

### S U M M A R Y

- P. 2 RESEARCH: Promoting European research into superconductivity  
The European Commission calls in two Nobel prize winners.
- ENERGY: 1988 is marked by uncertainties  
The European Commission tries to clarify the situation.
- P. 3 TRAINING: A year of cooperation between European universities and undertakings  
COMETT enjoys a successful first year.
- COST OF LIVING: The cheapest country in the EC - Portugal  
A look at purchasing power parities in Community countries last December.
- P. 4 AUDIOVISUAL: Money for dubbing and sub-titling  
A European fund for multilingual audiovisual productions is now operational.
- P. 5 THE ECONOMY: Slower growth and as many jobless as in 1987  
The European Commission's latest forecasts.
- P. 6 THE ENVIRONMENT: "Clean" coal in the 21st century?  
Euro-MPs want to brighten coal's image.
- P. 7 SINGLE MARKET: Border areas will face problems with the disappearance of internal customs  
The transitional period must be used to tackle their problems.
- P. 8 THE ENVIRONMENT: Holes in the canopy?  
The European Commission proposes detailed measures to protect the ozone layer.

RESEARCH: Promoting European research into superconductivity

The European Commission calls in two Nobel prize winners.

Superconductivity - the absence of electrical resistance - could lead to dramatic developments in not only computing, telecommunications, medicine and transport but also the exploration of space and the ocean depths. In the process, both jobs and vast sums of money would be generated.

It is hardly surprising, therefore, that the European Commissioner for Research, Karl-Heinz Narjes, should have invited the two European scientists who shared the 1987 Nobel Prize for physics to join other European specialists in superconductivity at a Conference held in Brussels in early February. The aim of the Conference was to get Europeans to join forces in a sector in which international competition is certain to be fierce.

Both official and industrial interest in superconductivity was rekindled by the discoveries of two European scientists, Professors Alexander Müller and Georg Bednorz, of IBM's Zurich laboratories. The two, who received the 1987 Nobel Prize for physics for their work, have paved the way for the commercial application of superconductivity by producing it at temperatures which are more manageable than was the case earlier.

Both the American and Japanese governments have launched ambitious, publicly funded research programmes. In Europe, research into superconductivity is being carried out by relatively small university teams in research laboratories scattered across the Community. The European Commission therefore would like to give this research a European dimension.

ENERGY: 1988 is marked by uncertainties

The European Commission tries to clarify the situation.

Will natural gas and nuclear energy be this year's winners - or will oil make a strong comeback? Even the experts are not sure, given the uncertainties surrounding the dollar and the plans of the oil producing countries as regards prices.

Energy consumption in the 12-nation European Community could rise by 4 to 12%, according to the European Commission. The rise would be substantial were economic growth to pick up or oil prices to fall. The winners otherwise would be natural gas and electricity from nuclear power.

What the Community's experts do not anticipate is a sharp rise in the demand for coal. If anything, it could even fall should oil prices go down.

Total energy consumption rose only slightly in 1987. The main beneficiary was natural gas, followed, if at a distance, by nuclear energy.

TRAINING: A year of cooperation between European universities and undertakings

COMETT enjoys a successful first year.

More than 1,000 students received training in firms in another European country in 1987, thanks to the European Community's COMETT programme. During the first year of its existence the programme also encouraged the setting up of 108 University-Enterprise Training Partnerships (UETPs) and the launch of 135 continuous joint training projects in a wide range of technological fields.

COMETT's 1987 Annual Report, approved recently by the European Commission, notes that an overall budget of ECU 16m.\* made it possible to help 618 projects involving cooperation between universities and enterprises.

More than half the UETPs are of a regional type, nearly one-third involve technological specialization while the remainder are a mixture of both.

The number of projects submitted to the European Commission in 1987 - some 2,600 in all - were far more than could be financed from the funds available to it. They were the subject of over 1,000 requests and to finance them all would have required about ECU 200 million.

The bodies which were not selected in 1987, as well as others, can try their luck this year. Applications must reach the European Commission before 31 March. It will select the projects to be aided before this summer.

COST OF LIVING: The cheapest country in the EC - Portugal

A look at purchasing parities in Community countries last December.

The cost of living remains highest in Denmark and Germany and lowest in Portugal, according to Eurostat, the European Community's statistical office. A comparison of price level indices in the 12 member states for December 1987 puts Denmark at the top of the list, with 132.7 (Belgium, the reference country = 100). It is followed by Germany, with 112.6. Portugal is at the bottom of the list, with 53.0. Britain, at 84.2, is cheaper than Ireland (95.0).

While the cost of living has risen in Denmark by 3% since 1985, in relation to Belgium, several countries have recorded falls: Britain (down 13%), Portugal (8%) and Ireland (7.4%). Greece has edged out Spain as the second cheapest country in the EC.

But the sharpest fall in the cost of living has been recorded by the United States. From 126.7 in 1985, the American price level index fell to 76.7 last December. The dollar's fall clearly had something to do with this.

\* 1 ECU = UK£ 0.70 or IR£ 0.78.

AUDIOVISUAL: Money for dubbing and sub-titling

A European fund for multilingual audiovisual productions is now operational.

Dubbing and sub-titling are the lifeblood of the European audiovisual industry: they make it possible to overcome language barriers and thus bring to a much wider audience works that otherwise remain largely unknown.

The European Fund for Multilingual Production has decided to give a boost to dubbing and sub-titling, on the basis of criteria adopted in Brussels in mid-February.

The Fund was set up on 21 January 1988 in the form of an association between the European Commission's MEDIA\* programme, the European Broadcasting Union (EBU) and the European Alliance for Television and Culture. Its aim is to provide financial support for dubbing and sub-titling, multilingual audiovisual productions, technical research and professional training in the field.

The Fund has decided it will back productions whose transmission is guaranteed by a broadcasting organization. The EBU, incidentally, is made up of West European television companies.

The Fund will back a dozen projects this year. It is giving preference to projects involving languages which are not so widely spoken; drama projects, especially for the young (including animated cartoons); pilot television series and experimentation and research, especially in the field of multilingual news.

Projects should be sent to the Secretariat: Frank NAEF, European Broadcasting Union, 17A Ancienne Route, Case Postale 67, CH-1218 Grand-Saconnex, Geneva, Switzerland. The telephone number is (022) 98 77 66.

The European audiovisual scene is proving a very lively one this year, which is hardly surprising in the European Cinema and Television Year. A few days after the meeting of the Fund's Steering Committee, Brussels was the scene of two events: (1) the European Animated Cartoon Association, set up in the framework of the MEDIA programme for the cartoon industry, held its first meeting and (2) the French Audiovisual Institute (INA) presented the computer graphics developed for the MEDIA programme. Computer graphics, in which computers are used to generate moving images, are being used more and more in advertising, animated cartoons and videos.

\* Measures to Encourage the Development of the Audiovisual Industry, launched in 1987.

THE ECONOMY: Slower growth and as many jobless as in 1987

The European Commission's latest forecasts.

The European Community was not as hard hit by the stock exchange crash as had been feared at the end of last year. However, despite this reassuring conclusion, the European Commission's latest economic forecast for 1988 is not especially encouraging.

A slowdown in growth is forecast for nearly all the 12 Community countries. Unemployment is expected to remain at around 11.5% for the Community as a whole. The Commission believes that under these circumstances the EC will have to count on itself for any improvement to its economic fortunes.

There will be a further slowdown in world trade this year, according to the Commission. The United States and most Third World countries will probably reduce their imports. As for the dollar, it should fall by roughly 10% in relation to the ECU. The Community therefore will witness a fall in its exports, accompanied by rising imports.

Economic growth could well be limited to 2% this year, as against 2.5% in 1987. It would be due, in any case, to a rise in domestic demand. Consumption, both private and public, is forecast to rise by more than 2% and infrastructure investment by around 4%. This is not enough, however, to make up for earlier shortfalls, in the Commission's view.

Unemployment remains a major black spot; it is expected to fall only slightly this year. Job losses will be more than off-set by new jobs in only the four southern Community countries and the U.K. In most of the other member states the two will cancel each other, while in Denmark and Ireland job losses will exceed the number of new jobs.

The European Commission has again pointed out that only faster economic growth can lead to a significant decline in the number of unemployed. It takes the view that after the European summit, which removed a number of uncertainties earlier this month, the Twelve must press ahead with the completion of the single internal market, set for 1992. The doubling of the Community's funds for reducing regional and social disparities, agreed to at the summit, should stimulate economic growth and help reduce unemployment.

THE ENVIRONMENT: "Clean" coal in the 21st century?

Euro-MPs want to brighten coal's image.

Will coal be a major source of "clean" energy in the 21st century? To many Europeans, accustomed to viewing coal in a dark light, the very idea will seem preposterous. But the European Parliament considers it realistic. A resolution which it adopted at the end of January calls for cheaper and more effective methods of producing "clean" coal.

The Euro-MPs believe that, while coal has kept the very poor image it acquired in the 19th century, it no longer corresponds to the reality. Their resolution stresses the fact that the technology needed to make coal less polluting already exists. But it is not used very much and is very costly on the whole.

The European Parliament believes that coal can reduce the European Community's dependence on imported fuels, even while presenting fewer risks than such "clean" forms of energy as nuclear power. Given that the 12-nation Community has substantial reserves of coal, Parliament feels it is worthwhile investing time and money to make European coal more acceptable from an ecological standpoint.

The resolution notes that the mining and transport of coal leave much to be desired. In the oldest mines environmental pollution measures are largely unknown, given that ecological concerns were unknown at the time they were opened. But even modern coal mines pose problems, because they produce larger quantities of waste, according to the European Parliament.

The Euro-MPs want the European Regional Development Fund to help projects for landscaping open cast mines and slag heaps.

Present methods of moving coal are very polluting, according to the European Parliament. The resolution favours more use of covered wagons and chemicals which prevent coal dust. The Euro-MPs also want more research into transport by pipeline.

SINGLE MARKET: Border areas will face problems with the disappearance of internal customs

The transitional period must be used to tackle their problems.

The disappearance of the Community's internal borders is a very good thing and most Europeans welcome it. Not all of them, however. Smugglers, to begin with, whose heyday is already over and who will be out of a job by 1992.

Then there are the customs officers, whose future obviously is linked to that of the first group. But unlike smugglers, customs officers belong to the civil service and have the right, therefore, to alternative employment.

Finally, there are those living in the border areas. For some border communities the single internal market could prove to be something of a disaster, given that up to 80% of their economy can depend on administrative controls and activities related directly or indirectly to the customs, according to members of the European Parliament.

Several Euro-MPs in fact have expressed their concern to the European Commission. While reaffirming their support for the single market they nevertheless have asked the Commission just what measures it plans to take to deal with the problem.

The Commission, as its Vice-President, Lord Cockfield, has pointed out in his reply, is well aware of the problem, even if it remains convinced that the creation of the single market will provide the necessary basis for the prosperity of the Community as a whole, not excluding its border communities.

However, in order to avoid a brutal shock to these communities, it is important to take advantage of the period until 1992 to take steps to (1) ensure that the people in question can find new jobs and (2) avoid creating regional imbalances. The European structural funds, such as the Social Fund in particular, could help with job creation, provided they receive projects which meet their operating rules and guidelines.

(Contd.)

As for the problem of regional imbalances, the Commission is undertaking studies aimed at assessing the regional impact of the principal measures required for the completion of the internal market. On the basis of these analyses it will be in a better position to plan concrete steps in favour of deprived regions.

It should not be forgotten that many of these regions could help themselves in the framework of the transfrontier programmes recommended by the European Commission, especially as regards investments in economic and social infrastructure and environmental protection.

#### THE ENVIRONMENT: Holes in the canopy?

The European Commission proposes detailed measures to protect the ozone layer.

Each time you use an aerosol spray, whether to shave, top a cake with whipped cream or clean windows, you are helping destroy the ozone layer which shields the earth from the sun's harmful radiations.

Although scientists first sounded the alarm some 20 years ago, they were generally ignored. As a result, the earth's natural canopy has been damaged, with harmful consequences for our health. The fact is that without the ozone layer we would be continuously bombarded by harmful radiations from that giant nuclear reactor, which is the sun.

The main threat to the ozone layer comes from chlorofluorocarbons (CFCs), a group of chemicals used in aerosol sprays, among other things. The layer has already been considerably damaged at the poles, with the southern hemisphere probably more seriously affected than the northern. But the damage to the ozone layer continues and could become global, if not stopped in time.



(Contd.)

Which is why the European Community and several of its member states signed the Vienna Convention, which seeks to protect the ozone layer, in 1985, and the Montreal Protocol, controlling the substances that are depleting the layer, in September 1987.

The European Commission has now sent the EC Council of Ministers a draft regulation which provides for direct controls on the Community's producers and importers of CFCs. The Commission also wants the member states that have not yet signed the Convention and Protocol (Ireland, Portugal and Spain) to do so, as this would allow the Community to approve and ratify them simultaneously before 15 September 1988.

The Montreal Protocol seeks to freeze production and consumption at 1986 levels, as from 1 July 1989. This would be followed by a 20% cut in 1992 and a further cut of 30% in 1998. The Protocol will come into force by 1 January 1989, provided 20 countries have ratified the Vienna Convention by 1 October 1988.

The hope is that these limits on supplies, and the higher prices that would follow, would incite users to look for alternatives which are less harmful to the environment. The limits would apply to all products, whether they were being used as propellants in aerosol cans, the manufacture of furniture foam or for cleaning purposes in the electronics industry.

But action is urgently needed, for aerosols are slowly eating away the canopy above our heads.