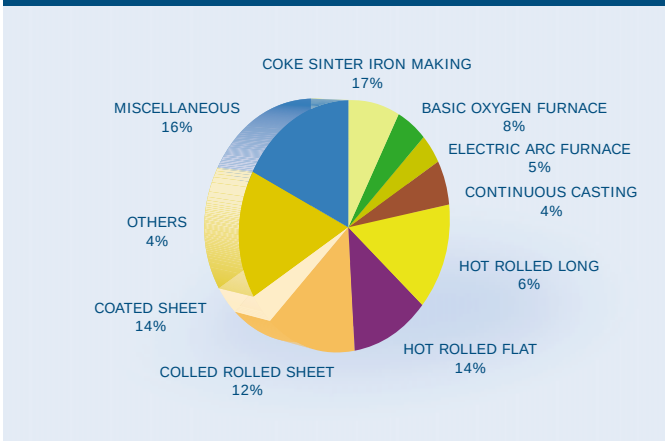
Source: European Commission

Investment in oxygen steel plants showed a similar percentage rise, with expenditure aimed at maintaining existing production plant or at the construction of new facilities, partly to replace old plants notably in Germany and The Netherlands.

As regards electric arc plants, investment levels were largely unchanged in 1999 compared to the previous year. Capacities are projected to grow slightly in the next 3 years. However, with capacities of oxygen plants projected to grow by over 3 million tonnes in the next 3 years, the growth in the share of total steel production held by EAF appears to have reached a plateau.

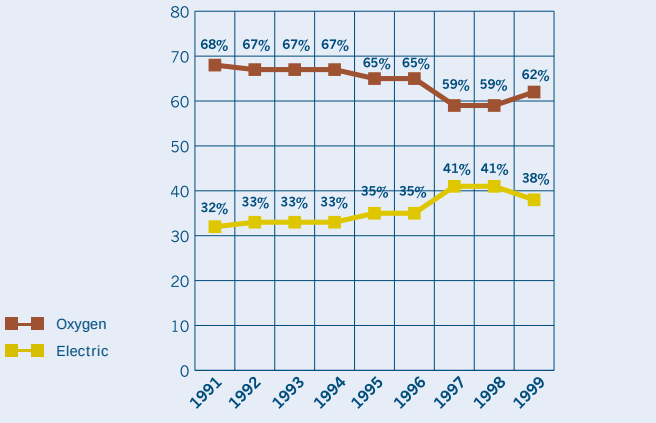
After the strong rise in capital expenditure in long products rolling mills in the previous year, 1999 saw a return to a level which reflected the average of recent years. Capacity in long products, both heavy and light, was largely unchanged. Expenditure therefore represented maintenance and modernisation of existing plants.

Iron and Steel: Investments Expenditure



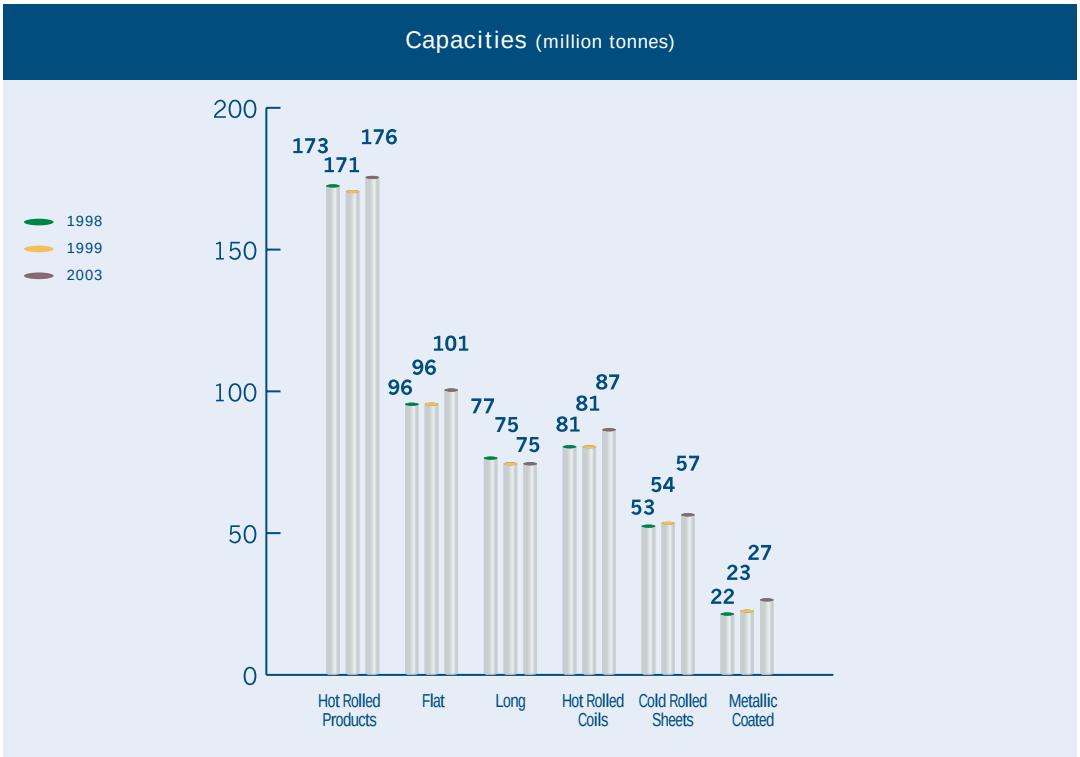
Source: European Commission

EU Crude Steel Production by Process



Source: Eurostat

Flat products mills saw major investments in 1999 as they did in 1998, notably for hot-rolled coil. Capacity will rise in Germany, Belgium and The Netherlands. Overall capacity increases will be 5.7 million tonnes in the next 3 years.



Source: European Commission

Equally, for coated lines, investment levels rose by over 50% in 1999, reflecting the substantial capacity build up in hot dipped galvanising lines. Capacities in galvanising will rise by at least 3 million tonnes by 2003.

Technology and Environment

RESEARCH

ECSC Research

Collaborative steel research and technical development under the ECSC programme has entered its sixth decade of operation, and it continues to be highly successful as shown in the 5-year assessment of the 1991-95 programme, reviewed and reported by an independent expert group in 1999. For the 2000 programme, a total of 188 project proposals were submitted and 81 of these were adopted for support from the 55.8 M€ budget.

During 1999, the European Commission started the preparations for implementation of the resolution by the Amsterdam European Council in June 1997 concerning the use of the revenues of ECSC reserves for a research fund for sectors related to the coal and steel industry after the expiry of the ECSC Treaty in 2002. A draft of the guidelines to be applied in the technical management of the programme was prepared by the Commission in 1999. EUROFER has contributed significantly to the further development of this Commission draft. As demanded by the Council of Ministers in its conclusions of 20 July 1998, the programme will be structured and managed largely as the present programme.

On the basis of a Commission proposal, the Member States are expected to adopt a formal decision regarding the implementation of the Amsterdam resolution during the year 2000.

Framework Programme Research

During 1999, the steel industry made a concerted effort to get funding for steel research also from the EU Framework Programme for Research and Technological Development. The results of this effort look very promising – more proposals and a high success rate.

Thematic Network

EUROFER is the main contractor of the Thematic Network NEST (New Efficient Steel Technologies). It was formally established on 1 January 1999 and has had several cluster meetings and workshops during 1999. The participating projects (including some of the steel projects in the current Framework Programme and some ECSC steel projects) in general have found this form of information exchange between related projects very useful.

STANDARDS

A permanent task is to monitor the ECISS (European Committee for Iron and Steel Standardisation) work programme and to influence decisions being made.

Those European Commission mandates supporting the Construction Products Directive related to steel, namely the "Reinforcing and Prestressing Steel for Concrete" and "Structural Metallic Sections", have been completed. Draft harmonised standards for both these areas are being developed, implying that "CE"-marked steel products may be available in 2001. EUROFER is also observing the activities of the Group of Notified Bodies for these two sectors.

Other European legislation that has required EUROFER consideration and input is the European Pressure Equipment Directive. EUROFER, its members and their customers are actively developing European Approval of Material in order to facilitate the procurement of steel for use in pressure vessels under the new Directive. The conditions when introducing and applying this Directive have to be monitored, taking into account national regulations and their special advantages in view of safety and reliability.

For both Directives, EUROFER intends to help ensure that technical barriers to trade are eradicated in support of the single European market.

The work to develop a European standard for bar-coded transport labels for steel products is close to completion. EUROFER has been approved as the Issuing Agency for label-issuer codes. A code will be issued to each organisation applying bar-coded transport labels on steel products so that the organisation is uniquely identified on the labels it applies. Some label-issuer codes have been issued.

The European Committee for Standardization (CEN) has an Advisory Board on the Environment. This board has a Working Group on Environmental Aspects of Product Standards which, during 1998 developed a proposal for CEN guidelines on this subject, and a CEN Environmental Help Desk was introduced during 1999. EUROFER still opposes such environmental initiatives by CEN because they further lengthen the already long CEN standardisation procedure and because they cause confusion in view of existing and future environmental legislation.

ENVIRONMENT

Integrated Pollution Prevention and Control

The IPPC Directive (Council Directive 96/61/EC) was adopted in 1996. As part of the implementation of the Directive, the European steel industry participated during the

years 1997-2000 in information exchange working groups, organised by the European Commission for the purpose of developing Best Available Techniques Reference Documents (BREFs). These BREFs contain detailed technical descriptions, including key consumption and emission values that can be consistently achieved using "best available techniques". The BREF for "primary and secondary iron and steelmaking" – covering coke ovens, sinter plants, pelletising plants, blast furnaces, basic oxygen plants, casting, and electric arc furnaces – was completed in March 2000 and is now available at the web site http://eippcb.jrc.es/exe/FActivities.htm. The BREF for "ferrous metal processing" – covering hot rolling, cold rolling, and hot-dip galvanising – will be completed later during 2000.

When IPPC is fully implemented, these BREFs will be used by Member States as key sources of information for the determination of emission limit values and other permit conditions for local permitting of industrial installations. The Directive is already in effect for new installations and will take effect for existing installations in October 2007.

EUROFER considers it very important that local permitting authorities do not automatically take reference values in BREFs as limit values without regard to local conditions and the likely costs and benefits of a measure, as required in the IPPC Directive.

Energy and CO_2 Emissions

The European Union has declared that it intends to take a leading role in the implementation of the Kyoto Protocol. EUROFER is concerned that this stance may impact negatively on its members' competitiveness. Present EU activities focus on the development of rules and a negotiating position concerning the Kyoto "flexible instruments" and on other policies and measures for meeting the Kyoto commitments.

The EU stresses that the main responsibility for meeting the Kyoto targets lies with the Member States. For common EU policies and measures, the focus is largely on the transport, electric-power generating, and agriculture sectors. However, industry is under pressure from the European Commission to make efforts beyond the 15% greenhouse gas emission reduction predicted 1990-2010.

Various policies and measures are being considered, nationally and at a European level, in order to implement the Kyoto commitments. EUROFER considers that such policies and measures should satisfy the following principles:

- *They should deliver the environmental objective in the most economical way.*

- *They should not damage the competitiveness of the industry.*

- *They should not place a cap on the expansion, volume, or added value of the sector.*

- *They should provide flexibility so that the sector, and individual companies in the sector, can pursue those options most suited to their own circumstances in a market-based environment.*

- *They should take account of past achievements towards a high energy efficiency.*

- *Subsidiarity should apply, because circumstances differ from one Member State to another. Each, within the constraints of satisfying other aspects of EU legislation and the rules that will be developed at international level to implement the Kyoto commitments, should be free to select the measures most appropriate to its own situation.*

Although a carbon energy tax has been on the Council agenda for many years, agreement has not been reached. Being a tax measure, it requires unanimity and so far a few Member States have blocked the various proposals made. A carbon energy tax, as proposed by the European Commission in March 1997, is quite inappropriate for the steel sector because it is unlikely to result in reduction of CO_2 emissions:

- *Its effect on the industry would be to push up input costs, not reduce unit energy consumption. Production processes are already very energy efficient and further improvements would be very difficult to achieve economically.*

- *In the short term, the weakening of EU competitiveness would result in loss of exports and in increased imports. Frequently, this loss of business would be to countries that have not committed themselves to CO_2 reductions. In the longer term, relocation of steel production to countries outside the EU not subject to such a cost burden could occur. In both cases, the likely result would be an increase of global CO_2 emissions.*

- *By reducing the profitability of the sector, such a tax would reduce the funds available for investment in research and development and in projects necessary for improved energy efficiency and other environmental improvements. Another consequence would be efforts by steel companies to reduce employment in the sector in order to stay competitive.*

EUROFER supports the idea of voluntary/negotiated agreements at a national level. Such agreements exist for the steel industry in five Member States (Germany, Finland, France, Luxembourg, The Netherlands) and are being discussed or negotiated in several others.

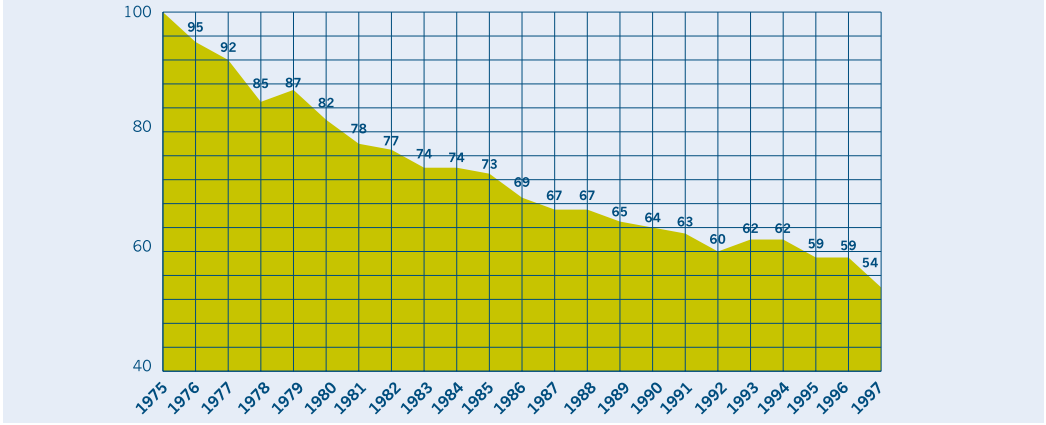
The EU steel industry is subject to the provisions of the IPPC Directive. There is a strong argument for suggesting that no other measures need apply to the sector, because it will be required to ensure that its operations, including energy efficiency, conform with Best Available Techniques. It is crucial that the relationship between IPPC and other measures for achieving environmental objectives is clear and ensures maximum flexibility.

Of the other Kyoto measures, details of how they might work are not yet available. However, they do have the potential for providing industry with flexibility by choosing the

appropriate mix in order to contribute to greenhouse gas reduction in the most economical way, providing no cap is placed on the proportion of commitments that can be met by each instrument. EUROFER therefore supports their further evaluation through extensive consultation between the EU, national governments, industry, and other interested parties.

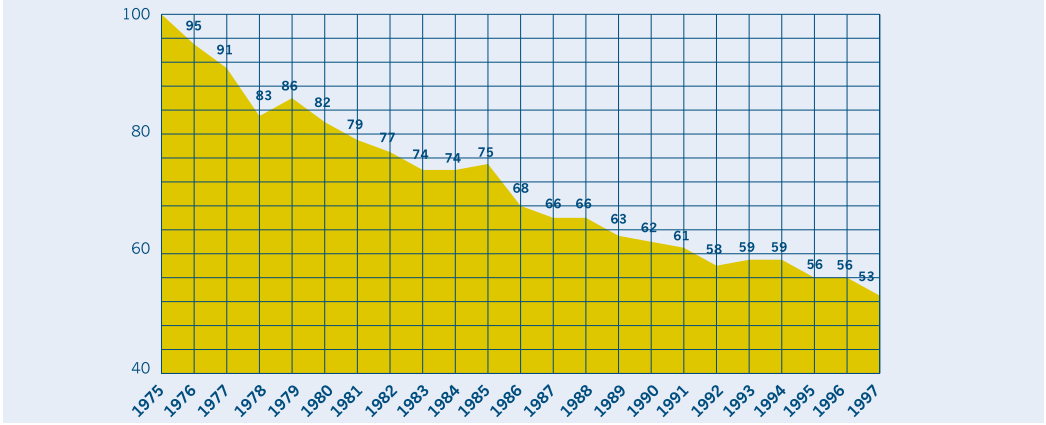
EUROFER is in close contact with the Commission and Eurostat (the EU statistics office) concerning the appropriate method of calculating CO_2 emissions from the steel industry. Although different methods and source data are used, the end results are quite similar. The diagrams below show that there has been a continual improvement of the energy efficiency and reduction of specific CO_2 emissions in the EU steel industry for a long time. The development has gone so far that theoretical limits according to the laws of physics are being approached. As the diagrams show, the largest reductions were made during the first half of the period. Further reductions are becoming progressively more and more difficult and costly, particularly because a large part of the steel industry's consumption of fossil fuels is used as a reductant, not as an energy source, and cannot be reduced below the theoretical minimum.

EU Steel Industry Energy Consumption per Tonne of Hot-Rolled Steel (index)



Source: Eurostat

EU Steel Industry CO_2 Emission per Tonne of Hot-rolled Steel (index)



Air Quality

The Air Quality Framework Directive (Council Directive 96/62/EC) was adopted in 1996. It provides for daughter Directives for the regulation of specific pollutants, e.g. SO_2, NO_2, particulate matter, lead, and several others. EUROFER is represented in the Commission's Steering Group for development of the daughter Directives.

The first daughter Directive covering the four pollutants mentioned above was adopted in 1999.

The Commission's proposal for a daughter Directive on benzene and carbon monoxide is close to adoption. The limit for benzene will probably be 10 µg/Nm³ (annual average) from 2003, linearly going down to 5 µg/Nm³ in 2010. This limit may cause problems at some coke-oven plants in the steel industry.

Work is ongoing concerning daughter Directives on ozone, poly-aromatic hydrocarbons, cadmium, arsenic, nickel, and mercury.

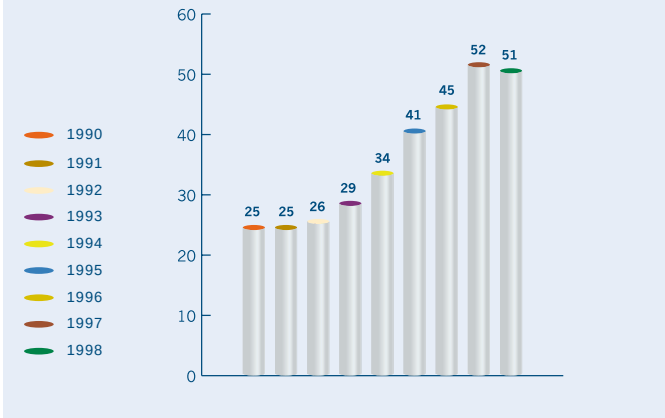
The Commission has proposed a Directive on national emission ceilings (NEC) for certain acidifying pollutants, i.e. SO_2, NO_x, VOC (volatile organic compounds) and NH_3. A table shows for each Member State the total maximum annual emission of each of these four pollutants. Each Member State would be left to decide how to share the burden for meeting the limits within its territory. Depending on the individual Member States' burden-sharing system, this proposal could cause significant cost increases for the steel industry.

EUROFER supports the common industry view that the estimated and uncertain benefits do not justify the extremely high costs for the measures required to reduce the emissions to the proposed limits. Industry and some Member States have argued that the less aggressive limits agreed under the Gothenburg Protocol to the UN/ECE Convention on Long-Range Trans-Boundary Air Pollution should be applied.

Residual Products

Steel is the most recycled of all materials. Great improvements have been made by the steel industry when it comes to recycling of steel scrap. For example, the present global recycling rate of steel cans is about 60% and rapidly increasing. Each tonne of recycled cans implies a saving of 1.5 tonne of iron ore and 0.5 tonne of coke.

Evolution of Steel Packaging Recycling in Europe in % (9 EU countries)

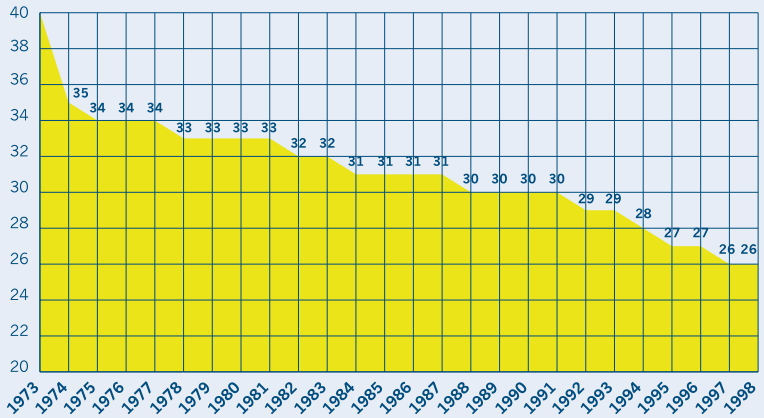


Source: APEAL

This means an energy saving of about 70% compared to making the cans from virgin raw materials. World-wide, the use of scrap as a raw material for steelmaking implies a saving of 600 million tonnes of iron ore and 200 million tonnes of coke each year.

In addition to increasing recycling rates, steel cans have been made lighter thanks to product development allowing thinner tinplate. The average weight of a 33-centilitre steel beverage can body was reduced from 40 grams in 1973 to 26 grams in 1998, and there is potential for even further downgauging! These developments represent significant steps in the direction of sustainability.

Evolution of 33cl. Can Body Weight in EU (gr/can)



Source: APEAL

Large quantities of valuable residual products are generated in steelmaking. Steel scrap and slag, both recycled to a high degree, are good examples. However, free trade in these residual products is hampered by restrictions under various international agreements, notably under the auspices of the OECD, the United Nations (Basel Convention), and the European Union.

The OECD and the European Union have placed iron and steel scrap and slag from manufacture of iron and steel on their green lists. However, a consequence of this classification is that both slag and scrap are considered as wastes. EUROFER has consistently tried to convince legislators that at least granulated slag and processed steel scrap are products used as raw materials, which should be removed from the Basel, EU and OECD waste lists. In fact, the OECD and the EU have removed processed slag from their green lists, but apart from this, all three green lists still include scrap and unprocessed slag from iron and steel production.

The Commission's initiative to improve the conditions for recycling through the so-called Recycling Forum was finished recently. Two Forum conclusions are of interest to the steel industry:

- *The problems caused by the waste label on ferrous scrap will be addressed to see if a separate*

legal treatment is possible for this large stream of secondary raw material. EUROFER is therefore working with the recycling industry to present specific proposals to the Commission.

- *The Forum proposal to consider more standards for wastes used for recycling has been mentioned as applicable also to ferrous scrap. EUROFER does not advocate such standards because the existing specifications for steel scrap, established in co-operation with the recycling industry in 1995, is felt sufficient.*

A proposal for a Directive on incineration of waste was presented by the Commission in 1998. It will finish with a conciliation between the Council and the European Parliament during 2000. The definition of "co-incineration" is critical for the steel industry because blast furnaces and sintering plants (perhaps even furnaces melting scrap) where minor quantities of residual products are used (as replacement for coke or as a source of iron units) could be seen as co-incinerators and would then be subjected to extensive emission measurement and monitoring requirements, and possibly also to tighter emission limits. This could lead to the phasing out of such environmentally beneficial practices. After the Council and Parliament discussions of the proposal, it now seems likely that the Directive when adopted will not seriously affect the steel industry, although this is not yet certain.

The End of Life Vehicles (ELV) Directive proposal to make vehicle dismantling and recycling more environmentally friendly is ending in conciliation between the Council and the Parliament. The EUROFER efforts to exclude leaded steel from the ELV proposal's ban on the use of lead (and three other metals) seems to be successful, because both the Council and the Parliament have included exemptions for up to 0.35% Pb in steel for cars.

Product Stewardship

The cradle-to-gate Life Cycle Inventory (LCI) study conducted by six major producers of stainless steel was recently concluded. Using the LCI database, individual companies will be able to satisfy the increasing demands from customers for life-cycle data for specific products. It will also be possible for them to estimate the total environmental impact of various investment or new product options considered.

Chemicals Policy

Member States and the Commission are not satisfied with the present system for regulation of chemicals, mainly because it takes too long to get existing chemicals through a formal risk assessment. It is therefore likely that the ongoing review will result in major changes.

Under the Existing Substances Regulation, a comprehensive risk assessment of zinc metal and five of its compounds is currently under way. EUROFER has submitted data on emissions from continuous galvanising lines to the Dutch "rapporteur" responsible for the risk assessment.

As a result of the hazard assessment, which is an integral part of the risk assessment, metallic zinc may end up with some form of ecotoxicity classification. This would be likely, in turn, to lead to a proposal for new control measures. EUROFER is working in close co-operation with the zinc industry to make sure that the rapporteur has a complete, factual basis for the risk assessment and that no ecotoxicity classification is recommended unless supported by strong, scientific evidence.

Stainless Steel Hazard Classification

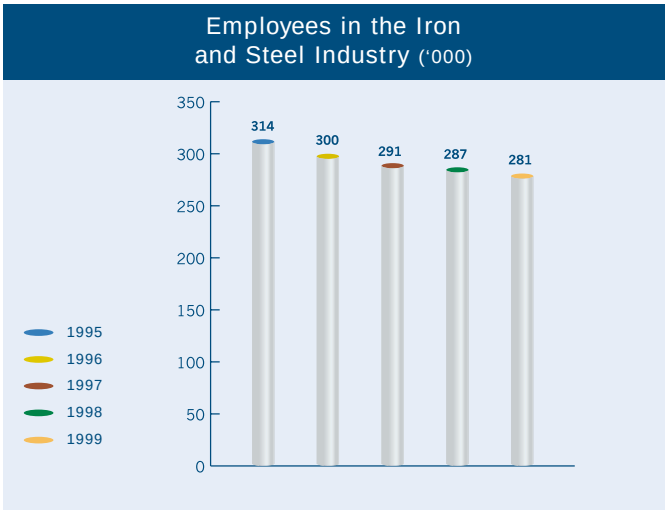
EUROFER has continued its activities in relation to the hazard classifications of stainless steels and other alloys, which emerge from application of the EU Directives on the classification of dangerous substances and preparations. Approaches to classification that may be applicable to simple mixtures of chemicals are inappropriate for the hazard classification of alloys and result in the unjustified classification of many alloys, including stainless steels, as hazardous materials.

Mainly as a result of activity by industry, the Commission has now acknowledged that there may be a problem with the hazard classification of alloys under the Preparations Directive. As a consequence, the text of the new Preparations Directive (99/45/EC) recognises that the methods for classification of chemical mixtures may not be suitable for alloys. The text charges the European Commission and the Member States to examine the need for a specific method for alloys and, if necessary, to submit a proposal for a more appropriate method for classification of alloys before the new Directive becomes law in 2002. The OECD, in its programme of work on harmonisation of the classification of mixtures, has also recognised that specific provisions may be needed for the appropriate classification of alloys. EUROFER is leading the intensive industry activities in both the EU and the OECD.

Human Resources

Evolution of Employment

In spite of the strong impact of the crisis in South East Asia and the CIS countries on the EU steel market and the results of the European steel industry, data for 1999 confirmed the significant slowdown in the decrease of the industry's workforce, observed since 1997. Based on provisional figures, total employment declined by 5800 persons, against 4600 in 1998, 8400 in 1997, and an average of 14000 people during the two preceding years. Indeed, contracting of new workers continued at the sustained pace of around 30000 persons in 1999, offsetting most of the natural departures.



Source: Eurostat

Management of Change

The second phase of EUROFER's project, "Management of Change and Human Resources" was completed at the end of 1999. The final report synthesising the learning from exchange meetings at ten Member Companies throughout Europe will be issued in 2000. It will contribute to a better understanding of:

- *the processes of change that have taken place in the industry;*
- *the factors that may contribute to optimise these processes in the future;*
- *the new organisations of work;*
- *the new roles of workers and management;*
- *the evolutions in training;*
- *how these change processes have constructively affected the social dialogue in the European steel industry.*

ECSC Budget

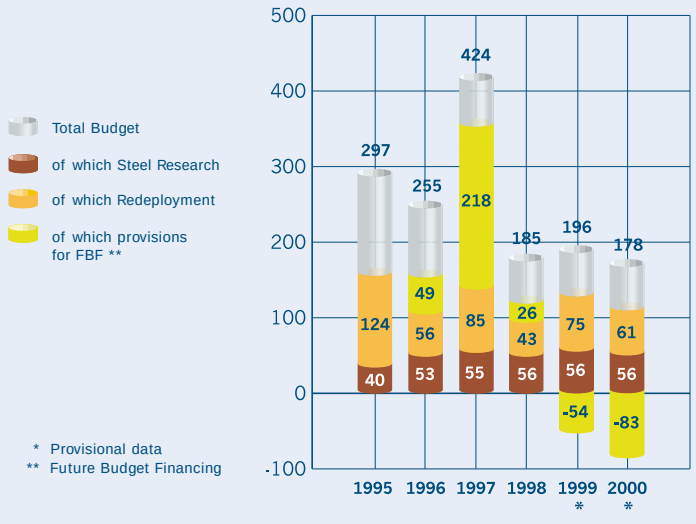
The phasing out of the ECSC budget is steadily continuing and remains in line with the financial scenario proposed by the European Commission in its "Communication on the expiry of the ECSC Treaty – Financial activities" (October 1997).

On the resources side, ECSC borrowing and lending activity has ceased, and, since 1998, the levy on coal and steel products has been reduced to zero. Accordingly, ECSC budget resources consist mainly of internal revenue corresponding to the net yield from management of ECSC funds, and to withdrawals from the provision set up to finance the ECSC budget between 1999 and 2002.

On the expenses side, from 1999 onwards, the budget will give priority to ensuring optimum continuity of financing for social support (redeployment) and for collaborative research, meeting the main interests of European steel companies and employees.

The provisional figures for the 1999 and 2000 budgets show total expenditures of respectively 196 M€ and 178 M€. Maintaining expenses at this level is made possible by drawing from the "provision for future budgets" 54 M€ in 1999 and 83 M€ in 2000. During these two years, 75 M€ and 61 M€ in redeployment aid have been budgeted, as well as 56 M€, each year, for steel research.

Evolution of the ECSC Budget
Main Chapters (M€)



Source: European Commission

Statistics

Steel Statistics after 2002

1999 saw an intensification of the debate between the European Commission, Eurostat, Member States and the steel industry to define the statistical needs for steel after the expiry of the ECSC Treaty. In repeated consultation rounds with the Community authorities, EUROFER has been strongly advocating the retention of meaningful and timely official statistics to fulfil the requirements of information users in the steel industry. At this point of time, there may be serious doubts, however, that the future steel statistics (structural business statistics, short term statistics and Prodcom), which will be collected by Member States, will cover much more than the rather basic administrations' needs. Consequently, EUROFER has commissioned with member companies and associations a comprehensive review of information requirements to help in building up an efficient voluntary system as an alternative to the future official instruments. Whilst this analysis was already completed in 1999 for some enquiries, work is currently in progress for other subjects and should be completed by the end of year 2000.

Official Trade Statistics

Against the background of its SLIM initiative (Simpler Legislation for the Single Market) of 1997, the European Commission made proposals to radically simplify the product nomenclature used to record the intra-EU trade (Intrastat). In this context, EUROFER made counter-proposals to preserve the level of product detail needed by market operators. Whilst the projected revision for Intrastat was still under consideration at Commission level during 1999 and hence, the current steel products classification has remained unaffected, the European Commission resumed technical examination with EUROFER; to define a trade nomenclature structure that takes into account the expiry of the ECSC Treaty and the tariff changes resulting from the Uruguay Round multilateral trade negotiations. These discussions will continue in year 2000. The new nomenclature structure should apply from January 1st, 2004.

Telematics for Enterprise Reporting – TELER

The primary aim of the TELER project is to reduce the administrative burden of the enterprises through the use of a common model and related standards for the collection, processing and transmission of statistics between enterprises and data collectors. CPS, the French steel statistics centre, ISSB Ltd. of the UK and Wirtschaftsvereinigung Stahl of Germany were contracting partners in this pilot study, which was completed in 1999. Presentations of the EUROFER / TELER concept and processes, focusing on the specific role played by producers' associations, were held for various audiences at national and EU level to promote and disseminate this product.

EDIFER

EDIFER is the committee within EUROFER which develops solutions to meet the requirements of the steel industry in the field of Electronic Commerce (EC) and Electronic Data Interchange (EDI). Since its inception in 1991, EDIFER has been active in the development of user implementation guidelines of EDIFACT messages for the European steel industry. The messages have reflected the priority choices of EUROFER members. They have mainly been targeted at the trading cycle.

The first publication by EDIFER took place in 1992 with the Orders, Despatch Advice and Invoice messages. Since then, EUROFER has issued user implementation guides for the following messages: Quality data; Purchase Order; Purchase Order change request; Purchase Order response; Order status report; Despatch Advice; Invoice; Inventory report.

In 1999, three user implementation guides were finalised and added to this list, namely: Delivery Schedule, Delivery Just in Time and Receiving Advice. This is an ongoing activity, bearing in mind also that user implementation guides have to be updated periodically in line with the latest EDIFACT standard version being released. In addition to the above, the EDIFER group has produced a reference document called "The role of EDI within business scenarios in the steel industry" which explains the different scenarios in use for the ordering, scheduling, shipping, invoicing and payment cycles as subdivisions of the global trading cycle between supplier and customer.

The EDIFER group has also studied the hire-working activities in the steel industry. This has resulted in the publication of a framework document "An EDI concept for hire-working activities" and four related user implementation guides:

- *Order message*
- *Production schedule message*
- *Despatch advice message*
- *Product information message*

As a recognised European EDI user group, EUROFER is regularly represented in meetings organised by standardisation bodies at European (CEN) and World (UN) levels, the aim being to secure the highest compatibility between the implementation guides of the European steel industry and those of other industrial sectors.

For the next two years (2000-2001), the following actions will be prioritised :

- *The continued review and upgrading of existing message user guides to the EDIFACT D97.A directory ;*
- *Creation of a manual dealing with transport scenarios for steel products and continuation of the Edifer involvement in the MIST project (Multi Industry Scenarios for Transport);*
- *Study and evaluation of the use of XML (Extensible Markup Language) / EDI for the European steel industry;*
- *Publication of practical EUROFER recommendations about the use of EDI messages between the steel industry and some of the customers communities.*

Steel Shaping the Future

Steel Shaping the Future was an event hosted in March 1999 by EUROFER, and addressed by Martin Bangemann, Member of the European Commission for Industrial Affairs, who described the European steel industry, after in depth restructuring and succesful privatisation, leading the globalisation process of the World steel industry.

He was joined by leading architect, Paul Andreu and Andreas Zapatinas (head of Alfa Romeo Centro Stile), who made presentations on the innovation potential of steel in respectively the construction and the automotive sectors.

During the event, the achievements of the European steel industry were on prominent display. Examples of steel's research and its ground-breaking accomplishments across a broad range of industries were showcased as steel demonstrated how it is ready to rise to the challenges of the next millennium.

The increasing applications for steel are the result of constant investment and research by the industry which, in response to the specific demands of the modern world, created thousands of different grades during the past ten years. In the new fields of information technology and electronics as well as in the construction, automotive, packaging and other industries, steel delivers to its clients not only their requested products, but also solutions for the conception and the development of their new products.

On that occasion, EUROFER also presented the brochure "Steel shaping the future" which illustrates just some of the achievements of steel and demonstrates how steel offers opportunities for sustainable growth and increased quality of life for the future.

Annexes

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