

SOCIAL EUROPE

2/87



COMMISSION OF THE EUROPEAN COMMUNITIES

DIRECTORATE GENERAL FOR EMPLOYMENT,
SOCIAL AFFAIRS AND EDUCATION

Social Europe, published by the Commission of the European Communities, Directorate-General for Employment, Social Affairs and Education, deals with current social affairs in Europe. The review is divided into several parts: the first gives an overview of developments and current events in the fields of employment, education, vocational training, industrial relations and social measures; the second part covers conferences, studies and other information destined to stimulate the debate on these issues; the third part reports on the latest developments in national employment policies and on the introduction of new technologies. In addition, once a year, *Social Europe* supplies statistics on social trends in the Member States.

The basic review comes out three times a year — in January, May and September. In addition, a number of supplements/files (10—12 a year) are published annually, each dealing in depth with a given subject, e. g. technologies of the future, education and vocational training, equal treatment for men and women, employment, industrial medicine, migrant workers, etc.

The addresses of the sales offices are given on the inside back cover; sale and subscription rates and order forms will be found in the tear-out insert at the back.

All requests for information (except on sales and subscriptions) should be sent to: The Editor, *Social Europe*, Directorate-General for Employment, Social Affairs and Education, Rue de la Loi 200, B-1049 Brussels

SOCIAL EUROPE

No 2/87



COMMISSION OF THE EUROPEAN COMMUNITIES

DIRECTORATE-GENERAL FOR EMPLOYMENT,
SOCIAL AFFAIRS AND EDUCATION

Notice to readers

The information contained in this publication does not necessarily reflect the opinion or the position of the Commission of the European Communities.

Luxembourg: Office for Official Publications of the European Communities, 1987

ISSN 0255-0776

Catalogue number: CE-AA-87-002-EN-C

© ECSC-EEC-EAEC, Brussels — Luxembourg, 1987

Reproduction is authorized, except for commercial purposes, provided the source is acknowledged.

The manuscript was completed on 25 April 1987

Printed in the FR of Germany

Contents

Editorial	5
Part One: Actions and guidelines	9
Sedoc — European system for the international clearing of vacancies and applications for employment	11
Equality of treatment between men and women under Spanish and Portuguese law	14
European Social Fund: assistance for a pilot scheme in vocational training for young people in microelectronics skills	17
Training: company business	22
The Comett programme: call for applications in first operational year	25
The training and preparation of young people for adult and working life	28
Statement on drugs	31
The Chernobyl accident — consequences to health in the Community	32
Part Two: Analyses, debates, studies	39
Small and medium-sized enterprises and employment creation in the European Community	41
Employment in the European electronics industry	45
People and technology	48
Privatization and social security	53
The specific training needs of migrant women	57
Part Three: Recent developments	63
Employment policy in the Member States	65
New technology and social change: overview of recent events in the Community countries	84

The social dialogue

As a follow-up to the meeting of the chairmen and general secretaries of the member organizations of ETUC, UNICE and CEEP held in November 1985, two working parties consisting of representatives of these same organizations met under the chairmanship of Mr M. Marín, Vice-President of the Commission in charge of Social Affairs, Employment and Education and Mr A. Pfeiffer, Member of the Commission in charge of Economic Affairs and Regional Policy, respectively.

On the occasion of a new meeting of the chairmen and general secretaries convened by President Delors for 7 May 1987, we are publishing the following two joint opinions adopted by the said working parties. The first, of 6 November 1986, concerns the cooperation growth strategy for more employment and the second, of 6 March 1987, concerns training and motivation as well as information and consultation of workers.

Joint opinion on the cooperative growth strategy for more employment
6 November 1986

An in-depth exchange of views on the economic situation and employment in the Community was held at the meetings of the Macroeconomics Working Group (set up after the meeting between UNICE, CEEP and ETUC with the Commission on 12 November 1985), and the Commission's annual economic report 1986—87 was discussed.

UNICE, CEEP and ETUC confirm their agreement on the basic principles of the Community's 'Cooperative growth strategy for more employment' and their support for the general thrust of the economic policy proposed by the Commission in its annual economic report 1986—87.

They call on the Governments of the Member States to make a greater effort to ensure that the cooperative strategy is effectively implemented and declare their willingness to cooperate.

Full or broad agreement was reached on the following points:

1. In spite of the progress made on the employment front, unemployment is still too high. Unless additional efforts are made, it will not fall sufficiently in the medium term. The aim in implementing the cooperative growth strategy is to bring about a significant and lasting reduction in unemployment over a period of several years. In order to do this, more jobs must be created through increased investment based on improved business profitability and reinforcing the competitiveness of the European economy. Public investment also has an important role to play in this respect, without jeopardizing the medium-term consolidation of public finance.
2. The creation of durable jobs will be threatened if inflation rates are not kept low. A stable financial environment encourages the propensity to invest. Monetary and budgetary policies should be managed in such a

way as to ensure that inflation rates remain low or continue to fall. The social partners also share some responsibility for containing inflation.

3. Real interest rates should fall further, with account being taken of the world economic situation and savings behaviour. The liberalization of capital movements should help direct savings towards productive investment.
4. The internal market must be completed rapidly. This will make it possible to release considerable growth potential which will reinforce the positive effects which the implementation of the cooperative strategy will have on investment and growth. Completion of the internal market should be accompanied by taking account of social policy and by the development of structural policies to strengthen the Community's economic and social cohesion as it is defined in the Single European Act.
5. Research and development must be promoted so that the Community maintains or regains its technological competitiveness, particularly in high-tech sectors. The Community should also encourage the implementation of the major 'mobilizing programmes' which are such as to promote growth and employment.
6. Improving the level of skills in the labour force and vocational retraining are important elements in developing employment and the competitiveness of the European economy. Training costs represent an investment. Employees at every level should be encouraged to take training courses.
7. The freedom of world trade should be maintained and developed within the framework of GATT. The Community has a special responsibility in this respect. Generally, an effort must be made to continue to combat protectionist trends, unfair practices and escalating subsidies, the effect of which is to distort the conditions of competition. In certain cases, temporary bilateral or multi-

lateral agreements could help to overcome specific problems.

8. In the framework of the cooperative strategy, moderate growth of real per capita wage costs below productivity gains should be maintained for some time to come in the countries in which it is already practised, and it should be applied in the other countries. But the other elements of the strategy must be implemented simultaneously. This will make an important contribution to improving business profitability and competitiveness as well as speeding up the implementation of job-creating investment. It is important here to highlight the link that exists between the moderation of wage costs — factor for increased profitability — and higher employment.
9. Appropriate tax measures, the development of new forms of financing, and easier access to risk capital can also strengthen investment and employment, notably in small and medium-sized firms.
10. Public investment and infrastructure investment have suffered under the process of budgetary consolidation, and there is at present some leeway to be made up here. Stronger expansion of such investment will make an important contribution, on both the supply and the demand sides, to achieving higher and sustained growth. Such investment should be regarded not as a way of compensating for the lack of private investment, but as complementary investment undertaken in the general interest. Its financing could be achieved in the framework of a healthy budgetary policy through the restructuring of budgets and through the use of budgetary headroom that already exists or will be created by the growth process; furthermore, in a number of major instances, reliance on private financing seems possible and desirable. In this connection, the following distinctions were made:
 - (a) public investment or infrastructure investment which is profi-

table in itself but which, without public initiatives, would not be carried out at the appropriate time because of its scale or because of its long pay-off period (for example, the Channel tunnel and the high-speed train link between Paris, Brussels and Cologne); in the case of this type of investment, private financing can most easily be envisaged;

- (b) public investment or infrastructure investment which is economically profitable in overall terms because it represents a precondition for private investment or for the development of certain countries or regions; in the case of this type of investment, on the basis of rigorous economic calculation, certain forms of cofinancing by the private sector can be examined;
- (c) public investment intended to meet justified public or social needs; its profitability must not be seen solely in economic terms; deciding on the priority projects in this area is also a matter of political judgement; cofinancing by the private sector is more difficult to envisage, but not to be ruled out in all cases.

UNICE, CEEP and ETUC are convinced that dialogue is an important element in the effective implementation of the Community's cooperative growth strategy for more employment. They are prepared to continue the dialogue, especially on questions not yet resolved (e.g. reduction in government spending and in taxes and social security contributions, the adaptability of financial, commercial and labour markets, revision of certain regulations, more flexible wage formation, reorganization and duration of working time, etc.).

Joint opinion of the Working Party on 'social dialogue and the new technologies' concerning training and motivation and information and consultation

Brussels, 6 March 1987

Following the meeting held on 12. 11. 1985 between representatives of the employers' organizations affiliated to UNICE and CEEP and representatives of the trade union organizations affiliated to the ETUC, the Commission convened a Working Party on 'social dialogue and the new technologies', which subsequently decided to turn its attention to specific topics including. (A) Training and motivation, and (B) information and consultation.

(A) Training and motivation

The participants in this group issued the following joint opinion concerning the part of their work related to training and motivation:

1. They took the view that the process of introducing new technologies would be economically more viable and socially more acceptable if accompanied, amongst other things, by effective training and greater motivation for both workers and managerial staff, factors which, in their view, constitute a genuine investment.

To this end, every member of the staff of the firm, at all levels of responsibility, should be encouraged to make the necessary efforts at adaptation and training, also through personal commitment.
2. They also stressed that vocational training — comprising basic training, in-service training and retraining — should be able to satisfy the demands of workers, firms, the economy in general and of the internal market in particular. From this point of view and in the spirit of this opinion, the work carried out by the Commission and by Cedefop on the development of training systems and their comparability needs the active support of both sides of industry and of the Governments. A system for the mutual recognition of qualifications should be rapidly introduced at European level.
3. They point out that responsibility for basic training, whether provided by the education systems or the basic training systems, lies with the public

authorities.¹ However, in order to ensure greater consistency between training and the requirements of the economy and of firms and workers, the authorities should consult and involve the social partners more than they do at present.

4. With a view to the adaptation of the training systems, they consider that the social partners must actively contribute towards the transition of young people from school to working life, more particularly by developing the Community programme of pilot projects. In this context, they stress the need to reorganize the education systems so as to make them more efficient — from basic training to training in advanced skills — and promote greater versatility and the acquisition of basic skills required for the transition of young people to adult working life. Priority should be attached to the development of a continuous process of guidance and counselling as well as to the training of trainers and to the methods of training needed in order to meet these requirements.
5. They also consider that in-service training should enable employees to adapt swiftly and continuously to structural changes in the firm, and that the costs of such training should be borne primarily by the firm itself. Information and consultation of the workforce or, depending on national practice, of its representatives, on training programmes carried out by the undertaking, would help to increase employees' motivation by also improving their understanding of the changes facing the firm.²
6. They stress that retraining measures must enable employees to find work or another job — as set out in paragraph 2 above — either in the same firm or elsewhere. It will, in principle, be the firm within which the worker continues to be employed with different skills which will have to bear the cost of these measures. However, at the same time, they emphasized that the economic and social value of a retraining policy implies that public vocational training bodies should

play a part so as to ensure a proper distribution of the costs, and a better utilization of resources. By contrast, the burden of retraining workers who no longer continue to be employed by the original firm will have to be borne by the public authorities or the firm which recruits them.

7. They also took the view that in-service training and retraining would be more effective if backed up by a policy designed to improve the forecasting of trends as regards skills and employment, particularly at regional and local level, so as to promote convergence between the respective aims of training and employment.
8. As regards the implementation of a vocational training policy for small and medium-sized enterprises, a more detailed study should be made of the ways and means by which the specific characteristics of these undertakings could be accommodated.
9. Special attention should be devoted to unskilled first-job seekers, particularly as concerns people under 25 years of age and women.

(B) Information and consultation

Acknowledging the need to master and manage the changes resulting from the process of industrial transformation now in progress, so as to make them effective and socially acceptable, the members of the Working Party issued the following joint opinion on that part of their work which relates to information and consultation in connection with the introduction of new technologies in firms.

1. To clarify what follows, 'information and consultation' must be understood as applying to workers and/or their representatives, in accordance with the laws, collective agreements and practices in force in the countries of the Community.
2. The participants recognized the need to make use of the economic and social potential offered by technological innovation in order to enhance the competitiveness of Euro-

pean firms and strengthen economic growth, thus creating one of the necessary conditions for better employment and, taking particular account of progress in the field of ergonomics, for improved working conditions.

3. The participants stress the need to motivate the staff at all levels of responsibility in firms and to develop their aptitude to change, amongst other ways by means of good information and consultation practices. They consider that such motivation will be all the higher if all the staff are in a position to understand the economic and social need for structural and technological change and the potential which such change offers to firms and to the workforce.
4. The participants note that, in most countries of the Community and also in many industrial sectors, there exist various forms of information and consultation procedures and negotiating practices. Whilst accepting the diversity of the existing procedures, they consider that best use should be made of the existing procedures.
5. Both sides take the view that, when technological changes which imply major consequences for the workforce are introduced in the firm, workers and/or their representatives should be informed and consulted in accordance with the laws, agreements and practices in force in the Community countries. This information and consultation must be timely.

In this context:

- (i) information means the action of providing the workers and/or their representatives, at the level concerned, with relevant details of such changes, so as to enlighten them as to the firm's choices and the implications for the workforce;
- (ii) consultation of the workers and/or their representatives, at the level concerned, means the action of gathering opinions and

possible suggestions concerning the implications of such changes for the firm's workforce, more particularly as regards the effects on their employment and their working conditions.

6. Both sides consider that information and consultation may, in certain circumstances, require an obligation to observe secrecy or confidentiality in order to prevent any damage to the firm.

The conditions relating to such confidentiality and the power to withhold the secret or confidential information, as also the need to provide timely information concerning major changes in the terms of employment and working conditions of the staff concerned fall within the scope of the laws, agreements and practices in force in the countries of the Community.

7. Both sides state that information and consultation must facilitate and

should not impede the introduction of new technology, the final decisions being exclusively the responsibility of the employer or of the decision-making bodies of the firm. It is understood that this prerogative does not exclude the possibility of negotiation where the parties take a decision to that effect.

8. In order to improve understanding of the new technologies, promote the acquisition of new skills and enhance adaptability, both sides express the wish that appropriate training for both employers and workers be developed.

In this connection, both sides express the wish that the Commission develop ways and means of contributing to this process.

9. Despite their differences as to the appropriateness of resorting to Community legal instruments, both sides recognize that it is worthwhile encouraging the development of in-

formation and consultation practices in matters relating to the introduction of new technologies in the countries of the Community.

10. Furthermore, both sides note that, on the basis of a variety of practices, adaptability and flexibility are developing throughout the Community. To this end, the two sides confirm their readiness to continue the social dialogue on the implications which the introduction of the new technologies has in the field of adaptability and flexibility, particularly with a view to improving the competitiveness of European firms and conditions of work and employment.

¹ Unless provided by the firms themselves.

² Confindustria refers here to the arrangements arising out of collective agreements drawn up in Italy.

Part One

Actions and guidelines

SEDOC

European system for the international clearing of vacancies and applications for employment

Legal basis, objectives and achievements

1. Set up by Regulation (EEC) No 1612/68 on freedom of movement for workers, Sedoc's task is to promote the matching at Community level of unfilled national vacancies and applications for employment and thereby give Community workers priority access to available jobs before they are offered to workers from non-member countries.

Sedoc thus expresses a unified concept of the Community labour market, which is why the Council Resolution of 27 June 1980 on guidelines for a Community labour market policy states that 'the integration of the Community labour market should be fostered... particularly by effective implementation of the Sedoc system'.

2. The procedures underpinning the exchanges of vacancies and applications are essentially based on the 'Register of occupations and professions in international exchange' drawn up some 15 years ago at the Commission's request by a technical group of national experts.

The Register is in fact a dictionary in the different Community languages of some of the most common occupations — at the time — coming up for international clearing. A numbered code allocated to each occupation or supplementary data on the available vacancy or application enables the national Sedoc services to communicate without risk of error.

Each month, a number of unfilled national vacancies and applications are telexed by the Sedoc service in each Member State to the Sedoc services of the other Member States, using this common language and a standard layout. The distribution of information at the beginning of each month is followed by two updatings at an interval of 10 days in each case.

Where the initial exchange of general information concerning the existence of a particular vacancy or application

relating to one or other occupation reveals an opportunity for clearing, the Sedoc services of the Member States concerned exchange further information concerning the vacancy and/or application in question, likewise using a standard layout and coded language. This is the second stage in the Sedoc procedure, the 'linking' stage intended ultimately to lead to a meeting between employer and worker. Furthermore, practice shows that, besides these formal procedures, personal and direct contacts take place between the Sedoc officials of the various Member States so that supplementary information can be supplied where necessary.

3. In addition to exchanging vacancies and applications for employment, these services also provide bespoke information for workers willing to work in another Member State and for employers unable to find the workers they need on the national market. The work also frequently involves the provision of vocational guidance and counselling.

In order to facilitate the collection of the information Sedoc officials require, the Commission, in accordance with the Member States, has adopted a 'Community plan'. It is composed of four parts:

- (a) general information on Community measures concerning freedom of movement and social security for workers moving within the Community;
- (b) general information on the host country;
- (c) general information and guidance on working conditions;
- (d) general information and guidance on consumer prices.

The information under (c) and (d) is collected every six months, whereas the (a) and (b) information is collected as and when required at no fixed intervals. As regards the dissemination of the information, Article 14 (3) of Regulation No 1612/68 lays down that the specialist services of Sedoc 'shall ensure that

wide publicity is given to such information, in particular by circulating it among the appropriate employment services and by all suitable means of communication for informing the workers concerned'.

Problems

Certainly the results obtained to date by Sedoc can, in spite of the Council's encouragement, seem modest from the sole aspect of the volume of vacancies and applications exchanged. But it should be remembered that Sedoc started at the same time as the beginning of the economic recession in 1973, that there is a considerable degree of qualitative mismatch between vacancies and applications and that there is very little mobility among Community workers. Further obstacles to mobility are created by the language barriers, worry about the living and working conditions in the host country and uncertainty as to the permanency of the job — uncertainty which of course is all the greater at a time when radical changes are taking place in economic activities and in job structures.

Furthermore, should not consideration also be given to the fact that the public employment services generally control only a rather modest portion of the labour market and that, for the most part, vacancies and applications are now matched through other channels?

In addition, it is true that the actual operation of Sedoc requires some changes or improvements.

The Register of occupations, for example, produced some 15 years ago, does not contain most of the new occupations created by recent technological developments. Updating is necessary not only for the Community clearing of job applications and vacancies but also to achieve the objective assigned to the Commission and the Member States which is to 'establish the comparability of vocational training qualifications in the Community'.

Indeed, in the Decision adopted in this field on 16 July 1985, the Council stated that the Sedoc Register should

'whenever possible, be used as the common frame of reference for vocational classifications'.

It should also be noted that in a number of cases, the Sedoc procedures have proved rather too slow and cumbersome to cope with the rapid filling of vacancies or finding of jobs. In such circumstances, Sedoc officials have overcome the difficulties by making use of the telephone, which proves on the one hand that the Sedoc European network and a common coded language is useful and, on the other, that communication by telex is often slow or inadequate. The only possible solution is to computerize the national employment services and make them compatible at European level.

As regards the above-mentioned information activities, much remains to be done to improve the regularity of the collection of data on living and working conditions and their dissemination.

At all events, irrespective of the results of Sedoc and the criteria by which these results are assessed, it should above all be borne in mind that the system stands in the forefront of the practical measures to organize the Community labour market. More precisely, it is currently the only existing way of ensuring that Community workers enjoy priority over workers from non-member countries as regards access to vacant jobs. In this connection, it should be remembered that Community priority in access to employment is a legal obligation laid down in the rules governing the free movement of workers the aim of which is not only to encourage movements of Community labour but also gradually to build a genuine common market in labour characterized by measures for the internal organization of the market and a common policy on immigration from non-member countries. Community priority in access to employment as an important initial step towards the common market in labour therefore constitutes the link between the phase in which the basic legislation on freedom of movement for workers was adopted and that in which an active policy on the integration of the Community labour market is applied.

Given the prospective completion of the internal market by 1992, the need to speed up this integration of the labour factor within a coherent concept of the development of the Community can be appreciated on all sides. In this context, priority for Community workers in access to employment therefore has a crucial role to play and Sedoc, which ensures that such priority is put into practice, merits revitalization. However, it should be borne in mind that it constitutes only one of the measures for the internal organization of the Community labour market and will only be able to operate to full satisfaction when it has been placed in a coherent overall context of other measures having the same objective.

Development prospects

The programme for the relaunching of Sedoc is based on such an approach. The implementation of the programme, which began in 1986, will continue along the following lines:

(i) Completion of the Sedoc network by its extension to Greece, Spain and Portugal in accordance with the provisions contained in the respective treaties to this effect. Over and above the long and complicated work of translating the Sedoc Register of occupations and the different arrangements by means of which vacancies and applications are exchanged and apart from certain infrastructure requirements, which are in reality of little importance, the implementation of Sedoc on the territory of a Member State depends first and foremost on the availability of qualified staff properly trained in the application of Sedoc procedures and — in the case of officials of the central department — having the necessary knowledge of other languages to be able to develop contacts with their Sedoc counterparts in other Member States. Indeed, despite the fact that much of the information on vacancies and applications is expressed in code, personal contacts by telephone are very often necessary where, in the event of a genuine possibility of

placement, additional details are required by the employer or worker before the latter can move.

Extending the Sedoc to a new Member State therefore means above all ensuring that already qualified staff are available for specific Sedoc training. To this end, a programme of cooperation between the old and new Member States was devised and adopted in 1986. The programme, which will be coordinated and financed by the Commission, provides for the training of a nucleus of (12) Sedoc instructors for each new Member State, who in turn would be responsible for training the national Sedoc staff. Such a programme — which is carried out partly in the new Member State and partly in one or two old Member States — was already carried out for Greece in 1986 with the collaboration of the Sedoc services of the Federal Republic of Germany and Ireland with the result that Sedoc can finally be extended to Greece by 1 January 1988 at the latest, which is the deadline laid down in the Treaty of Accession of Greece.

Programmes of the same type have already been drawn up for Spain and Portugal in 1987 although the deadline laid down in the Treaties of Accession of those countries is 31 December 1992.

- (ii) Updating of Sedoc Register of occupations by the inclusion of new occupations arising from technological developments which have occurred since the Register was first produced 15 years ago. This is a considerable task which the Commission has just embarked on in close collaboration with the 'Sedoc' Working Party. It was decided to begin this work by encoding a number of occupations falling into the engineering category on the grounds that this category features quite often among vacancies and applications sent for Community clearing through Sedoc.
- (iii) Computerization of Sedoc network. The launching of a pilot experiment

involving computerized liaison between the Commission's Sedoc services and those of the Federal Republic of Germany and France is currently being studied. Although the pilot experiment will initially only be applied in the two countries mentioned, it will have a Community character from the outset since the feasibility study to be undertaken will ensure that the system to be suggested for this pilot experiment is one which can be applied to the Community as a whole. The data-processing system advocated could consist of a central data bank and a number of terminals to be installed firstly in the Federal Republic of Germany and France and subsequently in the other Member States. Vacancies unfilled at national level would be fed by each country into the central data bank in accordance with the Sedoc rules and procedures.

Furthermore, plans exist to use this computerized system experimentally for disseminating the information on living and working conditions which the Member States are required to assemble and exchange regularly every six months in accordance with Article 14(3) of

Regulation (EEC) No 1612/68 on freedom of movement for workers.

Such a computerized system offers many advantages the two main examples of which are as follows:

- (a) according to the forecasts of the experts, the number of vacancies which could be cleared through this system would be considerably higher than the number currently processed by Sedoc by means of telex;
- (b) consultation in real time as to vacancies available and information on living and working conditions would result in an enormous time-saving.
- (iv) Broadened information on Sedoc, its operation, the services which it offers, the existing structures, etc. A video film to this effect is now being produced as a supplementary source of information to the documentation already drawn up by some Member States. Other information measures, intended particularly for people wishing to take up a job in a Member State other than that of which they are nationals, are also necessary. This need for information was also stressed by the

Council in its Resolution of December 1986 on an action programme for employment growth. However, no detailed information can yet be provided as regards the information measures envisaged in this field.

Completion of the network, computerization, updating of the Register and information measures therefore form the cornerstones for the relaunching of Sedoc as defined following close consultations with the Member States. Indeed, the design and first steps towards implementation of this programme have been possible, thanks, above all, to a permanent productive dialogue involving the Member States, the 'Sedoc' Working Party and the group of Directors-General of Employment.

Without forgetting the objective limitations on Sedoc (endemic unemployment in all the Member States, quality mismatch between vacancies and applications for employment, greatly reduced mobility of Community workers, etc.), it can now be expected that once the programme for the relaunching of the system has been put fully into effect, Sedoc will become a dynamic tool in the service of the citizen and an effective instrument of European integration.

Duilio Silletti

Equality of treatment between men and women under Spanish and Portuguese law

Second part¹

Portuguese law²

Prior to the revolution of 1974, the status of women in Portuguese law had progressed very little. The Portuguese Constitution of 1933 laid down the equality of all citizens before the law subject, as far as women are concerned, to 'restrictions imposed by their nature and the wellbeing of the family'. In 1967, the new Civil Code still retained the concept that the husband is head of the family and it was only in 1976 (Decree Law 474/76 of 16 June) that a husband's right to open his wife's correspondence was abolished. The extent to which law rooted in patriarchal traditions acts as an obstacle to the development of the principle of equal treatment and, even more so, that of equal opportunities is clear to see. One immediate consequence of the revolution of 25 April 1974 and the establishment of democracy was an improvement in the legal status of women. In the months that followed the revolution, the law enabled women to gain access to all positions in the local civil service (Decree Law 251/74 of 12 June), the diplomatic service (Decree Law 308/74 of 6 July) and the magistrature (Decree Law 492/74 of 27 September).

The principle of equality in the Constitution

The general principle of equality is proclaimed in Article 13 of the Constitution of 25 April 1976. Various articles of the Constitution reaffirm this principle in matters relating to family life, public life, employment, social security and education.

In the employment field, there is political readiness to progress beyond formal equality. Under the terms of the Constitution, it is the duty of the State to 'ensure equal opportunities in the choice of profession or type of work and the necessary conditions so that access to any post, work or professional category may not be prevented or limited by reason of sex'.

The purpose is to ensure genuine equal opportunities for women. Furthermore, the Constitution enumerates a number of workers' rights relating to conditions of employment, to be enjoyed 'regardless of sex' and covering remuneration for work, the organization of work and the conditions in which it is performed as well as rest and recreation and the length of the working day (Article 60).

Maternity being recognized as an 'outstanding social value', the Constitution guarantees special protection for women during pregnancy and after childbirth.

Legal framework of the principle of equality

As an expression of the principles enshrined in the Constitution, the Portuguese legislative framework was endowed in 1979 with Decree Law 392/79 of 20 September, which is the basic instrument in matters of equal treatment.

Particular note should be taken of the inspiration drawn by the Portuguese legislation from Directives 75/117 and 76/207 seven years before accession whereas some founder Member States of the EEC incorporated the same directives only at a very much later stage.

According to the preamble, the Decree is intended to introduce rules defin-

ing the legal framework for the practical application of the constitutional principles to work and employment as well as mechanisms for ensuring that these rules and principles are applied.

However, the legislators are themselves aware of the fact that the equality enshrined in the Constitution cannot be achieved solely through legislation. The social, economic and political roots of discrimination against women go far too deep but the hope is expressed in the preamble that the Decree will make a meaningful and decisive contribution to the abolition of all discrimination against women in the field of employment.

When a comparison is made with the Community texts, the Decree may be criticized for having a more limited field of application than the directives, particularly Directive 76/207/EEC. More precisely, Article 20 of the Decree law excludes certain jobs from its field of application. On the one hand it states that the employment of domestic service workers and home workers is governed by autonomous legal provisions which may deviate from the terms of the Decree law according to need and in the light of the particular characteristics of the sector concerned; on the other the Decree law 'will become' applicable as soon as possible to the State, the local authorities, municipal services and welfare institutions as well as to people working in the service of the latter.

Subject to this major reservation, any direct or indirect discrimination

¹ The first part, relating to Spanish law, was published in *Social Europe* 3/86, pp 16–20.

² Carlos Botelho Monitz, 'Equality in law between men and women in Portugal' in *National Reports*, European colloquium held at Louvain-La-Neuve Faculty of Law (Belgium), 22–24 May 1985. 'Work and employment of women in Portugal' Lisbon, Ministry of Labour, 1982; Manuel Silva 'Employment of women in Portugal', report drawn up for the European Commission (VI 2319/82), 1982; 'Women in Portugal', Supplement No 11 to 'Women in Europe', EEC Commission, Brussels, 1982; *Portugal: Status of women*, Commission on the Status of Women (Prime Minister's Office) 1985.

based on sex is prohibited in the fields covered by the Decree law, which defines discrimination as 'any distinction, exclusion, restriction or preference based on sex the purpose or effect of which is to jeopardize or refuse recognition of the enjoyment or exercise of the rights guaranteed under labour law'.

Paragraph 1 of Article 9 provides for equal pay for equal work or work of equal value performed for the same employer. For the purposes of the decree, pay is defined as any payment to which the worker is entitled under an individual employment contract, whether or not forming part of the basic wage and made in cash or in kind, i.e., more precisely basic pay, increments, long-service, holiday and end-of-year bonuses, productivity bonuses, sales commissions, travel and transports costs, overtime or work performed on weekly rest days and on public holidays, meal allowances, the provision of accommodation, housing or other considerations; Equal work is defined as work performed for the same employer where the tasks carried out are the same or objectively of a similar nature. Work of equal value is work performed for the same employer where the tasks carried out, although different in nature, are considered equivalent when assessed on the basis of objective job assessment criteria.

The terms in the Portuguese legislation relating to equal pay are far more satisfactory than those contained in Spanish law.

Paragraphs 2 and 3 of Article 9 lay down that variations in real pay do not constitute acts of discrimination if they are based on objective job criteria common to men and women.

Furthermore, task-description and job-evaluation systems must be based on objective criteria common to men and women in such a way as to exclude any discrimination based on sex. (It should be pointed out at this juncture that ILO Convention No 100 on equal pay was ratified by Decree Law 47-302 of 27 May 1966 as recorded by the ILO on 20 February 1967).

Whilst guaranteeing equality in access to employment, promotion and vocational training, the Decree law also allows positive discrimination in order to correct inequalities. Article 5 of the Decree law provides a practical example of such preference. It stipulates that it is the task of the State to promote, encourage and coordinate vocational guidance and training activities for women in the light of their own preferences and employment trends. The Portuguese text stipulates that 'in the implementation of such measures, priority will be given to the 14—19 and 20—24 years-old age groups or certificate of compulsory education as well as to women who are bringing up children alone'.

Such positive discrimination ensures that women have access to vocational training courses in a percentage fixed annually by an order from the Ministry of Labour.

Article 7 of the Decree law stipulates that advertisements offering employment must not embody any direct or indirect discrimination. Likewise, the advertising of courses may not contain any indication suggesting that they are specifically intended for one sex (Decree Law No 421/80 of 30 September). It follows that recruitment must take place exclusively on the basis of objective criteria.

Exceptions to the rules are permitted only in the case of protective legislation or for certain specific activities. For instance, access is prohibited or restricted where certain types of work may entail a reproductive risk. The legal provisions relating to such exclusions or limitations are intended to undergo periodical review 'in the light of scientific and technical progress'.

It should be mentioned here that Portugal has ratified ILO Convention No 89 on night work.

Some activities are, by their very nature, intended specifically for men or for women. Portuguese law lays down that restriction of recruitment to one or the other sex in work relating to fashion, the arts or the stage does not constitute discrimination where such limitation is es-

sential to the job concerned, the value of which depends on whether it is performed by a man or a woman.

Portuguese law is also concerned to reintegrate into working life women who have interrupted their occupational activity. This concern finds expression in the vocational guidance measures and the implementation of special retraining and further training programmes.

As regards complaints and sanctions, it should be pointed out that proceedings to enforce application of the rules relating to equality may be initiated either by the victim or, with his/her consent, by the trade union organization representing him/her.

The problem of the burden of proof, which the Commission departments are currently examining, since it is a difficult obstacle for any victim of sexual discrimination to overcome, has partly been settled in Portuguese law.

Although, as a general rule, the proof of discrimination in matters of equal treatment has to be provided by the victim, where pay is concerned, there is an important procedural safeguard since, under the terms of Article 9(4), the burden of proof is reversed. The employer has to prove that differences in pay are the result of factors unconnected with sex. The victim has merely to indicate the worker or workers compared with whom he/she considers he/she has suffered discrimination.

In order to prevent retaliatory measures by the employer in the event of a complaint, the law prohibits an employer from dismissing, applying sanctions against or in any way prejudicing a female worker if the latter has lodged a complaint alleging discrimination. The application of a sanction against a female employee within a period of one year following the lodging of a complaint is assumed to be abusive. Proof to the contrary may be produced by any legal means. Abusive sanctions establish entitlement to compensation.

Under the terms of the law on dismissals (Decree Law No 84/76 of 28 January amending Decree Law No 372/75 of 15 July) the absence of rea-

sonable grounds renders dismissals invalid. In such cases, the employer is obliged to pay the wages of and rehire the female worker or, should she so wish, pay her compensation instead.

Apart from such civil compensation, the law lays down administrative penalties. The employment inspectorate is instructed to apply the law but, where there is doubt as to the existence of dis-

crimatory situations or practices, it is obliged first to seek the opinion of the Committee on Equality in Employment, a tripartite body set up by the Decree law under the Ministry of Labour.

European Social Fund: Assistance for a pilot scheme in vocational training for young people in microelectronics skills

This scheme was operated in Belgium by Invomec — the Industrieel Vormingscentrum voor Micro-Electronica (Industrial Training Centre for Microelectronics) in 1984

The results achieved so far are described below. They have been taken from a report drafted by the beneficiary. The majority of innovative programmes supported by the Fund include an evaluation report. These reports can in the future be transmitted on request, in abstract or in their entirety, to those people interested in a particular programme.

Part One: General overview

Content, innovative nature and potential for future development of the Invomec project.

1. *Brief description of training courses, specific objectives and problems to which the project attempts to provide a solution*

The project comprises an interlocking set of specific course units (theory but mainly practical) aimed at providing young people under 25 with a completely new kind of accelerated vocational training in microelectronics.

With the development of VLSI (very large-scale integration) chips, the custom design of integrated circuits is increasingly becoming an industrial imperative. It has ushered in a genuine revolution in the design and manufacture of integrated circuits, in which the two stages of the process are meshed into an indivisible whole. In practical terms it means that traditional designers need retraining in VLSI design skills as a matter of urgency. The ultimate goal of the project can be summarized as: establishing new vocational training programmes in the field of integrated circuit design and production in order to retrain conventional systems designers as VLSI designers in the short term.

2. *Participants*

- (i) Number of participants at the beginning and end of the course: 100.
- (ii) Entry level knowledge about the design of VLSI chips: practically zero.
- (iii) Outcome attainments: thanks to the completely innovative approach, participants successfully redeployed their skills towards VLSI chip design.
- (iv) Employment prospects before the course: very dim, given the high level of demand for VLSI designers from the high technology sector.

(v) Employment prospects after completion of the course: all participants easily found satisfying jobs in industry. The current demand from industry far outstrips supply.

(vi) Cost per participant: 77 954 357 : 100 = BFR 779 543.

(vii) Cost per job: 77 954 357 : 100 = BFR 759 543.

3. *Nature and rate of acquisition of the main course elements*

(a) Skills taught:

- (i) analogue techniques;
- (ii) digital techniques;
- (iii) MOS technology;
- (iv) electronic components;
- (v) VLSI simulation techniques;
- (vi) familiarity with VAX-VMS computer systems;
- (vii) practical exercises using the different software employed in VLSI circuit design, including an introduction to the following particular areas of expertise: data bases, diagramming, simulation, layout and graphic representation;
- (viii) the ability (through practical exercises) to manage data relative to VLSI chip design using CAD (computer-assisted design) and CAE (computer-assisted engineering);
- (ix) familiarity (practical exercises), acquired through instructor-directed projects, in the use of libraries of standard and custom gate arrays.

(b) Project methodology

Recent years have seen the development of crash-course training methods in all aspects of VLSI circuit design for those with comparatively low entry-level technological skills. The project was able to make use of this type of approach due to the hardware (basic configuration:



Copyright D. Maillac/R. E. A.

colour graphic terminals, dot-matrix printers, plotters), applications software for VLSI wafer design, simulation and layout techniques available to it.

One of the keystones of the methodology lies in Invomec's core infrastructure, which is continuously hooked up to the various training centres via a computer network equipped with advanced communications facilities using dedicated lines leased from the Belgian telecom authority. The network was purpose-designed for the interactive graphic design of VLSI chips in accordance with the training dispensed from each of the remote centres.

(c) Target group

The training was structured to create a logical interconnection between the particular skills listed in paragraph (a) and assuring that, by completion of the project, participants would be able to apply the new techniques learned during the course to successfully completing practical exercises and solving real-life problems of the type actually encountered in advanced technology industries and the dynamic smaller business.

Generally-speaking, it would be safe to say that the project played a major pioneering role, drawing emphatically positive comments from training instructors, participants and

high-tech employers alike, both within Belgium and its immediate Community neighbours.

4. *Invomec's links with outside parties*
 - (i) at national level: Ministry of Education;
 - (ii) at regional level: the government of the Flemish Community: Economic Affairs and Employment, Continuous Training;
 - (iii) Invomec maintains very close contacts with senior officials endeavouring to establish similar training initiatives in other Community Member States: France, FR of Germany, The Netherlands, Spain, Italy and Denmark.

5. *Future plans*

- (i) Further development of the project: it would be desirable to add a more European dimension to the project to pave the way for greater cooperation between other Community Member States and Invomec in Belgium with the ultimate aim of assuring better integrated, more uniform training programmes and avoiding unproductive duplications of effort in the various Community countries.
- (ii) Changes to the structure and content of the project. The most pressing requirement is to increase the emphasis on VLSI-chip processing and testing activities, providing course members with even higher quality 'hands-on' training.
- (iii) To date, no application for funding has been made to the European Social Fund with a view to establishing an international project drawing participation from a variety of Member States.

Invomec's governing bodies have given their official support to the idea of mounting Europe-wide practical actions in the near future.

6. *Towards a kind of autonomy*

- (i) Invomec has already organized a number of training programmes for advanced technology firms and R&D centres.
- (ii) Invomec's current infrastructure gives it the capability to operate at international level with a view to financing at least part of its activities from self-generated cash flow.
- (iii) In order to fully accomplish such a programme, however, its data processing facilities in the form of work-stations and applications packages need considerable expansion.

Part Two: Target groups

1. *Selection of participants*

- (i) The innovative methodology applied to the interactive graphic design of VLSI chips via computer networking also helped increase trainee motivation (frequent demonstrations, hands-on exercises on terminals, design exercises, etc.).

In general terms, the entry-level requirements for acceptance on the programme were familiarity with basic electronic principles, and the necessary degree of motivation, ascertained during in-depth personal interviews with each applicant.

- (ii) These selection criteria enabled a consistent degree of quality to be achieved.

2. *Trainee participation in training programme development*

- (i) As the entire course had to be designed from scratch, students were not involved in the development of the training curriculum.

- (ii) However, students were given complete freedom of choice with regard to certain practical exercises during the course, and in particular, their final projects. A number of VLSI circuit designs were also developed out of this 'participatory' information using standard and custom gate arrays.

3. *Invomec's permanent interconnection via the data communications network described earlier ensured the tightest possible integration and coordination of all steps taken in the various training centres.*

- 4. The Flemish executive provided highly effective support in working closely with the organizing bodies of Invomec throughout the project.

Part Three: Training content

1. *Adaptation of certain project activities*

- (i) Adaptation to technological advance: this was closely monitored by a number of full-time science and technology research teams working for the Inter-universitair Centrum voor Micro-electronica (inter-university microelectronics centre).

- (ii) The inter-university microelectronics centre's worldwide contacts with universities in the USA, Japan and other EEC Member States, as well as commercial sunrise industry firms, enabled the industry's needs to be accurately pinpointed and incorporated in the training in the form of demonstrations and practical exercises.

- 2. The project content was fine-tuned at regular intervals. This flexible capability will be further enhanced shortly when the project is brought under the wing of the inter-university microelectronics centre, regarded as one of Europe's leading R&D centres in microelectronics technology.

3. *New types of job*

The project enabled 'traditional' electronics component designers to retrain as specialized VLSI chip designers using computer-assisted design techniques.

The project therefore met the growing demand for VLSI designers with hands-on training, enabling them to start work in firms engaged in design activities in the applied microelectronics field, with the absolute minimum of in-house training.

- 4. As far as matching the training programme to the future needs of industry is concerned, it is safe to say that the *training was carried out on an industrial footing using the same computing aids (both hardware and software as those currently used by firms in the advanced technology sector.*

The emphasis given to hands-on experience in the training programme was also designed to help trainees settle down into their new working environments with the minimum delay.

5. *Refresher and booster training* is always available and is, in fact, a scheduled element of the project follow-up.

Particular consideration is being given in this respect to the updating of VLSI applications software, instruction in the use of new VLSI packages, the upskilling of abilities in VLSI chip processing, and the in-depth study, through practical applications, of the various problems raised in the quality testing of newly developed VLSI chips.

Part Four: Information Methodology

1. *Educational innovation*

Much of the project's success can be put down to the use of remote instruction in the interactive graphic design of VLSI chips from 13 training centres scattered throughout the Dutch-speaking part of the country over a sophisticated computer network using dedicated lines leased from Belgium's telecom authority, hooked into Invomec's own core infrastructure. As a training system, it is unquestionably ahead of the field in Europe.

2. *New training techniques*

The project made use of the following training techniques:

- (i) Interactive graphic design of VLSI chips.
- (ii) Design work executed simultaneously in 13 different training centres using a computer network and advanced data communications facilities.
- (iii) The transmission speed of 9600 bps is exactly the same as that achieved by designers working

virtually next door to the host computer.

- (iv) Training is emphatically geared towards the use of visual aids.
- (v) Practical demonstrations were a major component of courses.
- (vi) The training programme was interlaced with very frequent practical exercises graded in increasing levels of difficulty, offering excellent opportunities for individual guidance and for students to pace their own learning.
- (vii) The Invomec project also offers participants the opportunity to produce and test VLSI chips, providing them with hands-on experience in applying a variety of design rules.

(viii) Simulation is also a major element, enabling the designer to effectively performance-test his circuit, in particular by checking the electrical responses of the various components.

(ix) The project also stands out in making available to the various training centres involved a package of VLSI design applications software, together with a silicon foundry service. This infrastructure enabled students, using standard and custom gate arrays, to carry out projects using methods very akin to those of traditional integrated circuit design.

(x) The project was instrumental in producing 50 VLSI integrated circuits with a total surface area of 400 mm².

3. *New forms of vocational guidance*

In the light of the educational innovations already described, and the new techniques used to dispense the training, it can be asserted that the project has contributed to the development of new forms of vocational guidance.

4. *Comparison with other training methods*

The objective set for the training programme — namely to provide accelerated training in VLSI circuit design — was attained. The innovative educational and technical content must be seen as crucial to accelerated training in a skill as complex as VLSI chip design for those with no particular expertise in that field. A more conventional, less 'innovative' approach would not produce the same result.

5. *There can be no question that the project has made a substantial contribution to improving the quality of instruction dispensed in vocational training.*

Part Five: Improving training structures

1. *Improving teacher training*

- (i) Initial training:

The very first trainers had purely electronics backgrounds. They were therefore given crash courses in VLSI circuit design. This training was assured by Invomec's core infrastructure and was directed by university senior lecturers, lecturers and assistant lecturers specializing in various fields of microelectronics: VLSI systems design methods, integrated process development, development of new materials and IC conditioning.

- (ii) Continuous training:

The project organizes regular intensive refresher courses for instructors, who are thus able to pass on state-of-the-art practical developments in VLSI technology to the students. Instructors can also use Invomec's existing computer network to continuously update and upgrade their own knowledge and skills with the full support of the entire VLSI design team.

2. *Organizational links*

- (i) The project occupies a dynamic coordinating position between the educational and vocational training services and industry, acting as a prime mover in the vertical integration of the three sectors.
- (ii) Since the Invomec project is geared towards training for emerging occupations, all the social partners are evidently actively involved in the initiative through their representation on the Flemish committee for concerted economic and social action.
- (iii) Through its integration into the inter-university microelectronics centre, enabling to tap the benefits of the pioneering work accomplished by the scientific division of the R&D laboratory — and hence continually realign its training programmes to take account of new technological advances — Invomec maintains close working relationships with a variety of R&D laborato-

ries, universities and advanced technology companies in the United States, Japan, Europe and Belgium.

3. *Official recognition for the Invomec training programme*

- (i) The Belgian Ministry of Education has granted the 'VLSI designer' certificate officially recognized status.
- (ii) The project meets all industrial and scientific standards currently applicable to the design of VLSI circuits.
- (iii) The integration already described has given the training programme the flexibility necessary to adjust rapidly to all changes in industry standards, which constantly raise the level of qualifications required of future students.

4. *Proposals for future training programmes*

The immediate plan is to introduce a number of innovations relative to VLSI integrated circuit design, including:

- (i) the teaching of state-of-the-art developments in VLSI design methods, including intensive training through practical exercises;
- (ii) instruction and intensive training in the use of new, high-powered VLSI applications software for the production and testing of VLSI integrated circuits;
- (iii) as far as course content is concerned, greater emphasis will be laid on the know-how of circuit production, and actual circuit manufacture, including the testing of manufactured circuits;
- (iv) as regards the hardware made available to the 13 training centres, an increase is required in the installed number of intelligent workstations. This development — which is a committed step forward — needs to be closely monitored, notably with a view to the future development of Invomec's core infrastructure.

Training:

Company business

A battery of recent Community instruments has both shed light and put more detail on the preparatory stages leading to the completion of the single internal market by 1992. The issues around which the accomplishment of the internal market revolves are both daunting and absolutely fundamental. They include the stimulation of economic recovery; harnessing not only current technological changes, but also controlling their impact on methods of production of goods and services as well as living and working conditions; increasing the competitiveness of Community business without distorting fair competition, and combatting the unemployment which has now become endemic in Europe. All due allowance made, the strategies devised to meet those challenges can be said to be linked by a single common thread: the key role conferred on European business and its capacity to adjust, and, consequently, on its core component: the economically active population — human resources.

In this light the Commission adopted, on 14 January 1987, a Communication on adult training in firms (doc. COM(86) 780 final). This document, which at the present stage should be regarded as a memorandum or 'Green Paper', stems directly from the conclusions of the Council of Social Affairs Ministers of June 1986 and the Resolutions of the Council of June 1983 concerning vocational training policies for the 1980s and vocational training measures relating to new information technologies. It has also grown out of the conclusions drawn by the Presidency at the meeting of the European Council in London on 5 and 6 December 1986, stressing the importance of Community actions on unemployment directed particularly towards encouraging better quality vocational training for young people and adults. It also offers an initial response to the Council Resolution of 11 December 1986 assigning the Commission the task of implementing the actions advocated by the London European Council.

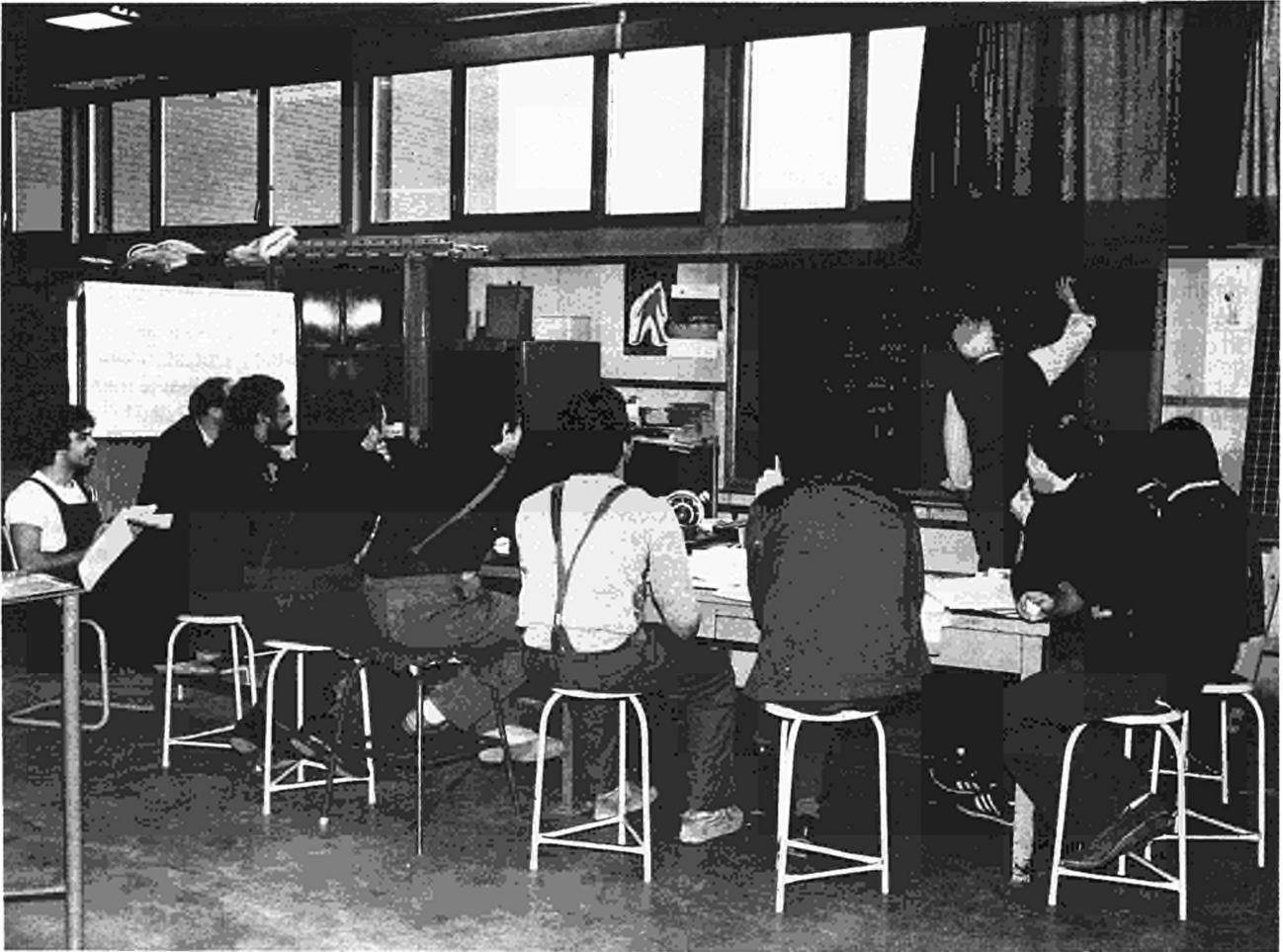
This latest Communication interlocks with other Community texts aiming to foster economic and social regeneration, and is designed to operate in harness with, and broaden the scope of, a number of programmes running in the field of technology (see annexed list). In some senses, it could be thought a shade ambitious in seeking to provide complex and varied answers to the whole panoply of problems faced by the mass of European businesses.

The counter-argument to that is that the document concentrates rather on the challenges, problems and future possibilities that those companies may share, irrespective of their size or business-base, going on to map out broad solutions which, if not universally applicable, can at least be moulded to fit particular circumstances. Additionally, the Commission is also encouraging the economic actors involved to focus special attention on the particular growth and adjustment problems of smaller businesses and, through that, on particular problems facing continuing training.

The criticism could also be levelled at the Communication that it deals only with a comparatively secure and limited segment of the total population, failing to address itself to the real problems of the labour market. And yet the decision to focus on working adults in no way implies that unemployed and/or job-seeking adults have slipped off the priority list. Nothing could be further from the truth. But the individual firm — irrespective of size or type — is still where the production of goods and services mainly resides, and the workers concerned (white- and blue-collar) are the core of the labour force. The wage-earning population, moreover, which is easily identifiable and not alienated either from economic or social life, is directly affected by the changes wrought by new technologies on work organization: they therefore have a personal stake in any innovatory approach — and training is one facet of that — to turn the workplace into a forcing ground for the emergence of new skills. In conclusion, it can also be assumed that both business and workers will provide the stimulus for getting any broader basic and continuing training actions off the ground.

Training actions in all Member States are increasingly geared towards specific economic ends, irrespective of the groups at which they are aimed. This change of approach is typified in instances where economic goals and training aims are meshed together in a single programme. Continuing training schemes will only be a viable medium-term proposition if, in the final analysis, business perceives an economic value in them and if they contribute to easing employment conditions — be it by preserving existing jobs, creating new ones or contributing to occupational mobility.

The other side of giving continuing training in firms is that such training can only realize its full potential if it is viewed from the outset as an investment in intangible assets tightly linked in with an overall growth strategy, itself defined as part of the integrated forward planning of all the company's factors of production.



Copyright Van Parijs

This general approach has attracted broad consensus from all the economic actors concerned: employers, workers, trade and professional organizations and public authorities.

The Commission will be pressing ahead with consultations on the matter throughout 1987, not only with the European Parliament and the Economic and Social Committee, but also with all those directly or indirectly affected by continuing training schemes. These consultations, largely based on the groundwork already done by Cedefop, will be targeted more specifically at both sides of industry at national, as well as at Community level.

The successful outcome of the top-level discussions recently held between the social partners — the so-called 'Val Duchesse talks' — assume particular importance in this context for future Community action. For the fact that governments may encourage, if not positively stimulate, an innovatory policy of continuing training for workers in no way suggests that implementation of such a policy should be confined to an employer/government dialogue from which workers and their representatives are excluded. Negotiations between management and labour have a direct impact on the world of work, including vocational training matters. Any efforts made to improve the provision of conti-

nuing training for workers is doomed to failure if employees see no reason to support it.

The Community action proposed in this Communication could be structured around three objectives: exploiting the experience gained with a view of transfer and dissemination, developing new products and methods of training, promoting the development of new in-service training practices.

¹ see: *Social Europe* 2/87 p. 10, joint opinion of the Working Party 'Social dialogue and the new technologies' concerning training and motivation, and information and consultation — Brussels 6. 3. 1987.

Taking account, in this context, of the experience gained from current activities, especially the interventions of the European Social Fund, and greater exploitation of this experience — three additional fields of action may be identified:

- (i) provision of support for setting up integrated training operations;
- (ii) an increase in the number of partnerships between firms and trainers in order to create new products; and
- (iii) support for the development of training systems on an individual basis.

On the basis of the conclusions that the Council, the European Parliament and the Economic and Social Commit-

tee draw up, the Commission after due consultation with the two sides of industry and other bodies concerned will take the initiative towards the end of 1987 of submitting a proposal to the Council for a Community medium-term action programme which should be implemented during 1989.

Annex

- (1) See in particular:
 - (i) the Commission's annual economic report for 1986—87 (doc. COM(86) 530 final);
 - (ii) 'aspects of living and working conditions' (doc. COM(86) 779 final);

- (iii) 'local employment initiatives to combat unemployment' (doc. COM(86) 784 final);
- (iv) 'vocational training measures relating to new information technologies' (OJ C 166 of 26. 6. 1983) and the Eurotecnnet programme of work 1985/88 (doc. COM(85) 167 final);
- (v) the Council Decision applying the Comett programme (OJ L 222 of 8. 8. 1986);
- (vi) the Council Decision on the comparability of vocational training qualifications (OJ L 199 of 31. 7. 1985);
- (vii) the action programme on the training and preparation of young people for adult and working life.

The Comett programme

Call for applications in first operational year

The European Community action programme for education and training for technology — the Comett programme — enters its first operational year in 1987. The Commission has now issued a *Guide for Applicants* for that first year. This article describes the objectives and content of the Comett programme and gives information on how to apply.

Comett is concerned with advanced level training for technology. This means predominantly technology and technology management but also all fields of training fundamentally affected by technological change. Finally approved by the Council on 24 July 1986, this programme will run for three operational years 1987—89 and has the following objectives:

- (i) to bring a European dimension to university-enterprise cooperation in training related to the new technologies;
- (ii) to promote joint university-enterprise development, both within and across Member States, of training programmes at advanced level;
- (iii) to improve the supply and level of such training at local, regional and national levels.

Comett will focus on five inter-related strands of actions designed to support enterprises and universities:

Strand A:

The development of university-enterprise training partnerships (UETPs) within a European network

These UETPs are cooperative ventures between universities and enterprises at local, regional, national or international levels which are designed to meet training requirements for highly qualified manpower on a structured and coordinated basis. Such consortia would typically engage in training actions of the type foreseen in the other strands of Comett.

Strand B:

Transnational exchanges of students and personnel

These exchanges are of (a) students into enterprises in another Member State, (b) of university staff into enterprises in another Member State, and (c) of the staff of enterprises into universities in another Member State. In all cases, the objective of such exchanges is to reinforce the transnational character of the person's training or of the training activities of the organizations concerned.

Strand C:

Development and testing of joint university-enterprise projects in the field of continuing education

These continuing education initiatives must be transnational in nature and will take two broad forms, namely: (a) the design, development, and testing of training materials/packages directed at highly qualified personnel, and (b) short intensive courses of high level aimed primarily at the dissemination of R&D results within universities and enterprises.

Strand D:

Multilateral initiatives for the development of multi-media training systems

This strand is to assist in ensuring a European-wide exploitation of the new technologies as instruments to improve the quality and delivery of advanced level training. As such, it is intended to contribute to the development of an overall plan for distance and open learning systems at European Community level.

Strand E:

Complementary information and evaluation measures

Measures under this strand are intended to assist the Commission in building up a strong process for the exchange of ideas and experience within the Community, and for the transfer and dissemination of good practice. This strand will also support measures to assist in the overall evaluation of Comett.

The financial support available from the Community is as follows:

Strand	Maximum Community proportion	Maxima operating (ECU)
A	50%	50 000 per UETP per annum
B	—	4 000 per student placement 12 000 per fellowship
C	42%	30 000 per short intensive course 500 000 per training materials project
D	50%	400 000 per project

It should be noted that the Commission is not at this stage inviting applications under Strand E.

In order to assist applicants, the Commission has published a *Guide for*

Applicants for the first operational year. This Guide is available in all Community languages and is available from the contact address at the end of this article.

The key points for applicants are the following:

Deadlines

There are two application deadlines in 1987: 31 March 1987 and 1 July 1987.

Who to apply to?

Applications must be made on the official forms (included in the *Guide for Applicants*) and sent directly to the Commission. The address is given in the Guide.

Who decides?

The Commission is responsible for decisions on applications and will be assisted in its assessment of applications by appointed experts. The Comett Committee — which was established by the Decision on Comett — has the right to express its view on any project where the Community contribution is more than 100 000 ECU.

When are decisions taken?

The Commission hopes to arrive at decisions on the first round of applications by mid-July 1987 and on the second round by mid-October 1987.

When can the money be used?

Finance under Comett will operate on an annual basis and not multiannually. Those who receive Comett funding in 1987 will be able to use that funding for the period up to 15 December 1988.

How to get further information?

There is a Comett information point in each Member State which can assist those seeking further information. The full list of information points is given at the end of this article.

Additionally, the Commission has established a Comett Technical Assistance Unit in Brussels, which can assist in the provision of information and which will

assist the Commission in the implementation of the programme. Its address is given at the end of this article.

Contact Address:

Comett Technical Assistance Unit
13 rue d'Egmont
B-1050 Brussels
Tel.: (322) 512 91 83
Fax: (322) 512 19 29

Centre D'information Comett / Comett information centre / Comett-Informationen Zentrum / Comett informatie centrum / Cometts Informations-Kontor. / Centro de informacion Comett / Centro d'informazione Comett / Centre de informacoes Comett / ΚΕΝΤΡΟ ΠΛΗΡΟΦΟΡΗΣΗΣ Comett

B

Dhr. Raymond Totte, Directeur-Generaal
Bestuur Hoger Onderwijs en Wetenschappelijk Onderzoek
Ministerie van Onderwijs
Manhattan Center, Toren 2
Kruisvaartenstraat, 3
B — 1210 Brussel
Tel: 219 18 80

Mr André Philippart, Directeur de la
Recherche Scientifique
Direction-Générale de l'Enseignement
Supérieur et de la Recherche Scientifique
Ministère de l'Education Nationale
Cité Administrative de l'Etat
Rue Royale, 204
B — 1010 Bruxelles
Tel: 210 55 64

D

Arbeitsgemeinschaft 'Comett'
Deutscher Akademischer Austauschdienst — Daad
Carl-Duisberg-Gesellschaft EV — CDG
Kennedyallee, 50
D — 5300 Bonn 2
Tel: 0228/8821
Telex: DAAD BGO 8/85515

DK

Comett-Kontoret
Akademiet for de tekniske Videnskaber
Lundtoftevej 266
2800 Lyngby
Tel: 2 — 88 13 11

E

Cerconett (Comite Espanol del Programa Comett)
Dr R. Lopez De Arenosa
Secreraria de Estado de Universidades e Investigacion
Ministerio de Educacion y Ciencia
Serrano, 150
E — 28006 Madrid
Tel: 411 54 14, 411 54 62
Telex: 45903, 46945

F

Assemblée Permanente des Chambres de Commerce et d'Industrie
Direction Formation Emploi
Programme Comett
45, avenue d'Iena
F — 75116 Paris
Tel: 47 23 01 11
Telex: APCCI 610 396 F

Volet B

Association Française pour les Stages
Techniques à l'Etranger (AFSTE)
101, Bd. Raspail
F — 75006 Paris
Tel: 45 44 52 03

Assistance Technique pour le Montage des Projets

Agence Nationale pour le Développement de l'Education Permanente (ADEP)
Programme Comett
ADEP Mont d'Est le Central, 430 —
boite 124
F — 93194 Noisy le Grand Cedex
Tel: 43 04 98 76

UK

Mr Richard Faith/Department of Education and Science
Elizabeth House
York Road
London SE17PH United Kingdom
Tel: 934 96 53—54

GR

'Comett Info Office'
Mme Valia Kousvelary-Massoura
Mr Raphael Koumeri
Ministry of Industry, Energy and Technology
14, Messogion St.
Athens Greece
Tel: 778 28 89, 778 29 51
Telex: 215811 YBIO GR

I

Professor Remo Rossi
Direttore del Centro di Calcolo
Elettronico/CINECA
Universita di Bologna
Via Magnanelli 6/3
I — Casalecchio di Reno (Bologna)
Tel: 39 51 576541
Telex: 226 333 CINECA I

IRL

NBST (National Board of Science and
Technology)
Shelbourne House
Shelbourne Road
Dublin 4 Ireland
Tel: 683 311
Telex: 30327 NBST EI

L

Mr Yves Oestreicher
LUX INNOVATION
7, rue Alcide de Gasperi
L — 1615 Luxembourg
Tel: 43 62 63
Telex: 2784 SIDLUX LU

NL

Mr J. E. Hagen
Netherlands Universities Foundation for
International Cooperation (NUFFIC)

P. O. Box 90734
NL — 2509 Ls DEN HAAG
Tel: 50 26 81
Telex: 33565 NUFIC NL

P

Conselho de Cooperacao Universi-
dade-Empresa
Av. 5 de Outubro, 107 1.0
P — 1051 LISBOA Codex
Tel: 76 82 87
Telex: 18428 EDUCA P

Volet B

Engo Mario Vincente
Instituto de Apoio as Pequenas e
Medias Empresas Industrias
Rua Rodrigo da Fonseca, 73
P — 1297 LISBOA CODEX
Tel: 56 02 51, 56 04 73
Telex: 15657 IAPMEI P

The training and preparation of young people for adult and working life

The European Community needs to put the highest premium on investment in its young people, their skill, versatility, sense of initiative and their ability to learn to cope with change. They represent the vital human resources for growth and prosperity in the Community of tomorrow. There are today over 53 million young people aged 14–25 in the enlarged European Community, Spain adding 6.5 million and Portugal nearly 1 million to the previous figure of 46 million.

While many young people are following programmes of education or training or are in a job, the unemployment rates remain depressingly high; about 1 in 4 for young men and 1 in 3 for young women. The overall national unemployment rates for young people have not improved, in most cases, since 1983. Although the demographic trends may be helpful for most Member States, since the number of 15–25 year olds in the Community will fall by 25% by the end of the century, the national youth unemployment statistics conceal the existence of areas where the rates are twice or three times as high. The personal tragedy of so many wasted lives apart, the Community cannot, and must not, accept the continuing loss or underutilization in the 1990s of those who will form so large a part of its adult working population.

Although progress in the education and training field is not a panacea for combatting youth employment, and recognizing that this contribution must be seen as part of a comprehensive response to the employment situation, the Commission considers that investment in training is a vital factor in future social and economic development. In this context, the effectiveness of vocational education and training opportunities provided for young people is a decisive factor in creating the conditions for their participation in continuing education and training throughout their adult working life.

In order, therefore to raise the standard and quality of training provision throughout the Community, the Commission adopted on February 1987 a Communication and a draft Council Decision to set up a new programme on the training and preparation of young people for adult and working life.

The Commission has a long history of concern for the problems facing young people in their transition between the world of school and the world of work, problems that became more acute through the early 1980s, as youth unemployment continued to rise. From the early beginnings of the first programme on the transition of young people from school to working life, the 1980s saw the transformation of this programme into the setting up of highly developed pilot projects. The experience gathered through this second programme, on which an interim report was adopted by the Commission in December 1985¹, has served as an important source of guidance for the drawing up of the current proposals.

In terms of policy developments, the end of the 1970s saw the Council stressing the importance that should be attached to linking training with work experience for young people, an issue becoming more important in some Member States as the number of traditional apprenticeships lessened with the decline in Europe's manufacturing industry. On the basis of a major policy document from the Commission on the subject of vocational training policies for the 1980s, the Council returned to the issue of youth training in its Resolution of 11 July 1983, inviting Member States to ensure that all young people who so wished could have access to at least six months and if possible one year's vocational training following compulsory education.

This commitment had already been met in most Member States and in some exceeded, by the time the Commission issued its progress report in May 1986². It was considerably less clear however, how far existing programmes for young people adequately covered all regions, catered for the more disadvantaged and provided equal opportunities for young women.

The increase in the number and variety of programmes available to young

¹ Interim Report from the Commission to the Council, COM(85) 767 final, 23.12.1985.

² Youth training in the European Community.



Copyright P. Nieto/R. E. A.

people carried with it the inevitable corollary that young people found difficulty in tracing their way through a maze of provision, often without adequate guidance and information.

The Commission took the opportunity in International Youth Year to draw up a balance sheet of activities present and proposed in favour of young people¹. The same year saw the presentation by the Commission to the Council of the Comett programme setting up university/industry links in training for new technologies, the Erasmus programme to increase student mobility in the Community and the YES proposals to encourage youth exchanges in the Community.

Also in International Youth Year, stressing the theme 'participation', the

Commission, with the then Luxembourg Presidency, brought together a group of projects where young people have been involved in the provision of information and training for their age-group. The effectiveness of these projects both in providing information in an acceptable form and in equipping the young people involved in its production with skills and experience has led the Commission to place its continued support for young peoples' projects in the context of its new action programme.

The new programme is based essentially on the need to assist the Member States in the implementation of the further commitment to young people given by the European Council, meeting in Milan in 1985, when it adopted the Adonnino Committee's report on a 'peo-

ple's Europe', which invited Member States:

'to do their utmost within national policies, whenever possible in association with enterprises and social partners, to ensure that all young people wishing to do so receive one year's, or if possible two years' vocational training in addition to their compulsory education'.

This commitment represents, for some Member States in particular, a considerable advance on existing provision. The Commission's intention in setting up its new action programme is to set policy objectives for the implementation of this commitment and to assist

¹ Memorandum for International Youth Year.

the Member States in achieving these objectives. The Community has a particularly important role to play in evaluating and transferring experience, particularly from those Member States where school leavers already have access to two years vocational training, and in assisting those for whom the Milan commitment represents greater changes.

The major theme of the Commission's action programme is the need for a better coordination of provision for young people between all the authorities concerned, in the fields of education, training and guidance, and all sectors of the economy, both public and private.

The period of transition between the end of schooling and entry into stable employment is often long and lengthening for the majority of young people in the European Community. There is no single point of transition but rather an increasing multiplicity of exit and re-entry points which have to be negotiated by young people. Moreover, there are different types of institutions and organizations providing vocational education, training, guidance or work experience according to the particular point in the process reached by the young people in question. It has to be recognized that the vocational education and training arrangements in most Member States are somewhat fragmented, as different government departments with overlapping responsibilities in the training field have developed temporary or crash programmes for young people in recent years. The need for closer cooperation, even coordination, between them has become widely established and the Commission has in recent years drawn

the attention of national authorities to the weaknesses inherent in fragmented and uncoordinated provision.

Increasingly there is evidence of wider recognition of the need for new partnerships in mobilizing the various education, training and counselling resources available to young people in a more coherent, and transparent form which can also secure the wider participation of young people in the programmes on offer. These partnerships should not simply involve public authorities, but also link up the wide range of other agencies and interests, especially at local level, both private and voluntary. There is scope for such partnerships to be developed further between national, regional, and local authorities, in accordance with the specific dynamics and traditions of each Member State, particularly with regard to the active role of the social partners, so that this commitment to mobilization of all available resources becomes a reality at all levels. Greater public understanding of and commitment to the training systems, through active participation in this process will also help raise standards and secure the necessary support for further investment in vocational education and training. Parents and the social partners have a special role in this respect.

To improve and stimulate this coordination, the Commission proposes to establish a European network of partnership initiatives in vocational education and training and to carry out a range of supporting activities aimed at improving the quality of training provision and ensuring that young people following training courses have access to recognized qualifications.

The nine-point plan of action to be implemented by the Commission can be summarized as follows:

- (a) the launching of a European network of training partnership initiatives linking projects from the different Member States;
- (b) technical assistance in the vocational education and training field;
- (c) comparative research on vocational education and training issues;
- (d) co-sponsoring of surveys on youth training programmes and their effectiveness;
- (e) review of evolution of vocational qualifications;
- (f) support for innovative information projects on the transition to adult and working life which involve young people in their planning, organization and implementation;
- (g) support for youth initiatives to encourage the development of entrepreneurial skills, responsibility and creativity amongst young people;
- (h) exchange of training specialists;
- (i) regular dialogue and reviews between policy makers and the social partners of the implementation of the Council decision.

The Commission will thereby, in order to complement and back up the measures taken by Member States, continue with its activities to encourage innovation and the qualitative improvement of vocational education and training systems.

Statement on drugs

The numbers of those taking illegal drugs — particularly heroin and cocaine — has risen to disquieting levels in all Member States in recent years, bringing with it widespread problems of both a medical and socio-economic nature, which can no longer be brushed aside. The unvarnished facts alone speak for the extent of the problem. There are, for example, some 1.5 million heroin addicts in the European Community today, most of them young people between 17 and 25. Europe has also become the new target market for new drugs and new methods of misuse — of which 'crack' is only the most recent. There is also a firmly established link between the use of shared needles for injecting drugs directly into the veins and the spread of deadly diseases such as hepatitis B and AIDS. Despite the major efforts made at national and international levels to shut the floodgates on this twentieth century scourge, it must be admitted that the results achieved to date are somewhat less than impressive.

While drug addiction is a worldwide problem, it is also a matter of Community concern. In a communication on health-related problems¹ addressed by it to the Council on 13. 9. 1984, the Commission considered that the fight against drug abuse should be a priority area for cooperation at Community level. Starting off from the premise that a war on drugs will only be successful if conducted on an integrated basis — directed at production, trafficking and use — the Commission's communication stressed the importance of prevention and health education. Current thinking on the matter, indeed, highlights the importance of front-line preventive measures and the need to mount campaigns to get youngsters to 'just say no' to drugs and to stop them acquiring the drug habit.

A more recent communication sent by the Commission on 28. 11. 1986 to the Council and the European Parliament concerning Community action to combat drugs², lays particular emphasis on prevention, treatment, rehabilitation and research. The choice of these actions points to the Commission's desire to give prominence to the priorities set by the European Parliament, notably following the report of its Commission of Inquiry on Drugs, in the hope that the actions recommended will lay the foundations of an on-going dialogue between the Member States and the Commission to step up the fight against the scourge of drug abuse. The communication provides for a series of initiatives to be taken in a lead-up phase covering 1988/89:

- (i) in the area of prevention, emphasis will be given to devising training and information programmes on drugs targeted specifically towards parents, teachers, community and social workers, and on fashioning health education programmes for young children and teenagers;
- (ii) the Commission's plans on treatment and rehabilitation are to undertake a critical assessment of existing systems with a view to improving them and developing effective and lasting methods in both areas;
- (iii) as far as research is concerned, the Commission is stressing the need for coordination of national efforts to put more detail on the incidence of drug addiction and pin-point high-risk groups;
- (iv) comparative studies are also planned with the aim of clarifying the actions taken. These will focus on identifying the types of drug most often taken, the forms of drug abuse and the real size of the addict population. A European information system on the drug problem, supported by a European data bank, might also be established, surrounded by safeguards to preserve the confidentiality of medical records and individual privacy. At its meeting on 15 May 1987, the Council and the Ministers for Health, meeting within the Council, took note of the communication.

¹ COM(84) 502 final.

² COM(86) 601 final.

The Chernobyl accident

Consequences to health in the Community



Copyright P. Sittler/R. E. A.

The accident at the nuclear power station in Chernobyl near Kiev occurred on 26 April 1986 and led to substantial quantities of radioactivity being released into the atmosphere.

The major release of activity lasted for about 10 days, i.e. from 26 April to 5 May. During this period the meteorological conditions over Europe changed considerably and as a consequence the dispersion of radioactive material across Europe was widespread but very uneven; in particular the pattern of radionuclide deposition on the ground was greatly affected by the occurrence of localized rainfalls.

The release of 26 April reached Scandinavia on the 27th and 28th, that of 27 April spread further southwards

passing through the Federal Republic of Germany and France before turning northeastwards to Belgium, the Netherlands, the UK and Ireland. The release at 29 and 30 April travelled south-east to Northern Italy before moving northwards. On 1 and 2 May the radioactive plume carried towards Greece. The releases of 3 and 4 May passed toward the north-west and had no immediate impact on Member States: however, subsequent releases on 5 May travelled towards the south-west reaching Italy and Northern Greece between 9 and 11 May.

In the absence of information from the USSR, the news of a radioactive release came with its detection in Sweden on 27 April 1986, when measuring instruments at two locations on the eastern coast recorded a sudden increase

in airborne particulate activity concentration; in the days which followed, the widespread contamination of environmental materials was confirmed almost throughout Europe. As a result of the release, besides the external exposure and contamination from the plume and from activity deposited on the ground, and internal exposure due to inhalation of radionuclides in the plume and of re-suspended radionuclides, the populations in the affected countries were also subjected to internal exposure due to ingestion of contaminated food and water.

Recognizing the potential danger and in accordance with Articles 35 and 36 of the Euratom Treaty, the Commission requested on 29 April 1986 from Member States the regular communication of monitoring data on radioactivity in air, water, soil and foodstuffs. Informa-

tion on contamination was exchanged on a daily basis between national competent authorities. It soon became apparent that air and surface water radioactivity was not such as to cause concern. Attention was focused instead on the contamination of agricultural products used for human consumption which became the major exposure pathway.

Because they became a major pre-occupation for the Community, administrative problems and measures relating to contamination of foodstuffs are described separately in Section 2 below.

Levels of surface contamination in Member States by the most important radionuclides, namely iodine-131 and caesium 134/137, as reported to the Commission by national administrations following the accident are illustrated in Figures 1 and 2.

A preliminary assessment of the consequences to health due to Chernobyl has been carried out by the National Radiological Protection Board of the United Kingdom on behalf of the Commission. The impact estimates are based on environmental measurements made during the first and second months after the accident, and on calculations made using mathematical models of the transfer of radionuclides through the environment.

Doses have been estimated for three representative age-groups, namely the 1 year-old infant, the 10 year-old child and the adult. The effects on exposure of countermeasures taken by the authorities were taken into account; however, the reduction in dose achieved by precautionary measures taken by individual members of the public as a reaction to the contamination resulting from Chernobyl is difficult to quantify and was therefore omitted.

Average individuals have been assumed to have food intake rates representative of the means for the country of interest and are assumed to eat food containing average levels of contamination.

Critical individuals are assumed to have higher than average intake rates of

all of the foods, which contain relatively high levels of contamination. They are also assumed to spend a greater part of their time outdoors than average and to live in buildings with less shielding than average. It is clear that this approach is likely to overestimate the doses; it gives however an idea of the possible ranges in individual doses.

Table 1 gives the individual effective doses received in the first year for each of the three age categories considered. Table 2 gives the effective dose received over the next 50 years in each Member State.

The calculated effective doses to average individuals in EC countries from exposure in the first year range from 0.2 μSv (in Portugal) to between about 200 and 400 μSv (in the FRG, Italy and Greece). The average 'lifetime' dose ranges from 0.3 μSv to 950 μSv . It is of interest to compare the above doses with that received from natural background radiation, which on average amounts to some 1 500 μSv per year, or about 130 000 μSv over a lifetime.

The total collective effective dose to the population of EC countries, integrated over all time, is estimated to be about 80 000 man Sv. This may be compared to the collective effective dose from natural background radiation of about 500 000 man Sv every year. In some countries, the restrictions placed on consumption of some foods are estimated to have been effective in reducing doses to the most exposed individuals, the reduction being up to about a factor of 2. Throughout the EC, however, countermeasures are estimated to have reduced the collective effective dose by about only 5%.

The long-term health impact from the Chernobyl accident in terms of cancer and genetic damage is very small compared to that arising from other sources and, in particular, from natural radiation. The NRPB study yields an estimate of about 1 000 potential additional deaths from cancer over the next 50 years, which is to be compared with a total of about 30 million fatal cancers from all other causes over the same period. Further refinements of this estimate will be

obtained from future assessments using better data bases. On present dose estimates, it would appear that epidemiological investigations designed to detect any relative increase in malignant and genetic disease due to Chernobyl would be impracticable to undertake on the scale and extent required to yield statistically reliable results.

The Chernobyl accident confronted the Community with practical and political problems both short term in dealing with the immediate consequences of the accident and longer term in ensuring that the best provisions are made for the future.

The radioactivity which was deposited in varying amounts over the surface of Europe contaminated a wide range of agricultural products. Plants were contaminated by direct deposits of radionuclides upon their surface. Animal products — dairy produce, meat, etc. — were contaminated through animal consumption of contaminated grass, etc. Contaminated agricultural products which are used for human consumption become vehicles for exposure of man to radioactivity. In view of the potential danger in this situation the Community system for rapid alert in cases of food contamination was put into effect on 2 May 1986 and data on food contamination were exchanged on a daily basis between control authorities. Concern over foodstuffs from contaminated areas, and especially imports from the Soviet Union and other affected Eastern European countries, led to the imposition by national authorities of restrictions on internal trade and on imports.

The national experts on food contamination met on 5 May 1986 together with experts in trade and in radiation and on the basis of this consultation the Commission:

- (i) adopted a Recommendation calling on Member States to set certain maximum levels for radioactivity in milk, in milk products, and in fruit and vegetables. Starting levels were 500 Bq/kg for milk and milk products and 350 for fruit and vegetables, these to be reduced by half every 10 days. This recommenda-

tion was followed by only a few Member States;

- (ii) decided, subject to approval of the Standing Veterinary Committee, to ban the importation of meat and live animals from certain Eastern European countries and the Soviet Union;
- (iii) proposed a Council Regulation to ban imports of fruit and vegetables, milk and milk products, game and freshwater fish from Eastern European countries and the Soviet Union.

The objective of these actions was to allow Member States to remove restrictions which had been imposed on internal trade and to take common measures on imports while protecting the health of the population. The Commission Decision on meat and live animals was taken on 7 May, covering imports of more than 70% of fresh food and live animal imports from the countries concerned. On 12 May 1986 the Council adopted a Regulation suspending imports of other foodstuffs. At the same time, the Member States agreed not to impose on imports from within the Community stricter radioactive levels than those pertaining to home products. Both the Commission Decision and Council Regulation were to run until the end of May 1986.

Subsequently, the alert system continued to operate and meetings of experts were held to update the situation. The Group of Experts, set up under Article 31 of the Euratom Treaty to advise the Commission on radiation protection standards, provided a provisional opinion on the derived reference level of caesium in major foodstuffs in international trade. These consultations were the basis for the provisional regulation fixing the maximum levels of caesium 134 and 137 contamination in foodstuffs, which replaced the import ban.

On 30 May 1986, the Council adopted Regulation (EEC) No 1707/86 on conditions governing imports of agricultural products and processed foods originating in all third countries. The Regulation fixed limits for the caesium radioisotopes 134 and 137 and was due to expire on 30 September 1986; it was, in fact, prolonged to 31 October 1987.

The levels fixed are:

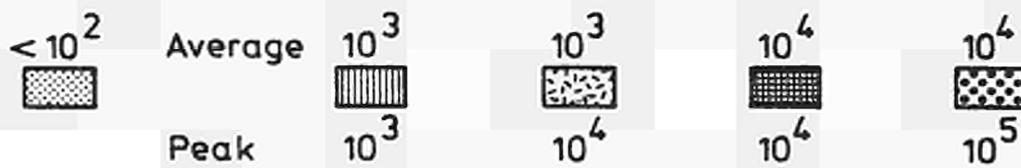
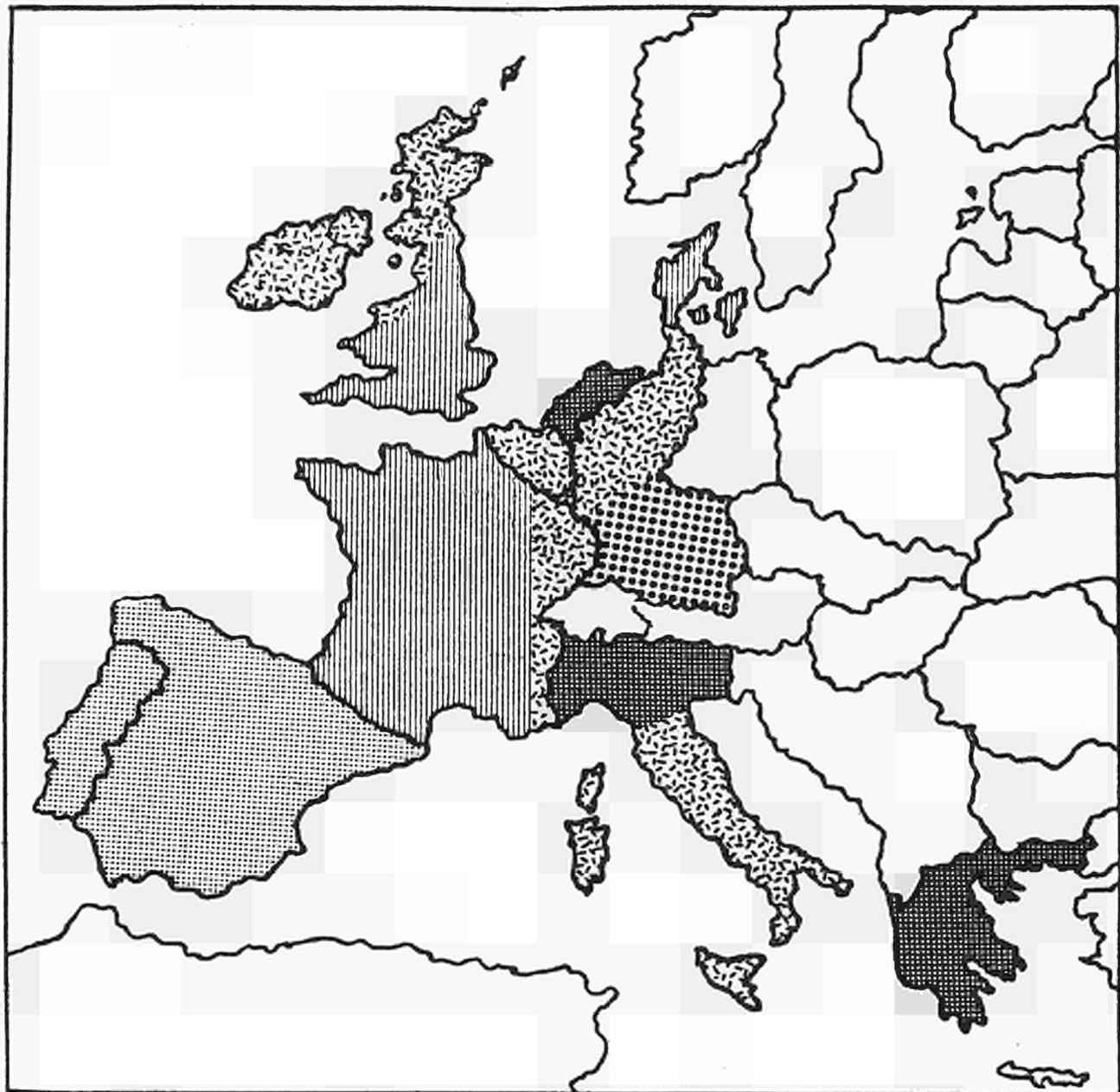
- (i) 370 Bq/kg⁻¹ for milk and milk products, the level applicable to the reconstituted products as ready for consumption, in the case of concentrated or dried products, such as milk powder,
- (ii) 600 Bq/kg⁻¹ for all other products concerned.

Finally, on 3/4 September 1986 a Working Group set up by the Article 31

Group of Experts submitted a report in which levels for almost all radiologically important radionuclides are proposed. The report was approved by the Art. 31 Group and served as the basis for the establishment of Commission proposals to the Council for pertinent regulations. These proposals were forwarded to the Council on 23 January 1987.

The Chernobyl accident also very clearly revealed the absence of an effective system for a rapid exchange of information between Member States and the Commission. The system used was inadequate and the data transmitted were found often to be incompatible, incomprehensible, and generally insufficient. To remedy this unsatisfactory situation the Commission, besides supporting the International Atomic Energy Agency's international convention on rapid exchange of information following a nuclear accident, has prepared proposals for a more comprehensive Community system. In addition, the Commission would take the necessary steps to strengthen the mutual assistance provisions between Member States and to enhance the coordination for emergency planning. Finally, the Commission is committed to complementing the Basic Safety Standards concerning radiological protection and work on this is progressing apace.

Giorgios Gouvras



(Both values rounded to the nearest order of magnitude)

Figure 1. Iodine-131 deposition, $Bq\ m^{-2}$

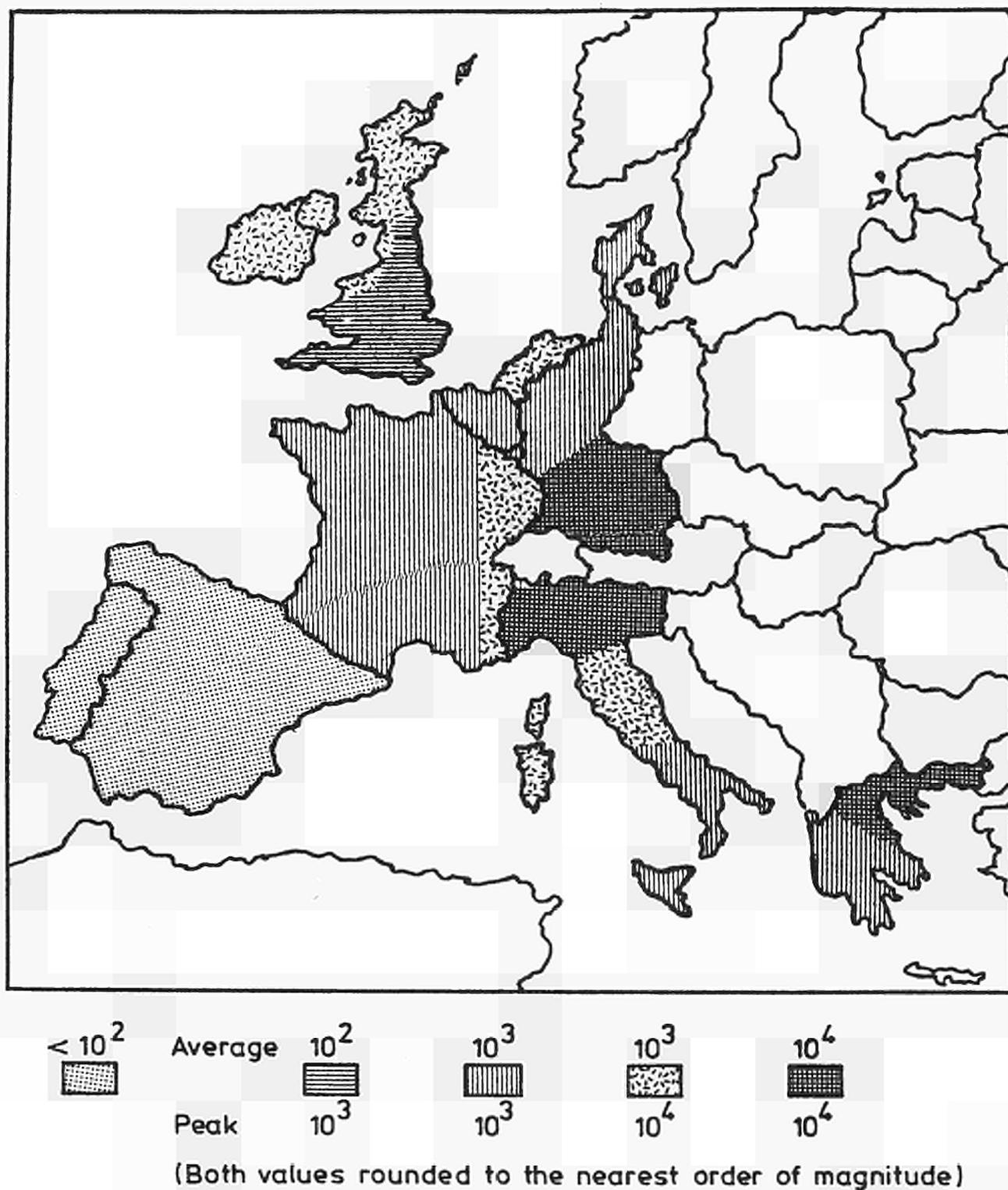


Figure 2. Total caesium deposition, Bq m⁻²

Table 1 Average adult and critical group effective doses in the first year¹

Country	Effective dose (μSv)	
	Critical group ²	Average adult
Belgium	430 (I)	44
Denmark	400 (I)	55
Germany ³		150
North	430 (I)	46
South	1900 (I)	380
Greece	1300 (C/A)	300
Spain ³		0.9
East	70 (I)	3.9
West	4.2 (I)	0.2
France ³		39
East	970 (I)	110
West	340 (I)	21
Ireland	520 (A)	97
Italy ³		160
North	1100 (A)	200
Central	830 (A)	120
South	760 (A)	120
Luxembourg	400 (I)	47
Netherlands	380 (A)	60
Portugal	3.6 (I)	0.2
UK ³		32
Cumbria, N. Wales and S. W. Scotland	840 (I)	190
rest of England	260 (C)	20
rest of Wales	370 (A)	29
rest of Scotland	590 (C/A)	83
N. Ireland	520 (A)	97

Table 2 Average and critical adult effective doses in 50 years¹

Country	Effective dose (μSv)	
	Average	Critical
Belgium	82	440
Denmark	95	480
Germany ²	360	
North	85	440
South	950	3800
Greece	530	2100
Spain ³	1.2	
East	4.7	25
West	0.3	3.3
France ³	76	
East	220	1100
West	39	250
Ireland	170	830
Italy ³	310	
North	400	1900
Central	230	1400
South	210	1100
Luxembourg	86	410
Netherlands	100	570
Portugal	0.3	2.7
UK ³	46	
Cumbria, N. Wales and S. W. Scotland	270	1200
rest of England	25	290
rest of Wales	37	450
rest of Scotland	150	900
N. Ireland	170	830

¹ The results are given to two significant figures to avoid rounding errors in subsequent calculations, and this degree of accuracy is not implied.

² For critical group, I = 1 year-old infant, C = 10 year-old child, A = adult.

³ For the average adult doses are average across all the regions considered, and are also given for each region separately.

¹ The results are given to two significant figures to avoid rounding errors in subsequent calculations, and this degree of accuracy is not implied.

² For critical group, I = 1 year-old infant, C = 10 year-old child, A = adult.

³ For the average adult doses are average across all the regions considered, and are also given for each region separately.

Part Two

Analyses, debates, studies

Small and medium-sized enterprises and employment creation in the European Community

A new study by David Storey and Steven Johnson of the University of Newcastle Upon-Tyne, UK, analyses the different studies which have taken place into the role of small and medium-sized enterprises (SMEs) in the creation of employment in the 12 Member States of the Community. It also reviews the policy initiatives which have been introduced at national, regional and local level, with the objective of stimulating employment creation in SMEs. This article reviews the results of that study.

The creation of jobs in small and medium-sized enterprises (SMEs) and the stimulation of new firm formation and self-employment are major components of the employment policies of all EEC Governments, and form the basis of numerous job creation strategies at regional and local levels within the Community. However, relatively little is known about the role of SMEs in job generation within Europe — the arguments for small-firms policies are often based upon the experience of the USA where several major studies (and particularly the pioneering work of Birch in 1979) have suggested that small firms are a major source of new jobs.

The study undertaken by David Storey and Steven Johnson did not involve carrying out any new original research but was concerned with collating and evaluating available material from all Member States on the following issues:

- (i) the size distribution of employment in the manufacturing and service sectors;
- (ii) recent developments in the size distribution of employment;
- (iii) the role of SMEs in employment creation;
- (iv) the characteristics of jobs created by SMEs;
- (v) rates of new firm formation, and the contribution of new firms to employment;
- (vi) policies aimed at SMEs and their effectiveness in the creation of employment.

The report comprises a summary which provides an overview of findings from the 12 countries, with conclusions and recommendations for further research and policy action, together with individual reports on the situation in each Member State.

The main results of the study are as follows:

- (i) SMEs are increasing their share of employment in most Community countries;

- (ii) studies which trace the development of individual firms through time (job generation studies) show that SMEs are creating jobs at a more rapid rate than are large firms;
- (iii) relatively few firms are responsible for the majority of jobs created;
- (iv) the reasons for these trends are unclear, and may vary from country to country;
- (v) the characteristics of jobs created by SMEs differ from those created by large firms;
- (vi) in many Community countries, the creation of jobs in new and small firms is a major component of employment policy at national and local level;
- (vii) the impact of most policy initiatives on registered unemployment is unclear. In particular deadweight and displacement effects are difficult to identify and measure;
- (viii) it is suggested that a more selective approach to small-firms policy would be effective in creating large numbers of jobs with minimum deadweight and displacement effects.

The size distribution of employment

The relative importance of small and medium-sized firms in employment in the EEC countries is illustrated in Tables 1, 2 and 3. Small enterprises have been defined, for purposes of comparison, as firms employing less than 20 workers and medium-sized enterprises as those employing between 20 and 99 workers. Table 4 presents time-series data on the percentage share of SMEs in manufacturing employment in EEC Member States and suggests that SMEs are becoming more important employers of labour in most countries. In the majority of cases, however, the changes are relatively minor: only the United Kingdom has experienced a very large increase in the share of SMEs in manufacturing employment.

The contribution of SMEs to employment creation

Table 5 presents the results of various job generation studies on a reasonably comparable basis giving employment change in each size group of firm expressed as an annualized percentage of total base year employment. An analysis of these studies shows that small and medium-sized enterprises are creating jobs at a time when large enterprises have been reducing their employment levels. The report concludes that job generation studies undertaken to date in the EEC countries are unanimous in finding that the net employment performance of SMEs is better than that of large firms. It notes, however, that the vast majority of SMEs either remain small or die and that only a small minority of SMEs create the vast majority of new jobs. Similarly job loss is concentrated in relatively few large firms and some medium-large and large firms are creating significant numbers of jobs.

New firms have been the focus of considerable attention for policy-makers and researchers in recent years. The report assesses the various studies which have been undertaken to investigate new firm formation and finds similar results emerging. Although direct international comparisons are not possible, the indications are that the pattern for new firms is similar to that of small firms: a majority fail within 10 years of starting up, most of the rest remain small and very few new firms grow sufficiently to make a noticeable contribution to total employment.

The types of jobs created in SMEs

The results of the analyses presented in the report suggest that the jobs which exist in small firms are different, in a number of ways, from those in larger enterprises. First, small firms tend to employ a greater proportion of female workers, and particularly part-time fe-

male workers than their larger counterparts. Secondly, the skill level of manufacturing employees was found to be higher in small than in large firms in both the United Kingdom and the Federal Republic of Germany. Data for France indicated that, in comparison with large firms, small firms employ a similar proportion of skilled manual workers, a lower proportion of unskilled manual workers, and a higher proportion of white collar employees, both skilled and unskilled. Finally, there was evidence from some countries that small firms tended to offer more unstable and lower paid jobs than large firms.

Future directions for policy and research

Storey and Johnson's report shows that small firms have become relatively more important in providing employment in almost all EEC countries. However, it points out that the key factors which influence these trends are poorly understood. Changes in technology, in world and domestic markets, in the sectoral distribution of employment, and in the behaviour of large companies (sub-contracting etc.) have all been put forward as explanations of the observed trends. More recently, the role of unemployment in 'forcing' people to start their own businesses has become an important issue. Finally, the overall impact of the type of government policies analysed in the report is unclear. The authors stress that it is important that policy-makers understand the key factors underlying changes in the size distribution of employment if appropriate policies are to be introduced.

A finding which is of central importance in this report is that relatively few firms are responsible for the majority of new jobs created. It seems that the most cost-effective methods of creating jobs through public policy would be those which focus attention upon these few dynamic firms, and which encourage the maximization of their job creation potential. Research has indicated that fast-

growing small firms encounter significant problems in many areas (premises, finance, recruitment, training) and that they would benefit from appropriate public sector intervention. In addition, firms which are growing rapidly tend to be selling a substantial proportion of output on national and international markets. Hence, policies which are designed to encourage such firms to create jobs are likely to result in low displacement and relatively high multiplier effects. The report recommends that policy-makers should investigate the characteristics of fast-growing firms, and examine ways in which the public sector can help to overcome the problems which they face, and maximize job creation potential.

Finally, Storey and Johnson suggest that the labour market impact of policies designed to create jobs in new and small firms is unclear. There is considerable evidence in the report to suggest that the jobs created in small firms differ from those which exist (or are lost) in large firms, in many respects. Small firms employ a relatively high proportion of female and part-time workers, skilled workers (in manufacturing firms) and tend to pay lower wages and offer inferior conditions of employment than do larger enterprises. Moreover, small firms' jobs are relatively unstable and are often not created in areas in which there are large numbers of unemployed people. It seems unlikely that the overall impact of small-firm job generation on the unemployment register in most EEC countries will be relatively low, once displacement and labour market mismatch problems are considered. The report concludes that if small-firms policies are to continue to be a major component of employment policies in Europe, this aspect should be given careful consideration.

The report 'Small and medium-sized enterprises and employment creation in the EEC countries' by David J. Storey and Steven G. Johnson of the Centre for Urban and Regional Development Studies, University of Newcastle-Upon-Tyne will be published by the Commission of the European Communities in 1987.

SMALL AND MEDIUM-SIZED ENTERPRISES AND EMPLOYMENT CREATION

Table 1 Size distribution of employment at latest available date — whole economy (percentages)

Country	Date	Enterprise size (Number of employees)			
		<20	20—99	100—499	500+
Belgium	(1983)	25.0	20.9	21.5	32.6
Greece	(1978)	51.7 ^a	17.0 ^e	31.3	
Spain	(1986)	24.3 ^a	34.3 ^b	20.0	21.3
France	(1986)	29.7	25.4	44.9	
Netherlands	(1980)	26.6 ^a	30.9 ^b	57.5	

Notes: a 1—9,
b 10—99,
c 20+,
d 6—19,
e 10—49.

Table 2 Size distribution of employment at latest available date — manufacturing (percentages)

Country	Date	Enterprise size (Number of employees)			
		<20	20—99	100—499	500+
Belgium	(1983)	12.1	20.7	25.8	41.3
Denmark	(1982)	10.1 ^d	29.7	34.6	25.6
Germany ^c	(1983)	—	16.0	24.8	59.2
Greece	(1978)	39.3 ^a		60.7	
Spain	(1978)	20.2	23.2	21.8	34.8
France	(1980)	18.8	25.3	28.8	27.1
Ireland	(1980)	9.5	28.6	30.6	20.4
Italy	(1981)	22.9 ^a	36.0 ^b	21.3	19.8
Luxembourg	(1980)	7.7	11.5	25.8	55.0
Netherlands	(1980)	10.7 ^a	27.1 ^b	62.2	
Portugal					
United Kingdom	(1983)	22.0		14.4	63.6

See notes to Table 1.

Table 3 Percentage share of SMEs in total manufacturing employment 1970—84

Country	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Belgium											28.1	28.2	28.5	28.6	28.9
Denmark				31.3	31.3	33.7	33.5	34.3	34.0	33.6	33.0	34.3	34.0	35.1	
Germany ^a	12.5						13.1	15.9			15.4			16.0	
Greece	47.8								39.3						
Spain												56.4	57.5	57.8	57.8
France		23.6	24.3		24.4	25.3	25.5	24.7	25.8	26.1	26.7	27.7			
Ireland				36.6							38.1				
Italy		53.1										59.0			
Luxembourg				18.0				17.9	18.5	19.3	19.2				
Netherlands									34.9	35.1	34.8	34.7	34.6		
Portugal															
United Kingdom		15.5	16.0	15.3	16.0	16.6	17.0	17.1	17.3	17.5	18.8	20.3	21.1	22.0	

Notes: a 20+
b whole economy
c 1—9

SME is defined as a firm with less than 100 employees.

Table 4 Job generation studies in Europe

Country/area	Time period	Coverage	Annualized % change in employment (% of total base year employment) size of firm/establishment					
			≤20	20–49	50–99	100–499	500+	Total
United Kingdom								
East Midlands	1968–75	Manuf.	+0.4	+0.3	+0.2	–0.3	–0.9	–0.3
Northern England	1965–76	Manuf.	+0.2	+0.1	+0.0	–0.1	–1.0	–0.8
Northern England	1976–81	Manuf.	+0.2	–0.0	–0.2	–1.6	–3.8	–5.4
United Kingdom	1972–75	Manuf.	0.0	0.0	–0.0	–0.0	–0.1	–0.1
United Kingdom	1971–81	All sectors	+0.8	–0.1	–0.0	–0.1	–1.4	–0.7
United Kingdom	1982–84	All sectors	+2.0	+0.3	–0.0	–1.0	–2.2	–0.9
Northern Ireland	1971–81	Manuf.	+0.1	–0.0	–0.2	–1.2	–1.9	–3.2
Federal Republic of Germany								
Germany (sample)	1974–81	All sectors	+0.2	+0.2	+0.2	+0.2	–0.5	+0.3
Germany (4 regions)	1974–80	All sectors	+0.8	+0.7	–0.0	–0.2	–0.5	+0.8
Northrhine-Westfalia	1978–84	Manuf.	–0.2	–0.3	–0.3	–0.9	–1.3	–3.0
Ruhr & Frankfurt	1975–80	All sectors	+1.1	–0.4	–0.4	–0.5	+0.5	+0.3
France								
Poitou-Charentes	1972–84	All sectors	+1.0	+0.7	–0.1	–1.9	+0.5	+0.2
France	1981–83	All sectors	+0.0	–0.1	–0.1	–0.4	–0.4	–1.0
Ireland								
Ireland	1973–80	Manuf.	+0.7		+0.3	–0.3	–0.2	+0.6

Employment in the European electronics industry

Many studies carried out in the last few years on the effects of information technology on employment conclude that such effects are negative in traditional manufacturing sectors, where information technology is used to rationalize production processes, but that compensating effects are and will be generated in the equipment-producing sectors, so that the final outcome will depend on the balance between the two and on the extent to which such backward linkages occur in the specific countries. However, information technology sectors themselves introduce new techniques in their processes; consequently, a further trade-off has to be considered, i.e. the balance between the employment generated by the increase in output and the employment displaced by labour-saving technical change in the production of hardware and informatics products.

Two problems emerge as soon as one tries to analyse these trends: one is the loose definition of information technology sectors; the other is the problem of statistical sources and their sectoral breakdown. In order to have at least a partial overview of what is happening in Europe in this field, the Commission initiated, in the framework of its sectoral studies of employment trends related to new technologies, an analysis of the electronics sector. A study on 'Employment, skill composition and wages in the European electronics industry' is now complete: it provides an overview of employment trends in the European Community (although not all countries could be covered due to the lack of data), and more detailed analyses of the United Kingdom, the Netherlands and Italy.¹

The definition of the sector's boundaries is somewhat arbitrary: it was decided to focus on four branches of the European NACE² classification, namely: manufacture of office and data-processing machinery (NACE 33); manufacture of telecommunications equipment, measuring and electro-medical equipment (NACE 344); manufacture of radio and television sets, sound reproducing and recording equipment etc. (NACE 345); manufacture of domestic type electrical appliances (NACE 346). The rationale was to exclude electrical machinery, wires and cables, batteries and lamps, i.e. the conventional electrical products, but to consider branches, such as consumer electronics and domestic appliances, where information technology increasingly enters production processes and product characteristics. The shortcomings are evident: among the most important are the fact that it is impossible to consider separately what is taking place in the production of components, one of the battlegrounds of international competition, which is not recorded separately in NACE statistics; and the exclusion of high-employment-growth branches which are not part of manufacturing, such as software.

Even with these limitations, it proved to be quite difficult to carry out a comparative analysis of all Member States,

due to the shortcomings of all statistical sources, and the non-comparability between them. Thus, Eurostat data had to be supplemented by data from the OECD and private sector sources, which produce their own detailed and updated estimates.

The first part of the study provides an overview of trends in the EEC in the period 1970–84. The industry grew throughout the 1970s, went through a downturn in the early 1980s, and has shown some signs of recovery since 1983. Two negative aspects are observed: one is the continuing deterioration of the balance of trade, particularly in some branches (office machinery and computers, radios and televisions), which points to a decline in the international competitiveness of the industry; the other aspect is the large proportion of the output of the European electronics industry accounted for by subsidiaries of US and Japanese firms. As the authors point out, the scale and learning economies that foreign multinationals reach by designing products in their own country for manufacture and distribution throughout Europe and the rest of the world, and by regulating the international flows of components and products, form a serious cost competitive hurdle for any European firm.

Moreover, the analysis of commonly used indicators of research intensiveness of the industry (R&D efforts, patents and technological balances of payments) shows that, by all indicators, the US is definitely ahead of all other countries, Japan is rapidly catching up, while most EC Member States are far behind and do not display a clear effort to improve their relative position. It may be interesting to mention, in this respect, that among the top ten spending bodies in R&D in the OECD area at the end of the 1970s, we can find four US Federal

¹ *Employment, skill, composition and wages in the European electronics industry*, by W. van Lierop (ESI-VU, Amsterdam), L. Soete (SPRU, Brighton), A. Goglio (Reseau, Milano), Luxembourg, Office for Official Publications of the European Communities, forthcoming, 1987.

² NACE = General industrial classification of economic activities within the European Community.



Copyright D. Maillac/R. E. A.

Agencies, three US-based multinationals, and only one government department apiece from the UK, Federal Republic of Germany and France (one of which is a Ministry of Defence). The largest US university spends considerably more on R&D than, for instance, Ireland or Greece.

General employment trends are difficult to identify, since different trends can be observed between countries and between branches. The overall picture since the late 1970s is one of stability, with only one branch, namely consumer electronics (brown goods) consistently losing jobs in all countries. It should however be remembered that Eurostat employment statistics, based on production statistics, do not cover employment in small establishments. In any event, what can be said tentatively is that the electronics sector is not, in

present conditions, an important source of new jobs.¹

More positive indications emerge from the analysis of qualitative employment changes, which shows a clear shift from manual to non-manual employment. Here again, the non-availability at European level of occupational statistics is a serious constraint, particularly considering that this is an industry with a high skill profile and that skill shortages are identified by the study as one important bottleneck to the growth of the sector. For the countries where data on employment by grade and/or occupation are available, it becomes clear that the shift in composition is accompanied by a sharp absolute decline in the number of workers with a low skill level.

The structural and qualitative shifts in employment emerge even more

clearly from the second part of the study, which examines in more detail the situation and trends in the United Kingdom, the Netherlands and Italy, with the help of a number of case studies at enterprise level. Once more, it is difficult to generalize, but some observations are of interest: the speed of technical and organizational change going on within the firms themselves, with some cases of sharp reduction in employment in firms that have restructured in order to adapt to market changes; the general-

¹ The authors' attempt to formalize the analysis and forecast of the effects of technical change on employment by means of econometric models was successful only for a few countries (Netherlands, Ireland and UK) using simple models, due to the lack of the necessary data and to insufficient time series even for the data which are available.

ized complaint about the shortages of supply of highly skilled employees (technicians and engineers), although skill requirements are often defined in terms of flexibility and autonomy in decision-making, rather than in terms of technical capabilities; the substantial

upgrading of jobs which takes place through an extensive retraining of existing workers, from production departments to the offices for example. Where data on wages could be obtained, these shifts are reflected in the changing pattern of wage differentials. On the other

hand, no evidence was found of generalized premium wages paid to highly skilled technical employees in order to attract or retain them, in spite of the reported shortages of this type of personnel.

Anna Silvia Piergrossi

People and technology

London, 25 and 26 November 1986

Father Jose Maria Arizmendiarieta, the priest who inspired the development of the Mondragon cooperatives in Spain, once said 'The sign of vitality is not to endure, but to be reborn and adapt'. 'People and technology — Investing in training for Europe's future' was the title of a major conference held in London, United Kingdom, during November 1986 and its overriding message bears out Father Jose's dictum. The social and economic vitality of Europe rests on our ability to change and adapt.

This article highlights some of the issues, policies and actions concerning human resource development and new technologies. It provides a thumbnail sketch of the 'People and technology' conference, in anticipation of a full conference report which will be available in summer 1987.

Lord Cockfield, in opening the conference, referred to the star-studded cast of speakers, including two Cabinet Ministers from the British Government — Lord Young of Graffham (Employment Minister) and Mr Kenneth Baker (Education Secretary) and two Vice-Presidents of the European Commission — Lord Cockfield himself and Mr Manuel Marín, Commissioner responsible for Social Affairs, Employment, Education and Training. But quality was not only to be found on the speakers' platform. Over 1000 high-ranking delegates from all 12 Member States attended the conference, representing a wide range of industrial interests as well as statutory and commercial education and training authorities. Jointly sponsored by the Commission of the European Communities (under the auspices of the EuroTecNet programme) and the UK Manpower Services Commission, the conference proved to be a major commercial, political and educational event which provided a forum for the most extensive exchange of ideas, training information and techniques

in the new technologies within the European Community.

More than 70 stands were present in the exhibition which ran alongside the conference and welcomed over 3 000 visitors. This exhibition provided not only a showcase for training projects and materials drawn from all Member States participating in EuroTecNet, but also a marketplace where ideas, strategies and approaches were the trading commodities. The conference proved to be a very model of cooperation and partnership. In the conference forum and the exhibition halls, private companies mingled with public training authorities; employers from large, medium and small enterprises shared platforms with representatives of governments and unions; experts working on national training strategies for the new technologies compared notes with consultants employed by the private sector to develop highly sophisticated training packages to meet a wide range of industrial needs. The important interaction was that which took place between participants from different Member States, underlining the significance of the European dimension attached to the event.

New technologies, or as some prefer to call them, advanced technologies, embrace a number of recent technological developments, from biomolecular engineering and renewable resources technology to laser technology, fibre optics and the development of new materials. But perhaps the new technology which has made the most impact on everyday lives and which has considerable implications for education and training is information technology. A widely accepted definition of it is the acquisition, production, transformation, storage, retrieval and transmission of data by electronic means in vocal, pictorial, textual or numeric forms. The applications of it have profound social, economic and cultural implications. The commodity is information: the business is communication; and it affects the lives of everyone.

'The main resource of the European Community is its human resources, its people. Giving them proper training and thereby enabling them to master the technical, social and cultural changes of the end of this century is the major challenge of today' (Mr Manuel Marín).

It is advisable to focus attention on the significant benefits to be obtained from investing in training for the new technologies. Without doubt, workforces which possess the skills to exploit these technologies will play an essential part in securing Europe's future prosperity' (Mr Bryan Nicholson, Chairman of the UK Manpower Services Commission).

Training has, of course, long been an important priority for the European Community, but the rapid advance of new technologies has led to a new and urgent perspective, as one of the commercial exhibitors, producing a range of technical training packages, express in their promotion literature. 'A trained workforce exploits new technology, an untrained one becomes its victim . . .'

Whatever differences exist between the social partners, or between Member States, there is fundamental agreement that 'Europe stands at the frontier of a technological revolution. Our people are experiencing technological changes which are affecting every aspect of their



Copyright D. Maillac/R. E. A.

daily lives in ways undreamt of even as little as 10 or 15 years ago. And the pace of change is increasing' (Lord Young). And just how rapid that pace of change has been is spelled out by Mr Kenneth Baker: 'Seventeen years ago, when Neil Armstrong first walked on the moon, there were no digital watches, no

home video-recorders, no pocket calculators, no microprocessors and the technologies of laser, fibre optics and biotechnology were undeveloped'. Jobs, working patterns and skill are also changing. New technologies lead to job losses, but also to the creation of new jobs, new industries and services. Re-

sponding to the challenge of this level and pace of change requires a massive increase in the quality and quantity of training and the development of training methods which are more flexible, more accessible and more cost-effective. By a rather neat quirk of fate, it is the new technologies themselves which can provide many of the tools needed for the job — such as computer-based training methods and materials, interactive video, open and distance learning and the modularization of training courses.

But however good the tools, they are only effective if used wisely and within an overall strategy. The introduction of new technologies, as well as the new training strategies, need to be underpinned by appropriate political, economic, educational and social policies. The conference called for the social partners to work together and to be prepared to make a sustained effort to develop and implement these policies, each playing their own, special role:

Teachers/trainers and educational institutions — to use their expertise to improve basic education and training and to develop training opportunities which are available and accessible throughout working life.

Employers and industry — to increase their commitment to and investment in human resource development.

Workforce and unions — to work towards a pattern of training provision which meets industry's requirements together with individual needs and aspirations.

Politicians and governments — to develop the economic, industrial, social and educational policies which will provide a supporting framework within which the social partners can operate.

Mr Hinderscheid, Secretary General of the European Trade Union Confederation (ETUC) and Mr Meyer, speaking on behalf of the European Employers and Industries Federation (Unice) were both clearly aware of the responsibilities facing their members. Mr Hinderscheid quashed any pre-conceived views of the audience as to the attitudes of unions: the ETUC does not oppose the intro-

duction of new technologies, but welcomes their potential for improving the quality of working life. However, since decisions taken on this front profoundly affect the world in which we live, they cannot be left to a few experts and consultants. Information, consultation and collective negotiation form the 'spinal column' which supports the successful introduction of new technologies. To participate in the decision-making process, improved levels of education must be available and accessible to all members of the workforce — including those who have difficulty in gaining access to the labour market: young people; older workers with redundant skills; women returners; the disabled; the educationally and socially disadvantaged; those who are excluded by virtue of unemployment.

'Whenever new technology is introduced into society, there must be a counterbalancing human response ... we must learn to balance the material wonders of technology with the spiritual demands of our human nature' (John Naisbitt, author of *Megatrends*).

Speaking on behalf of Unice, Mr Meyer cited Disraeli who said 'In a progressive country, change is inevitable, on the education of the people depends the future'. But responsibility for the future is a corporate one and is shared between employers who must budget for education and training as a normal part of capital investment; employees who must be committed to improving the quality of their work; teachers who must see to it that schooling motivates people to go on learning throughout life. Schools must teach people to enjoy and want education, not to fear it. But good quality education and training depends on good quality teachers and trainers. 'If you pay peanuts, you get monkeys; and if you think education is expensive, try ignorance.'

The notion that a firm's training costs should be treated as a normal part of investment was a recurrent theme of the conference and, for Mr Meyer, the costs of training are declining thanks to the use of information technology, the willingness to use home and personal time

for training, reductions in working time and new training approaches such as distance and open learning.

As far as employers are concerned, there is no alternative to the introduction of new technologies and Unice offered a five point plan of action:

- (i) An awareness campaign to change people's attitudes.
- (ii) The sequential model of education systems needs altering as it does not encourage the notion of lifelong learning.
- (iii) More investment is needed in teacher training — with continuous updating both on knowledge and equipment.
- (iv) More thought needs to be given to the delivery of training in small and medium-sized enterprises.
- (v) More and better training for entrepreneurship is needed.

Individual firms, training institutes, regions and national governments are responding to the challenges posed by new technologies, but what contribution can the European Community make? In his speech, Lord Young spoke of the traumatic and structural changes that Europe has had to deal with in the past few years, with heavy job losses and ever fiercer international competition. 'As a Community, we need to work with change, not fight against it'. Sentiments indeed that were supported by Mr Marin: 'Not only does the EC recognize the importance of investment in new technologies, but the need for improved and different forms of training to maximize on that investment is high on the agenda of the Commission. New forms of collaboration must be developed which increase worker involvement in the planning and implementation of initial and further training and special attention must be given to the disadvantages suffered by poorly and non-qualified workers — disadvantages which, if we are not careful, will be accentuated by training for the new technologies. The challenges of new technologies will not be met by producing a highly trained elite with the qualities of flexibil-

ity and adaptability. The workforce as a whole needs to be motivated to participate in training throughout working life.'

Two major Community programmes demonstrate the level of European-wide commitment to these issues. The first is the EuroTecNet programme which co-sponsored the conference and consists of three stands: a network of innovatory demonstration projects to develop links between Member States in their attempts to tackle the social, educational and training consequences of rapidly developing new technologies; a series of concerted research actions; and a programme of study visits for vocational training experts. Current priorities in the network of innovatory projects are:

- (i) The role of training in new information technologies in the development of small and medium-sized enterprises.
- (ii) The training of young people in new information technologies — especially those with a low educational level.
- (iii) New information technologies in the training and retraining of adult skilled workers
- (iv) The need for women returning to work to benefit from training and retraining in new technologies.

Research themes to date have concentrated on new qualifications, the local and regional management of human resources, in-company training aimed at smaller businesses, and developments in distance learning. Results of all four research themes, published with the cooperation of the European Centre for the Development of Vocational Training, were made available to conference delegates and visitors to the exhibition.

In January 1987, the Commission formally launched the Comett programme (Community action programme for education and training for technology). Comett will provide support for the development by industry and higher education of advanced education and training related to new technologies. The programme will forge new patterns of cooperation between small and me-

dium-sized enterprises and large firms and the tertiary education and training institutes, the aim being to produce highly trained personnel for new and developing industries.

Both EuroTecNet and Comett will help lay a solid foundation on which to build a European perspective and action on training in the new technologies. Or, in the words of Mr Hywel C. Jones, Director of Education, Training and Youth Policy for the European Commission, 'They are part of the web of partnerships which will go to form a mosaic which takes us beyond the rhetoric to practical actions'.

The two major discussion themes of the conference were technological training and access to jobs (concerned with the role of the new technologies in the training of young people, women returning to work and the long-term unemployed) and technological training, productivity and competition (concerned with the latest approaches to the upgrading of skills, training for small and medium-sized enterprises and job creation).

Benjamin Bloom, the American pioneer of training strategies, wrote in 1968 that undeveloped societies can only use a small number of highly educated people in the economy and therefore access to education and training is deliberately limited. The talented few are given the best educational and training opportunities, with the majority being rejected somewhere along the educational line. Bloom stated 'The complexity of the skills required by the workforce of any highly developed nation like the United States suggests we can no longer assume the completion of secondary and advanced education is for the few. Investment in human resources through education has a greater return rate than capital investment. We cannot return to an economy in which educational opportunities are scarce, but rather must provide enough opportunities that the largest possible proportion of students will acquire the skills and knowledge necessary to sustain the society's growth.'

To do this requires a much more serious and business-like approach to

the education and training of those on the margins, for it is here that there is most wastage — among the disadvantaged, the discriminated against, the demotivated and the de-skilled. Structural changes are also needed which, instead of concentrating resources in the early years of life, spread them more evenly throughout the post-school, working life. Given the impossible task of trying to pack a lifetime's learning into the few short years of youth, it is not surprising that the majority come nowhere near realizing their full potential.

In discussing the problem of access to employment by the disadvantaged and the marginalized, it became clear that the content and delivery of education and training must be redesigned to give access regardless of race, sex, social status or class. Training and continuing training must provide recurrent opportunities for learning which are tailored to the specific needs of different target groups — women returners, workers with redundant skills, managers, entrepreneurs, young people, ethnic minorities — and to different occupational sectors. Some of the ways in which training in new technologies could be customized to meet the needs of different target groups include:

- (i) Basic training in the use of office systems for adults with a low educational background (EuroTecNet project B6 — Open University of Charleroi).
- (ii) Multi-skilling courses for unemployed engineers in computer-aided engineering (EuroTecNet project UK3 — Southampton Institute of Higher Education).
- (iii) Introduction to production technology and robotics for engineers, production management executives and young unemployed (EuroTecNet project B7 — Free University of Brussels).
- (iv) Drop-in computer centre for the training of women in new technologies (European Social Fund aided project, UK).
- (v) Permanent exhibition of technological materials for the physically

handicapped and evaluation of communication equipment for the disabled (EuroTecNet project ESP 1 — Fundesco, Spain).

- (vi) Training the trainers in non-sexist approaches to the training of women (Women in science and technology project, UK).
- (vii) Strategies to improve the preparation of young, de-motivated people for working and adult life (EC transition pilot projects).
- (viii) The professional, industrial and commercial updating of colleges, polytechnics and universities to improve their response to the training needs of employers and employees (Department of Education and Science, UK).
- (ix) Establishment of remote work units for the disabled, matching employers with disabled employees in financial managements, word processing and programming (EuroTecNet project UK5 — IT World, London).

The second major theme, the relationship between technological training, productivity and competition, was aimed at business executives, trade unionists and policy-makers. Expenditure on research and development (R&D) is seen as good investment in the future and to improve the productivity and competitiveness of the firm. But how often does R&D include research into training and development of human resources?

Recent research in the UK shows that economic performance is directly linked to the development of human resources:

- (i) over 90% of high performing firms undertook significant adult training;
- (ii) only 50% of low-performing firms had undertaken any training — and then only a few people were trained;
- (iii) in the USA, expenditure on training per employee amounts to UKL 1 500 per annum (\pm 1 100 ECU); in the UK it is UKL 200 (\pm 150 ECU).

In his speech, Lord Lucas (UK Parliamentary Under-Secretary of State for

Trade and Industry) stressed that managers were also in need of updating on technical skills and new approaches to their work: '... to benefit from new technology is not just a matter of installing the latest high-tech equipment, it requires balanced judgments, effective management and efficient organization. Companies need to introduce new technologies on a considered and systematic basis. This places new demands on senior management, supervisors and production personnel to acquire the necessary skills and expertise.'

New technologies open up a whole range of possibilities for small and medium-sized enterprises (SMEs) and for enterprises and job creation. The contribution of SMEs to the economy should not be underestimated. In Denmark, for example, 80% of Danish firms have less than 25 employees. Currently SMEs provide the most dynamic expansion in developing new products, services and markets, but they need assistance in the introduction of new technologies and in the training of managers. While large and multinational companies have well-defined operational structures for management and workforce training, this is not the case with SMEs. New technologies cannot replace good management in small businesses and if new technologies are to be useful in enterprise creation, managerial skills in small companies must include the capacity to innovate. A company which cannot innovate is not well managed.

Some of the strategies presented to the conference to encourage enterprise creation and better performance in SMEs included:

- (i) Consortia of SMEs to pool training resources and collaborate on the development and implementation of

training programmes (Federal Republic of Germany).

- (ii) The development of links between technical vocational schools and SMEs (France).
- (iii) The development of services to SMEs on the application and impact of new technologies (EuroTecNet project IRL8).
- (iv) The training of entrepreneurs in new information technologies (EuroTecNet project I1 — CNITE, Rome).
- (v) Consultancy and training service for SMEs in software and hardware implementation (EuroTecNet project UK2 — Microsystem Advice Training Centre, Halifax).
- (vi) School for women wishing to set up in business in the field of information technologies (EuroTecNet project NL5 — Alida de Jong School, Utrecht).
- (vii) The development of partnerships between SMEs and education and training institutes and the establishment of intermediary structures to serve as a link between universities and SMEs (EC Comett programme).
- (viii) Vocational training courses on data-processing systems for SMEs (EuroTecNet project I6 — Centro Polo per le Tecnologie, Mestre).
- (ix) Introductory programme on the use of computers in SMEs (Construction Industry Training Board, UK).

The conference provided a veritable cauldron of ideas, strategies and actions and the exhibition abounded with materials, training packages and examples of the use of new technologies to

improve training. It also provided some pithy quotes, including one from a Chinese philosopher from the third century BC: 'When planning for a year, sow corn; when planning for a decade, plant trees; when planning for a lifetime, train and educate people'. We must take care not to invest *all* our energies in sowing corn and planting trees.

There is great deal that can be done to improve education and training — much of it with the help of new technologies. Thanks to programmes such as the EC action programme on the transition of young people to adult and working life, we now know *how* to make these improvements and we have many of the answers. Whether we implement them or not is largely a matter of where we put our priorities, and whether the key actors in the Community are willing to learn from the experiences, successes achieved and mistakes made in other Member States. Much good practice exists, and simple intelligence dictates that it makes sense to learn from this Community resource.

But we do not have all the answers. Only one speaker, Mr Bertrand Schwartz (member of the Social and Economic Council of France) had the courage to state what nobody really wanted to admit — that there is a great deal that we do not know and that, to a large extent, we are all working in the dark. If schools, governments, industry, unions and employers work independently of each other, who knows what kind of society we will end up with in 10 years time. Mr Schwartz said 'the time is ripe for a meeting of minds, none of us *really* knows what is going to happen, or what to do'.

The message is a simple one. We must invest. Together. Now.

Privatization and social security¹

In August 1986 the Commission forwarded to the Council a communication entitled 'Problems of social security — areas of common interest'.² This paper concentrated on three main areas of study: the effects of future demographic trends on the social security system, the phenomenon of social marginalization (new poverty) and problems arising from the methods currently applied in the financing of social security. In connection with this last point possible alternatives were also examined, such as spreading the burden between the individual sectors (private households, firms, and the State).

A study requested by the Commission, which has just been completed, falls within the wider context of these preoccupations. It deals with 'privatization and social security', i.e. with the respective roles to be played by the State and the private sector in the provision of social security in the individual Member States of the European Community.

By far the biggest part of the work is devoted to a stock-taking survey of the existing situation. Country by country it outlines the basic features of the public system of social security and the possibilities available for private insurance coverage. In addition it describes any State incentives to privatization which may exist and any measures along these lines already taken or under discussion.

In the second part the study attempts to develop an overall concept of privatization.

Finally the study draws some conclusions which are reproduced on the following pages (as such — particularly as regards the proposals made — they are not to be considered as approved by the Commission, but as a basis for further contribution to the discussion of this subject).

The importance of privatization: One finding which clearly emerged from our study was that though much is being said about the privatization of social security, little is actually being done.

The proportion of GNP spent on social security provision in the various European countries studied has either remained stable despite the recession (with a few notable exceptions such as the Netherlands, for example), or has actually risen. It would not be true to say that the State has shed any of its burden of social protection onto the private sector.

Remarkably few incentives to private welfare provision were found in the countries studied. Tax advantages for private insurance plans and occupational pension schemes are well-established, but have not been increased. On the contrary, in certain countries government has actually tightened its control over the private sector; in two of the countries studied (Portugal and Greece) legislation sought — unsuccessfully — to prohibit contracted-in occupational schemes in order to preserve the ideal of equality in social security matters.

The remarkable strides made by the private welfare sector in the majority of European countries in recent years is due first and foremost to policies of wage restraint which have led employers to explore other avenues of compensation for their employees and assure themselves of a skilled and motivated workforce, or to continued economic and social development which has put occupational and personal schemes within the reach of broader categories of workers.

Reductions in the level of provision and the tightening up of conditions of eligibility principally affect unemployment benefit — an area not really conducive to private insurance schemes. 'Privatization' in this sector will come about only in so far as unemployed workers not qualifying for unemployment benefit will be forced back into their savings or to living off their families, unless they apply for supplementary benefit.

The same is true of family allowances, which have been severely affected by the crisis in a number of countries (Denmark is a case in point). Except in certain instances where employers 'top up' State family allowances, cuts in family allowances will only rarely be made up by private insurance schemes.

Privatization takes as many forms, and is hedged around by as many problems, as there are types of protection surrounding the social security system. Nine of these can be identified:

personal savings or property ownership, family support, charity, civil liability, insurance, mutual insurance, social assistance, mutual assistance (friendly societies), employer's responsibility.

A reduction in the level of social protection offered by public social security systems would have the effect of shifting the public welfare burden onto one of these traditional techniques. The difficulty lies in predicting exactly how that burden would be apportioned between them, and it is quite possible that, for example, the risks one might wish to see assumed largely by personal insurance schemes would ultimately be shouldered by the family or social assistance.

The traditional forms of protection (personal savings, property ownership, the family, charity and civil liability) are closer to the idea of individual responsibility so dear to those who favour the liberal-economic approach. But at the same time they are also a step backwards towards a less highly organized form of society, with a markedly less pronounced degree of social justice. Our report sets out the possible objections to such forms of protection. They are not available to all those in need of

¹ A study produced for the Commission of the European Communities by the European Institute of Social Security, Louvain, under the direction of Professor J. Van Langendonck.

² Document COM(86) 410 final of 24 July 1986



Copyright P. Sittler/R. E. A.

them, they are frequently insufficient to cover the need adequately, and finally, they may create a dependency relationship which cannot easily be reconciled with contemporary views of human dignity.

A move towards more sophisticated forms of social protection, such as employer's responsibility, and basic or mutual insurance and assistance, would be much more satisfactory from both the social and economic viewpoints. These

are solutions in which the per capita cost of the risk is distributed among a greater number of heads (in the case of company provision, for example, the risk is effectively borne by the shareholders), extending even so far as to society as a whole (social assistance).

Apportionment of the risk in these ways may be unsatisfactory on a number of counts, set out in greater detail in our report. Social assistance is humiliating and creates undesirable feelings of personal dependency. Employer's provision can protect only employed workers, and the ability of companies to provide occupational welfare schemes varies widely according to sector and the size of the business itself.

Private insurance schemes, whether the free market type or mutual insurance variety, offer the most interesting alternative solution. In using actuarial calculations to spread the risk over the greatest possible number of lives, they in fact achieve a form of individual and group responsibility very close to that created by public social security. It is a less widespread form of joint responsibility, but one more acceptable to those paying the premiums; it also offers a sense of security appreciated by most people. The great problem for private insurance is the selection of risks and the resultant inequality of protection. It is only admissible to the extent that adequate social protection is guaranteed on a basis of equality for all.

Schemes for private, occupational social protection to supplement social security need hedging around with legal safeguards against their own inherent problems, which are essentially:

- (i) the danger of future bankruptcy or insolvency;
- (ii) protection of rights following sale or takeover of the company;
- (iii) protection of rights following redundancy, dismissal or change of job;
- (iv) protection of rights for migrant workers or change of industrial category.

Fairly comprehensive legislative provisions already exist in some countries

(e.g. the Federal Republic of Germany, the United Kingdom, the Netherlands), while the majority of countries at least have legislation covering certain types of complementary or occupational protection.

The Council Directive of 24 July 1986 on equal treatment for men and women in occupational social security schemes¹ can be considered as the first step to regulating this question at European level.

The problem of privatization is a problem of social security rather than a problem of private social protection schemes.

The real reason the question of privatization has arisen is a twofold one, stemming on the one hand from the extra strain placed on social security by the recession, necessitating savings on social security expenditure by reductions in the level of protection provided, and on the other from the feelings of concern aroused by estimates of the cost of financing the system in the future, when an ageing population will pose highly acute problems for systems based on risk-spreading.

In the majority of cases privatization plans are clearly based on the gloomy financial outlook for the social security system, and are seen primarily as offering some kind of solution to the problems.

It is a solution whose outcome is uncertain. The corollary of a reduction in benefits should normally be a lower rate of contribution. The financial dilemma of social security would therefore remain unchanged in substance if slightly less acute in degree. And the protection offered by occupational schemes still has to be paid for. In all probability, the cost of financing personal schemes would fall back on the same companies who at present shoulder the burden of national insurance contributions.

The private sector has no need of 'privatization' to foster its expansion. Its growth is led quite simply by economic and social development which has brought complementary protection within the reach of a broader section of workers and offers a growing number of families greater saving opportunities from the use of more modern forms of investment. All countries demonstrated marked growth in this area, although the majority displayed no — or merely marginal — corresponding reductions in the levels of social security provision.

The problem of financing social security may be rendered even more acute if the trend towards privatization is allowed to lead to the hiving-off of the more profitable risks, for which private insurance can offer more attractive benefits, from the compulsory scheme. The effect of such a movement (such as might, for example, result from a contracting-out scheme on the British model) would be to further raise the cost of compulsory insurance and deepen its financial plight.

Concern about the future of social security in Europe is a serious problem with which most Community countries are preoccupied. Despite the Herculean efforts put by governments into building an impressive social welfare system unparalleled anywhere in the world, broad sections of our population are seen to be shunning State protection in favour of other forms of protection offered by the commercial sector, perceived as offering greater certainty or as being more attractive.

This attitude is a product of the effects which recession and the ageing of the population have had on the financing of public social security. People have lost confidence in the statutory guarantees of their rights to social security as a result of the continual tinkering with legislation to reduce certain types of benefit or tighten up eligibility rules.

The long-cherished belief that in social security established rights were sacrosanct has been shaken.

The constitutional guarantees offered in the countries studied do not inspire confidence in the general public. They are too vague. They relate only to the existence of a social security system, not to acquired levels of protection. They have certainly not been adequate to prevent what has (mistakenly) been described as a dismantling of social security.

We believe that the European Community could play a role in this area in the same way as it already has in the major arena of equal treatment for men and women. A Community directive concerning the guaranteeing of established rights based on contributions would have the effect of a supranational guarantee of the level of social protection from which no member country could derogate.

Any such directive should have the same scope as Directive 79/7 and Directive 86/378². It should precisely define the meaning of 'contribution' and specify the minimum contribution required for access to the guaranteed right. But even beyond that, its importance would be as the first ever concrete expression of the idea of 'new entitlement' occasionally used when talking of beneficiaries' rights to future benefits.

¹ OJ L 225, 12.8.1986, p. 40.

² Council Directive of 19 December 1978 on the progressive implementation of the principle of equal treatment for men and women in matters of social security (79/7/EEC); Council Directive of 24 July 1986 on the implementation of the principle of equal treatment for men and women in occupational social security schemes (86/378/EEC).

The specific training needs of migrant women

The Commission has been ahead of the field in drawing attention to the discrimination confronting migrant women, and in promoting measures to change this reality. Already in its 1982–85 action programme on equal opportunities, the Commission emphasized the necessity to examine the vocational training possibilities open to migrant women, and the legal obstacles preventing them from obtaining employment. The second action programme, for the 1986–90 period, goes farther and, on the basis of studies already carried out, integrates migrant women into the group of priority categories in greatest need of Community action.

This article is devoted to one of the research projects carried out under the first equality programme and aims to shed new light on the situation of migrant women.

Women immigrants and their economic activity

In its report on women in the economy, the OECD shows that increased participation by women would in fact seem to be a structural component of all migratory flows, whether its objective be to increase a population or its workforce. In the European countries, the proportion of women in the immigrant population varied from 40 to 46% between 1970 and 1980.

This was accompanied by a marked increase in their labour force participation, with their activity rates equalling or overtaking those of the local female population. Allowance must also be made for the fact that the official figures take no account of the many immigrant women working in illicit, and hence undeclared, jobs (homeworking, contracting out, etc.). What is clearer is that they occupy the worst-paid, least-skilled and least secure jobs.

A high proportion of ethnic-background girls are to be found in the same type of jobs as their mothers (and hence over-concentrated in the unskilled occupation group); the most highly qualified form a disproportionate percentage of the young unemployed or under-employed.

Stereotypes . . .

Perceived almost solely as wives and mothers, this enforced role slot has resulted in migrant women being seen as 'hangers-on' dependants, unproductive, isolated, illiterate and ignorant. It is a deeply-entrenched image which has gained much ground: with researchers (where Morokvasic was moved to comment on the 'sociological invisibility of migrant women'), migrant welfare groups, and trade unions — not to mention the feminist movements, who have only recently awoken to the migrant woman's cause.

Training programmes for foreign-born women are therefore thought of primarily as socio-educational actions designed to meet the 'needs of immigrant women for training' and defined in terms

of integrating them into the host society, focusing therefore on activities to facilitate the acquisition of a new lifestyle (courses in hygiene, nutrition, literacy and dressmaking skills, not to mention family planning instruction).

What vocational training?

Migrants — both men and women — have the same rights to vocational training as the indigenous population.

That is the general rule throughout all Community countries. In practice, however, access to that training is qualified by any number of subtle constraints. And to insist on the strict application of the general rule would be to shut our eyes to the reality of the obstacles impeding access to that training.

Participation in established training courses

This immediately poses us with a major problem. The lack of official statistics in this area has frequently been deplored: most Member States do not have data on demographic characteristics such as sex and nationality of students undergoing training. Despite the fact that such data could help cast light on, and even ultimately improve, the situation, some States have turned full circle and discontinued collecting this sort of information 'in order not to discriminate'. In fact the very few surveys conducted in this area suggest another explanation: that the proportion of migrants on established training courses is so low (and even lower in the case of migrant women) as to give 'equal opportunities for all' a very hollow-sounding ring to it.

Studies carried out in the Federal Republic of Germany (Schweikert, 1984; König, 1985) reveal the very low participation rates of foreign-born women: in 1984, a mere 0.19% of migrant women workers took advantage of the generally available basic training and retraining courses.

In Belgium, out of a total 7 684 women enrolled in training courses run by the country's manpower services of

office in 1981, a mere 546 were foreign-born women from other EC Member States and a further 136 from non-Community countries. Britain also reports low training participation rates for ethnic minority women, albeit the findings are qualified by age and country of origin (Smith, 1981).

Immigrant youth

Specific programmes aimed at helping young people make the transition to working life and combating youth unemployment are fairly common throughout the Community. Research on ethnic minority youth, however, reveals their low participation rate on such training schemes. A survey on the United Kingdom's Youth Training Scheme concludes that YTS programmes as normally constituted actually aggravate discrimination and the disadvantages suffered by ethnic minority youth (Fenton, Davies *et al.*, 1986).

Training programmes and accessibility

Some attempts have been made to sweep away traditional barriers by organizing vocational preparation courses or specific schemes in harness with established training institutions. Here, the aim is to improve training opportunities either by 'using the resources we have in a better way', or by seeking a greater opening up of sectors of the labour market from which migrant women were previously all but excluded.

'Using the resources we have in a better way' expresses the change of direction being taken by groups who, having worked with migrant women over a number of years in socio-educational projects, now find themselves having to 'retrain' to meet what is increasingly seen to be a widely shared need: the need to work. Working in harness with established training centres, they contribute their special knowledge of the main types of learning difficulty faced by ethnic minority women to help devise programmes leading to the acquisition of more appropriate qualifications. A case

in point here is the cooperation in France between the Association pour le Développement de la Formation des Immigrés (ADFI — the immigrant training development association) and the Institut de Formation aux Techniques d'Implantation et de Manutention (Ifim — the institute for training in layout and handling techniques). The training is directed at the poorly-educated, job-seeking immigrant woman, tailored as far as possible to regional job market conditions. Market research conducted by the Ifim revealed that opportunities did exist in the distributive and retail trades due to the high staff turnover in both occupational groups. However, the general minority female population, poorly educated and not especially proficient in the French language, simply did not have the necessary entry-level qualifications for a training course as check-out and cash and wrap operators in a self-service store. Now, with the ADFI handling induction of trainees and upgrading basic skills, length of training is extended but it does offer immigrant women the opportunity to follow a genuine training course leading to a job.

This approach can be found in training schemes leading either to an unskilled or semi-skilled job and/or as a ladder to higher level vocational qualifications. From their very inception, the length of the waiting lists for enrolment proved — it proved were necessary — the extent of the demand for real qualifications.

Ways and means

Alongside these training schemes, other more innovative experiments have recently been introduced. Unlike the former, they are endeavouring not only to give migrant women a place in the job market but to carve out a *separate* place for them.

The programmes are built around two findings:

(i) that immigrant women are noticeable by their absence in certain occupational groups (such as public service occupations), which is at

odds with the concept of representativeness, and

(ii) that minority women have certain skills not possessed by the general female population (knowledge of the ethnic language and culture, for example) which could significantly increase their employability.

These training schemes will take account not only of immigrant women's problems (their low educational attainment and inadequate grasp of the majority language in particular), but also more subtle factors such as the racism of examiners, the cultural bias of entry examinations, the negative preconceptions of training and guidance officers, inadequate dissemination of information, and so forth.

The programmes set up in the Netherlands as part of the 'care and service sector' project being run by the 'Women and minorities' Working Group (under the aegis of the State Secretariat for Social Emancipation) is one of the most remarkable examples in this area. As part of on-the-ground research into the obstacles barring migrant women's access to certain occupations, vocational training and work integration schemes covering a hundred women were set up in six regions throughout the country. They revolved around three separate action areas: family care, social and migrant reception work (institutional and community), and community services (local authority social services and police). In putting the schemes into operation, attention focused on:

- (i) recruitment and selection,
- (ii) vocational preparation (dependent on the level of entering ability and lasting for between six months and one year), and
- (iii) personal support and encouragement during and after training.

The courses are practical in nature and prepare migrant women for the same jobs as the local female population (no separation of work, no ethnic stratification).

The schemes have all been evaluated and the initial findings published.



Copyright P. Nieto/R. E. A.

While it appears that selection may sometimes be biased, recruitment difficult (the women are not always well informed), and that there is frequently reluctance in the workplace to accept foreign women (a source of competition or upset in established working practices, or in a society as closed as that of the police force!), it also emerged that success rates were extremely high and the drop-out rate very low.

In the Federal Republic of Germany some pilot schemes for young people specifically address the twin problems of how to improve the chances of young ethnic-origin girls on the job market and giving them access to recognized vocational qualifications. One such training programme organized by the Hamburg-based association INCI prepares young girls for training as nurses and nursing

auxiliaries. The interest of the project (and no doubt the reason for its success with young girls) unquestionably lies in the association's achievement, helped by backing from the Equal Opportunities Office (Leitstelle Gleichstellung der Frau), in securing the Ministry of Health's agreement to set aside 60 hospital training places for young minority-background girls. While hospitals have thus been obliged to make room for these new candidates, their integration into the nursing staff has not been achieved without difficulty, and the association confirms the importance of personal and group support for these young girls.

These few examples illustrate how integrated training as part of a larger package of measures designed not only to open doors for a handful of migrant

women in particular circumstances can also lay the foundations for discussion and different practical approaches.

Alternative training

Alternative training schemes unconnected with traditional educational institutions have also developed alongside these initiatives, impelled by the desire to open up new, non-traditional occupational perspectives for women generally and ethnic minority women in particular, or geared towards new job creation.

New immigration-related opportunities

This covers training related directly to the immigrant market not offered by

any of the traditional training institutions and structures, such as migrant community leaders/trainers, sociomedical interpreters, etc.

These training courses start literally with a blank sheet, having to devise not only the training programme and the structure to be adapted, but even the very course content itself. And while the training and support organizations are succeeding in constructing programmes which will attract applicants, the great difficulty remains that of finding real markets for the skills.

Here, the programmes encounter the problem of political choices on which the allocation of grants depends. A case in point is the Brussels-based training programme for immigrant interpreters in the social and medical fields which successfully trained Turkish and Moroccan immigrant women to provide competent interpretive services in hospitals, clinics and health centres. Despite the interest displayed in certain circles, no salaried post has yet been created.

The future of this course remains uncertain, therefore, for one factor on which the success of training depends is the prospect of finding a job at the end of it.

New opportunities for women

Some alternative training courses for women are particularly geared towards migrant women.

Interesting examples of this type of training can be found in the United Kingdom. Membership of an ethnic minority group is among the priority admission criteria for courses run by the Haringey Women's Training Centre, for example.

Training courses in 'non-traditional' fields (such as plumbing, electricity, joinery, science, new technologies) have been set up in a bid to break away from the vicious circle of female unemployment (it is an established fact that certain 'women's jobs' are usually the first to go in cut-backs) and to open up new outlets.

Certain conditions are a *sine qua non*, both for the women organizers and trainees: childcare arrangements, a timetable that fits in with family commitments, and grants, but also personal support and integration assistance both during and after training: workplaces not infrequently abound with racist and sexist attitudes.

Here again, the results obtained speak for themselves: the drop-out rate is almost non-existent, and those who sit examinations to go on to further training enjoy a high pass rate.

The prospects of getting a job, while not guaranteed, are none the less good, partly due to the network of women's cooperatives and ventures.

Training and job creation

The desire to find a market for their abilities other than those traditionally offered them is increasingly leading migrant women to join forces in a search for alternative routes into economic life. Thus, using their traditional, culture-specific skills, but adapted to the market forces within which they are now operating, they are at the same time creating both specific training environments (the structured transfer of knowledge) emerging from channels of solidarity and job opportunities.

Thus an idea for a weaving workshop in Denmark ('Harem') tied to training for Turkish women is evolving towards a cooperative. Set up in 1984, the workshop currently has eight women working there full-time, with seven more undergoing a seven-month training course; their craftwork in the workshop is supplemented by language teaching and other, more general, studies. Another example, from France, is a catering course (Mansouria) designed to train women in techniques of management and economic production using their own individual and culture-specific skills (in this case, Moroccan cooking). If the women are uneducated (and some are completely illiterate), the training methods dispense with writing in favour of audio-visual aids, giving all women

access to the training without distinction.

Conclusions: Towards positive actions?

A close examination of vocational training opportunities for immigrant women clearly reveals that here, also, they occupy a poor place. The situation of ethnic minority women and their daughters does not rank high on the list of political priorities. But new horizons are opening up.

There is a growing groundswell of opinion among migrant women themselves in favour of breaking down the barriers; one manifestation of this is the creativity displayed by minority women in alternative and traditional training courses.

A study of these experiments reveals not only the demand for training leading to qualifications, but also the potential of even poorly-educated women to succeed and obtain recognized vocational qualifications. Such success depends on specific steps being taken, on account of the obstacles faced by immigrant women (remedial and vocational preparation courses, childcare arrangements, training grants, support during and after training). But the effort cannot come from training courses alone. The schemes already in operation also point to the need for a more wide-ranging campaign against intolerance and prejudice. For there is abundant evidence that discrimination persists in the workplace, at school (particularly in educational and vocational guidance) and in training itself.

It is vital, therefore, that positive action be taken. This study, and those relating to other aspects of discrimination (such as access to employment), should help the Community decide on the policies it will be pursuing. The seminar due to take place in autumn 1987, which will bring together the people responsible for political decision-making and those active on the shop floor throughout the Community, will certainly be a first step in this direction.

Bibliographical references

De Troy C., *Les besoins spécifiques de formation des femmes immigrées*. Commission des Communautés Européennes, 1986.

Fenton, Davies *et al.*, *'Ethnic minorities and the Youth Training Schemes'* MSC research and development, No 20, 1985.

König P., *Berufsvorbereitende und berufliche Bildungsmaßnahmen für Ausländer*, Bonn, 1985.

OCDE, *Les femmes et leur intégration dans l'économie*, Paris, 1984.

Smith D., *Unemployment and racial minorities*, Policy Study Institute, London, 1981.

Schweikert K., *'Female migrants in the Federal Republic of Germany'*, paper No 84/30 c, Standing Conference on the Sociology of Further Education in conjunction with Deutsche Gesellschaft, Berlin, 1984.

Colette De Troy

Part three

Recent developments

Employment policy in the Member States

In response to the wish expressed by Member States delegations in the Council to receive information on developments in national employment policies, the Commission set up a mutual information system called Misep. The system operates on the basis of contributions from correspondents in public administrations or organizations and a Commission representative.

It provides the relevant authorities in each Member State with regular quarterly information on measures and trends in the employment policies conducted in the other Member States.

Social Europe presents a selection of the information exchanged through Misep in each issue. The Commission accepts no responsibility for the use of this information, which comes from official national sources. It is presented as a summary, on a regular basis to enlighten the reader on the evolution of various aspects linked to national employment policies.

Overall developments

- Spain Collective bargaining 1986
- Ireland Manpower policy paper
- Italy Future employment programme
- Netherlands Policy developments
- Portugal Investment incentives
- United Kingdom Inner cities

Aid to the unemployed

- Belgium Unemployment insurance reform
- Luxembourg Basic income

Training

- Germany Qualifications offensive; training places
- Netherlands Careers guidance

Job creation

- Spain Employment promotion measures
- France Differentiated work
- Portugal Open-ended employment contracts
- United Kingdom Wages Act 1986

Long-term unemployed

- Belgium Recent developments
- France New training programme
- Ireland New pilot programmes
- Netherlands MLW scheme
- Portugal Temporary work programme

Youth

- Netherlands Youth guarantee
- United Kingdom New Workers Scheme

Placement

- Germany Trans-border placement
- Spain INEM revision

Overall developments

Spain: Collective bargaining in 1986

Collective bargaining in Spain is a part of the national ('Interconfederal') Agreement signed between the UGT trade union confederation, on the one hand, and the CEDE and CEPYME employers' organizations, on the other. This agreement makes up Chapter II of the AES (Social and Economic Agreement) which came into force in 1985 and 1986.

By the end of September 1986, 2 659 collective agreements had been registered involving 667 701 enterprises and 4 534 464 workers. When it is remembered that at the same time in 1985 71.4% of the agreements had been signed, it can be estimated that in 1986 there will be a little more than 3 700 agreements involving nearly six million workers.

As regards the scope of bargaining, 67.1% of all agreements are at the level of the industrial enterprise, of the remainder 32.1% concern sectors or branches (at the local, provincial, interregional or national level) and 0.8% concern groups of enterprises. Agreements covering several enterprises concern 99.7% of the enterprises and 84.3% of the workers; the smaller proportion of workers than enterprises is due to the average number of workers employed by the enterprises covered by the agreement being 5.7 as against 400 by the enterprise agreements. Thus it is the large enterprise which negotiates an enterprise agreement while small firms are brought together by agreements covering many enterprises — the average number in this case being 760 enterprises.

Although bargaining is, geographically, most frequent at the provincial level (89.2% of agreements), 10.2% of agreements are made at the interprovincial level (i.e. two or more provinces), covering 15.9% of the enterprises and 39.8% of the workers. Of these latter, 44 are national agreements covering 101 637 enterprises and 1 237 991 workers.

According to the Interconfederal Agreement, wage and salary increases are calculated on the basis of the rate of inflation (as estimated by the government) within a wage band ranging from 90% to 107%. Since the government's estimate of inflation is 8%, this band for wage increases oscillates between 7.2% and 8.56%. The average wage increase set out by the agreements reached and registered by September was 8.19%. More than two thirds of the agreements (68.8%) gave wage increases within this band; of the remainder, 18.5% gave higher increases and 12.7% lower. This last percentage is made up of enterprises which are not required to respect the wage band: loss-makers or enterprises which made losses during the previous two fiscal years, or which were aided or restructured. In cases of restructuring, enterprises are held to what was set out in their reference plans.

Should the retail price index (RPI) be higher at the end of the year than the 8% estimate, the signatories of the Interconfederal Agreement have worked out a wage revision clause. This is aimed at safeguarding the link agreed to at the beginning between wage increases and the rate of inflation. Wages will be revised just as soon as it is officially recognized that the RPI has been exceeded. The amount in question is paid in a single payment during the first quarter of the following year, coming into effect retroactively from January of the preceding year. This amount is thus included in the basis for calculating the wage increase for the year in which the revision is taking place.

The average annual number of hours of work has been set at 1 806, i.e. 8 hours less than the previous year for the same period. 51.6% of the workers covered by a collective agreement work 1 826 hours a year, which is the maximum number permitted by law; the remaining 48.4% work fewer hours.

The Interconfederal Agreement also tackles other issues such as productivity, absenteeism, overtime, holding more than one job and voluntary arbitration procedures to settle disputes. Yet only

23.1% of the agreements include clauses on productivity and only 15.1% on absenteeism.

The Interconfederal Agreement advocates the abolition of normal overtime. It recommends that each enterprise bring together the workers' representatives with management to study ways for new hirings drawing on the various types of existing employment contracts to make up for hours that would have been worked as overtime. Overtime worked in 1985 in enterprises covered by their own enterprise agreement represented 1.36% of the total number of working days stipulated for the previous year, i.e. an average annual amount of 24.4 hours overtime per worker.

In accordance with Decree Law 1/1986 of 14 March, collective agreements must specify whether overtime is compensated for by means of a premium which can under no circumstances be less than 75% of normal pay or by granting an equivalent number of paid days off. On the other hand, the maximum hours of authorized overtime per year, which were previously fixed at 100, have been lowered to 80 hours and the previous daily and monthly ceilings for overtime have been abolished.

Ireland: White Paper on manpower policy

The previous White Paper on manpower policy was published in 1965. It was drawn up against a background of projected growth and expansion of the economy and its main objective was to ensure an adequate supply of skilled labour to meet the requirements of industry.

Since then the general economic situation has changed radically resulting in a steep rise in unemployment. As a result manpower policy, in addition to improving the overall skill level of the labour force, has had a bigger role to play in the battle against rising unemployment.

The purpose of the latest White Paper is to redefine the role of manpower policy in the changed circumstances, to

identify its contribution to overall employment policy and to set down guidelines for its developments for the next five years or so.

Government policy in relation to four key areas of activity is outlined in the White Paper, namely (a) transition to working life, (b) training (c) special labour market measures and (d) placement and guidance service.

Transition to working life

It is proposed that the education system will have primary responsibility for preparing all young people for working life and that the necessary curricula changes will be introduced to achieve this objective. The manpower agencies will continue to have a distinct role in assisting those who, having left the educational system, experience difficulties in getting a foothold in the labour market by providing and implementing programmes and services specifically designed to meet their particular needs. Measures will include the social guarantee for young people, already in operation, and the introduction of a youth trainee initiative scheme to help those in insecure jobs.

Training

In the future training grants to industry will be based on a more selective and strategic approach as envisaged in the government White Paper on industrial policy. Consultative mechanisms between manpower, education and industrial authorities will be developed to assess the relevance of training to industrial strategy objectives.

Management training will be improved. The existing technical assistance grants scheme will be replaced by a more selective management and supervisory training scheme, and an Advisory Committee on Management Training will be established.

Other proposals provide for a comprehensive review of the craft apprenticeship system, as well as increased priority being given to the training needs of over-25 short-term unemployed workers.

Special labour market measures

The government has, in recent years, expanded the range of employment schemes and programmes available to provide employment opportunities for those groups in the labour force, such as early school leavers and the long-term unemployed, whose prospects have been most seriously damaged by the economic recession. The White Paper contains a number of initiatives designed to improve the effectiveness of such measures.

Firstly, in recognition of the changing age profile of the labour force and the unemployed, the upper age-limit for access to certain programmes which were originally confined to persons under 25 years, will be removed. Secondly, a direct action programme specifically aimed at the long-term unemployed will be introduced to complement other programmes already in place for such persons. The intention is that all persons who are unemployed for more than one year will be contacted with a view to offering them a place on a manpower programme or to help them find a job.

Placement and guidance service

While the traditional placement function will be maintained, priority attention will be given to the management of employment schemes including the direct action programme for the long-term unemployed and the social guarantee for youth.

Institutional and funding arrangements

In order to implement the programmes outlined above in the most efficient and cost effective manner, the government has decided to amalgamate the four existing manpower agencies (AnCO — the National Training Authority; CERT — the Council for Education, Recruitment and Training for the Hotel, Catering and Tourism Industries; the National Manpower Service; and the Youth Employment Agency) into a single body. This will enable the manpower programmes and schemes to be developed on a more cohesive basis

and provide a central point of contact for access to the various services. The policy role of the Department of Labour will be strengthened and the Department will be provided with the necessary resources to carry out this function.

In recognition of the changing age structure of the population and of the labour force, the government has decided to change the existing youth employment levy into a general employment levy, thus making the funds available to assist all age groups and not just the under-25s, as at present.

Italy: Employment initiatives for the coming triennium

The Minister of Labour presented to Parliament as an attachment to the Ministry's 1987 budgetary estimates (Protocol No 1403/1) a report on employment policy over the coming 10 years and measures foreseen for the coming three years.

After examining the international economic scenario and the growth possibilities for the Italian economy in the 1987—89 period, the plan outlines the results of manpower policy in Italy over the past three years. Thus, it sets out the restructuring activities taken by the Ministry as a result of the legislative measures aimed at reforming placement and of its agencies.

In conclusion it presents the policies to be adopted in the coming triennium striving for greater flexibility in placement reform, in the regional employment commissions, employment agencies, income support measures for the unemployed (CIG, unemployment benefit, etc.), working time and part-time work.

Netherlands: Measures to combat unemployment (1987—90)

Reducing unemployment by 200 000 in 1990 compared with 1986 is the key

issue of the Cabinet's employment policy. This is stated in 'Measures to combat unemployment in the years 1987 through 1990', a document submitted to the social partners for consideration, with a copy sent to the Second Chamber.

It outlines a range of measures which, together with the overall socio-economic policy, are aimed at reducing the unemployment of various groups. The Minister states that combating unemployment is the joint responsibility of the government and the social partners.

Enhancing output and employment can only be achieved through cutting down public expenditure, restraining costs, encouraging investment growth, more training, technological innovation and deregulation.

Continued income restraint is singled out as being of particular importance for employment policy. Furthermore, work needs to be redistributed. Moreover, the Cabinet will create additional part-time jobs particularly in public administration and in the State-supported sectors.

The introduction of the youth employment guarantee scheme will bring about a reduction of youth unemployment if in the end the complete target group will have been reached.

The government furthermore considers that it is necessary to enhance training. Together with the social partners the Cabinet will be examining the possibilities of intensifying industry's training efforts. Having unemployed people participate in training programmes in the enterprise will also be discussed. And it is intended to foster the reintegration of unemployed minorities in the labour market.

In view of the importance of combating unemployment, the Cabinet has again earmarked additional funds for employment policy, amounting to HFL 250 million in 1987 and gradually rising to HFL 500 million in 1989 and 1990.

Portugal: System of regional investment incentives — employment implications

The Decree-Law No 280-A/86 of 5 September 1986 brings in a system for stimulating investments aimed at fostering the development of the most disadvantaged regions, job creation and industrial innovation and modernization.

The repercussions on the labour market are considered in the context of economic and social policies, and the incentives which take the form of direct financial participation in the investment are granted according to each of the criteria referred to above.

As regards the employment promotion criterion, each project must provide for the creation of at least 5 jobs and the amount of the subsidy for each job to be created is of ESC 200 000, 250 000 or 300 000 according to the development level of the region in question.

The programme is being implemented under the responsibility of the Ministry of Industry and Commerce with the participation of IEFPP, the national employment and vocational training agency.

United Kingdom: Action in the inner cities

The United Kingdom Government has been developing a systemic approach to the problems of the inner cities. Very large amounts of government money have been spent in inner cities by a number of departments, but until about two years ago lack of interdepartmental cooperation meant that these resources were often not used to best effect. To tackle this, City Action Teams (CATs) were set up in April 1985 in London, Birmingham, Liverpool, Manchester and Newcastle with the aim of coordinating and raising the profile of existing government help and action in four main areas: encouraging enterprise and economic regeneration; increasing job opportunities and the employability of certain groups; reducing the number of

derelict sites and vacant buildings; and reducing the number of people in very poor housing conditions.

The Inner Cities Initiative was launched in February 1986 as a development of CATs. The Initiative focuses on smaller areas with particularly serious employment problems and concentrates on the people in those areas. Eight relatively small areas in English inner cities (North Kensington and North Peckham (London), St Pauls (Bristol), Handsworth (Birmingham), Highfields (Leicester), Moss Side and Hulme (Manchester), Chapeltown and Harehills (Leeds), and North Central Middlesbrough) have been chosen as broadly representative of the pressing problems needing to be tackled, not because they are necessarily the worst areas. Each has a small Task Force consisting of civil servants supported by secondees from local authorities and the private sector. The Task Forces aim not only to ensure efficient targeting of the government spending (around UKL 75 million in 1985/86) already available in the eight areas, but also to develop new approaches to job creation, training and enterprise for the benefit of residents. They also seek to ensure that existing national programmes really do meet the particular needs of people in the inner cities, and to involve actively the private sector and the communities themselves in their work. Task Forces have a small amount of new money, about UKL 8 million overall, to help achieve their aims and promote innovative approaches.

Since the launch of the Initiative, Task Forces have made considerable progress in formulating and implementing plans to achieve their objectives. Some 30 projects involving around UKL 1.3 million have already been approved for support. The projects focus on a wide range of economic objectives some of which are described below.

One of the main features of the Initiative is the encouragement of enterprise, particularly among the ethnic minorities who form a significant proportion of the population in the eight Task Force areas. The Initiative has already contributed to a venture capital fund for black

business in Birmingham, a new black enterprise agency set up and financed by a mixture of government money and support from local trusts and businesses. Task Forces are continuing to work on setting up Enterprise Agencies in all the eight areas with a focus on ethnic minority business as well as skill training facilities and managed workshops. The Initiative is also keen to encourage enterprise among young people and is supporting a Youth Business Centre in Middlesbrough in the particularly depressed north-east of England. Six of the Task Force areas are supporting the Industrial Society's programme 'Headstart' which provides counselling, advice and training in enterprise for 18–25 year olds in inner cities areas. The scheme will include conferences in schools and work with youth training scheme and Community programme participants, counselling services and one-day workshops, training spread over 8 weeks in marketing, financial and general information involving tutors and business-mates from companies, and post-training support.

A major theme that has emerged in all eight areas is the need to ensure that future urban development projects in inner city areas produce more work opportunities and skill training for local people. It has often been the case in the past that the benefits from inner city building projects in terms of cash and jobs have tended to go to people who were not themselves touched by inner city problems — for example suburban employees of contractors who carried out the work. Plans for the first Inner Cities Initiative project using local labour are at an advanced stage and an agreement is expected to be reached shortly with a major contractor to employ and train local people on a building project in Handsworth, Birmingham. It is intended to develop this approach with other building and refurbishment work in other Task Force areas.

Tackling some of the key problems faced by inner city businesses is a key aim of the Initiative. Progress is being made with the insurance industry to re-

solve inner city insurance problems on the spot, and quickly. Contacts have also been made with private firms and the banks to see what help they can give through sponsoring projects, providing secondments to the Task Forces, and making easier access to finance by inner city entrepreneurs. The aim is to underline the message that the inner city is the right place to do business in.

Much of the work of the Task Forces concerns the better coordination and targeting of existing programmes and resources. Particular attention has been given to the programmes of the Manpower Services Commission. One of the largest of these is the community programme (CP) which offers to the long-term unemployed jobs which benefit the community. Many of these people live in the inner cities and it is there that the need for more CP places is most acute. The Initiative has been successful in obtaining an additional 1 450 places for the eight areas. At the same time, as a way of building up provision, there is a need to attract more private sector sponsors for CP in the inner cities. In order to make it easier for firms to support the programme, the rules relating to private gain have recently been revised to allow a gain to be made so long as there is also a large community benefit. In addition, to give added encouragement to good CP projects in inner city areas, improved funding is being made available for a limited number of 20 pilot projects by private sector sponsors, at least 10 of which will be in the Task Force areas.

Although it is too early to begin to evaluate the Inner Cities Initiative, significant progress is being made towards achieving its objectives. A firm of consultants, with world-wide experience in urban problems and their solutions, is advising the Initiative on operational matters and project development as well as on assessment. A structured system of monitoring and evaluation will shortly be introduced which will enable the Initiative both to assess its own performance and to draw the important lessons for UK urban policy.

Aid to the unemployed

Belgium: Reform of unemployment insurance

Through its Val Duchesse plan of 25 May 1986 the government decided to stabilize its 1987 budget. Following from this decision, it has issued various decrees bringing about savings in, among others, the 'employment and work' sector.

Within this sector savings will be achieved in part by new budgetary measures and in part by clarifying the already existing regulations.

As regards the regulations concerning unemployment insurance, there has been a change in fixing the amount of unemployment benefits (Royal Decree of 8 August 1986 modifying Articles 124, 156, 160 and 160bis of the Royal Decree of 20 December 1963 dealing with employment and unemployment and the Ministerial Order of 11 August 1986 modifying Chapter VIIIbis of the Ministerial Order of 4 June 1964 on unemployment). These measures came into operation on 1 October 1986.

The previous system

The previous system for determining unemployment benefits distinguished three categories of the unemployed: heads of household, those living on their own and others. Only the heads of household received benefit at the rate of 60% of the average daily remuneration (up to a ceiling) throughout the period of unemployment. Cohabiting persons and those living alone, on the other hand, only received 60% during the first year of unemployment, a percentage which was reduced to 40% for the following 12 months. As from the third year both these categories of the unemployed dropped to a flat rate for the rest of their period of unemployment (the amount varied, depending on whether the person was living alone or cohabiting).

The new system

A. From now on, the unemployment benefit is composed of three elements:

- (i) a basic benefit equivalent to 35% of the average daily remuneration (up to a ceiling);
- (ii) a benefit for having dependants or for adaptation equivalent to 20% of the average daily remuneration (up to a ceiling);
- (iii) a benefit for loss of sole income equivalent to 5% of the average daily remuneration (up to a ceiling).

B. There are two cases of 'an unemployed person having dependants' ('une famille à charge'):

- (i) the unemployed person living with a spouse who has neither earned income nor replacement incomes (co-

habiting with other persons whether or not they have any earned income does not enter into the question);

- (ii) the unemployed person who cohabits with someone without this person being the spouse and solely with:

- (a) one or more children provided that he/she can claim for at least one of these family allowances or that none of these children has earned income or replacement income,
- (b) one or more children or other relatives or relations up to and including those of the third degree provided that he/she can claim family allowances for at least one of these children and that the other relatives or rela-

tions have neither earned income nor replacement income,

- (c) one or more relatives or relations up to and including those of the third degree who have neither earned income nor replacement incomes.

C. Periods of compensation

First period: the first 12 months of unemployment. All unemployed persons receive a basic allowance of 35% and a 20% supplement for dependants or for adaptation.

A 5% supplement is given to the unemployed with dependants as well as to unemployed persons living alone when it is a case of the sole income being lost.

Summary Table

Situation of the household	First year		Second period		Third period (indefinite duration)	
			previous system: 12 months	new system: 6 months + 3 months for every year worked		
	previous system	new system	previous system	new system	previous system	new system
'Charge de famille' (having dependants) + 'revenu unique' (sole income)	60%	35% AB ¹ 20% CF ¹ 5% RU ¹ <u>60% total</u>	see first year		see first year	
Sole income ('isolé') (persons living on their own)	60%	35% AB 20% AA ¹ 5% RU <u>60% total</u>	40%	35% AB 5% RU <u>40% total</u>	Flat rate: BFR 16 406	see second period
Others (workers who cannot prove having dependants or having lost a sole income)	60%	35% AB 20% AA <u>55% total</u>	40%	35% AB	Flat rates: BFR 10 504 ³ BFR 13 338 ⁴ BFR 12 558 ⁵	Flat rate: BFR 10 504 (+ BFR 3500 per month) ²

¹ AB='Allocation de base' (basic benefit) CF='Charge de famille' (dependants) AA='Allocation d'adaptation (benefit for adaptation) RU='Perte de revenu unique' (loss of sole income).

² Supplement granted to each of the two cohabiting unemployed workers if, together, they do not earn at least the equivalent of the maximum allowance.

³ Cohabiting worker with a spouse having a wage or salary or any other income that is not a replacement income, when the household's income is not below BFR 30 678.

⁴ Cohabiting worker with a spouse who only has replacement incomes.

⁵ Cohabiting worker with a spouse having a wage or salary or any other income that is not a replacement income, when the household's income does not exceed BFR 30 678.

Second period: 6 months extended by 3 months for every year worked. All receive the basic allowance (35%). Only the unemployed with dependants receive a supplementary allowance of 20%. A 5% supplement is given to the unemployed with dependants as well as to unemployed persons living alone when it is the case of the sole income being lost.

Third period: unlimited duration. The unemployed with dependants receive, as for the previous periods, a basic amount of 35%, an allowance for dependants of 20% and an allowance following the loss of a sole income of 5% (i.e. 60% in total).

The unemployed without dependants but still having right to an allowance following the loss of a sole income receive a basic allowance of 35% and a 5% supplement (i.e. 40% in total).

Unemployed persons who are not entitled to claim a family allowance and who have no right to an allowance for loss of a sole income fall to the level of a flat rate sum of BFR 10 504 per month.

Luxembourg: Combating poverty

The Law of 26 July 1986 deals with:

- (a) creating the right to a guaranteed minimum income,
- (b) creating a national social action service,
- (c) amending the Law of 30 July 1960 on the creation of a national solidarity fund.

One of the government's aims is to combat poverty and, by means of bringing in a guaranteed minimum income, to ensure that all citizens have the minimum means of existence.

The law has been brought in following the opinion expressed by the Economic and Social Council on 28 September 1983. This showed the general public that in the Grand Duchy of Luxembourg 8% of all households lived under very precarious circumstances with 18% on the poverty line.

The opinion of the Council and the studies behind it show that social welfare plays an indispensable complementary role to social security. The guaranteed minimum income is intended to constitute a safety net for all situations which earned or replacement incomes cannot face up to.

The law adopts a universalist approach. This foresees a generalized guarantee for a minimum standard of living for everybody, irrespective of the reasons for the lack of resources. Thus, according to the law, everybody has the right to a guaranteed minimum income, the level of which is determined according to the make-up of the household of which that person is a part.

Given this universalist approach, it was necessary to write into the law certain restrictions on this right so as to avoid abuses. Hence, to be able to claim a guaranteed minimum income the person must:

- (a) be domiciled on Luxembourg territory and have resided there for at least 10 years,
- (b) be aged at least 30 years,
- (c) be available for the labour market.

Should conditions (b) and (c) not be fulfilled, the following can nevertheless claim a guaranteed minimum income:

- (i) persons aged more than 60 years,
- (ii) persons who because they are unfit for work due to illness or incapacity

are unable to earn their living by means of a job in line with their strength and skills,

- (iii) one of the parents who brings up one or more children or a handicapped child for whom he/she receives family allowances.

It should be pointed out that the legislation provides for the possibility of subordinating the right to a guaranteed minimum income to the beneficiary undertaking social or cultural community jobs ('travaux d'utilité collective, sociale ou culturelle') or enrolling in retraining or reintegration into working life programmes.

As regards the problem of fixing the absolute level of the guaranteed minimum income, the government has adopted the approach of determining this guaranteed minimum by relating it to all social benefits currently in force which have so far shaped the whole of social policy. Thus, account has been taken of the allowances of the national solidarity fund, the minimum social wage and of the unemployment allowance, minimum pensions as regards pension insurance, family allowances as well as fiscal scales as regards the minimum non-taxable income. The level of the threshold decided upon determines the amount of the supplementary income to be granted as well as the group of beneficiaries concerned.

The amounts in question have been set as follows (in Luxembourg francs):

	Cost of living index number (100)	Situation on 1 July 1986 (index 426.54)
First adult	4 900	20 900
Second adult	1 800	7 677
Third adult	1 500	6 398
Per child	750	3 199
Ascendants living in the household of the children	3 000	12 796
Second ascendant	1 500	6 398

The allowances are a supplement representing the difference between the guaranteed minimum income on the basis of the eligible persons making up the household community and the overall income of the persons of this community.

The law furthermore sets out a certain number of connected or subsidiary measures concerning health care which are given to beneficiaries who are not otherwise covered, or social assistance.

Training

Germany: 'Qualifications offensive'

The Federal Government has, together with the social partners, launched a 'qualifications offensive'. The purpose of the approach is to provide workers as well as the unemployed with all-round vocational skills so that they can cope with continuously growing vocational demands. By means of further vocational training workers can assure and improve their occupational positions. The continuing technological upgrading of German industry and trade requires there to be a sufficient pool of qualified workers.

With the growth of automation jobs with low vocational qualifications are disappearing. A recent survey of Prognos AG estimates that the proportion of jobs for persons without any formal training will drop by the year 2000 from the current 25% to 20%. Thus the employment opportunities for the unskilled will decline. The proportion of jobs producing new products with new production methods is growing.

The Federal Parliament set up a committee to examine 'new information and communication technologies'. The starting point of the committee's work is that by 1990 some 70% of all persons employed will have to have some knowledge of information technologies. In

September 1985 59% of the unemployed, some 1.3 million persons, had insufficient qualifications. This clearly indicates the extent of the need for efforts to raise qualifications in the near future.

The 'qualifications offensive' has three main goals:

- (i) Workers need constantly to adapt their vocational knowledge and skills to changes in working life and the latest technological developments. To these ends there must be an appropriate supply of further training.
- (ii) More of the unemployed should take part in further vocational training, particularly special target groups including the long-term unemployed and the older unemployed.
- (iii) More use should be made of the opportunities for the provision of qualifications closely associated with work, i.e. there should be a broadening of special measures for in-company learning.

Modifying AFG

The legal bases for the 'qualifications offensive' are the instruments for enhancing vocational training according to AFG (Labour Promotion Act) which have been significantly improved through the 7th amendment.

First results

These new regulations came into operation on 1 January 1986. The first results can now, after 6 months, be discerned. Thus entries in vocational training schemes in the 5 months to the end of May have increased by 17.6% over the previous year, in vocational retraining by 22.3%, and in the vocational adjustment schemes ('Einarbeitungsmaßnahmen') by 50%. The overall entry figures in these five months was 199 761 and the proportion of the unemployed was 67.6% compared with 65.6% the previous year.

Research has looked into previously unemployed participants who, in the first quarter of the year, successfully com-

pleted vocational training programmes. 60% of them were back in employment at the end of the second quarter. This indicates the extent of the role of further vocational training in reintegrating the unemployed in working life.

Germany: Creating training places

Making available training places in sufficient numbers is primarily a task of the enterprise. In the Federal Republic, the dual system of vocational training has proved its value in recent years when there was a strong increase in the demand for training places. In 1985 697 000 new training contracts were signed. This was some 66 000 more than in 1982. In the course of the 1985-86 training year some 95% of young people who were looking for a training place received one. In total well over 700 000 young people have entered vocational training, a figure which includes those covered by the special schemes of the *Länder* for initial vocational training.

There is no reason for complacency on the training places market for 1986. Rather, there is a need to raise their supply. It will only be several years hence that there should be any significant decline in the demand for training places since then the backlog of the previous candidates will be overcome. Demographic trends will, with a short lag, become increasingly effective so that from 1987 there should be a drop in the demand for training places.

Netherlands: State-aided careers guidance

The 1986 scheme for State-aided careers guidance supersedes that of 1962.

The new approach is a form of performance-related subsidy which makes it easier than in the past to control gov-

ernment expenditure in this field, raise effectiveness and to reduce government involvement in the activities of the institutions engaged in careers guidance. These institutions are thus being given more scope to develop their own policies as regards both finance and content.

By choosing this form of State aid, the institutions will be encouraged to develop their activities as cost-effectively as possible. Thus is the possibility of competition between the institutions and the presence of external incentives expressly authorized.

Careers guidance is currently characterized by considerable variations in the range and volume of activities; by anything but optimal geographical access for persons seeking advice; by an insufficient matching of the available capacity with the target group; and by great vulnerability as a consequence of the relatively small size of the existing institutions. The new scheme contributes to solving these problems by earmarking part of the money available to the national programme of careers guidance activities, which determines for each province the maximum number of activities that are eligible for a subsidy.

By means of this new scheme the government is covering a considerable part of the cost for careers guidance. However, the current practice of asking the person seeking advice to pay a fee, albeit small, will be maintained.

It is furthermore intended to bring about a significant shift in the areas covered so that the careers guidance services will focus more than at present on job seekers or those about to enter the labour market. Since there is hardly any question of career choice at the end of primary education, activities in this area will no longer be subsidized.

Job creation

Spain: 1986 results of employment promotion measures

For the first 9 months of 1986, there were 2 167 394 placements registered in the employment offices. This is an increase of 366 836 (20.4%) on the figures for the same period in 1985. During the same period, there were 1 000 969 contracts concluded with the help of employment promotion measures which is 302 809 (43.4%) up on the previous year. These contracts represented 46.2% of all placements registered in these 9 months as against 38.8% in 1985 and 21.5% in 1984. Employment promotion contracts have thus experienced considerable progress since 1984. That was the year when some clauses of the Workers' Statute were revised (Law 32/84 of 2 August) with the aim of bringing in a series of clear, lasting and flexible contractual arrangements fostering the creation of new jobs.

As shown in the table, 1985 experienced some very significant percentage changes in the number of contracts, which brings out still more the progress achieved in 1986. One aspect to be underlined is that, compared with other contracts, employment promotion contracts foster work for two groups which are often discriminated against on the employment market: young people and women. The proportion of young people and women hired by these sorts of contracts is significantly above their proportions in placements overall. Similarly, they are concentrated in the services (65.7%) compared with their percentage in all placements (40.7%).

Among the measures without financial incentives, temporary contracts (lasting between 6 months and 3 years) obtain the best results of all contracts: 316 616 during the first 7 months of the year (41.1% of all employment promotion contracts), which is 21.9% more than the previous year for the same pe-

riod. The predominance which this type of contract has kept is explained by the flexibility it gives the enterprise for hiring any kind of workers registered as unemployed to meet its temporary manpower needs.

The number of part-time and 'replacement' employment contracts also grew considerably during the first 7 months of the year. The growing importance of the part-time work contract on the labour market is in the process of reducing the gap between Spain and other countries where part-time work represents a not inconsiderable percentage of total employment. Over the past few years the percentage of part-time contracts in all placements registered has increased significantly: from 1.7% in 1982 it rose to 2.6% in 1984, 4.7% in 1985 and 5.7% in 1986 (to July). Of all employment promotion contracts these part-time contracts have the greatest proportion of women (57.2% for the period from January to July 1986).

Among the schemes having financial incentives are the employment promotion programmes for underprivileged workers on the labour market. Hiring such workers is encouraged by giving grants and/or reductions in social security contributions. Of these schemes, temporary contracts for work experience and for training for young people have continued in 1986 their upward trend from their already high figures for 1985, with rates of respectively 76.4% and 46.9%. There is a high proportion of women (37.7%) in both types of contracts, which corroborates the doubly effective role of these approaches in hiring young people including women.

Another programme which has a great impact on youth employment is that started in 1985 aimed at promoting employment contracts for an indefinite period of time for young persons under the age of 26: 119 997 such contracts had been signed by July 1986.

As regards contracts for an indefinite period of time for the disabled and for long-term unemployed workers over the age of 45, mention should be made of the economic upswing in 1986, since more than twice as many people were

hired in the first seven months compared with the same period of 1985.

Moreover, since bringing in the possibility of paying unemployment benefits all at once to enable unemployed workers in receipt of benefit to set up on their own or to become members of a cooperative or 'work association', 62 334 workers have drawn upon this scheme between September 1985 and September 1986. During these 13 months of its existence, expenditure on it has amounted to PTA 58 356.4 million, which represents an average capitalization of PTA 936 189 per worker, an amount which is growing over time.

The action of the public sector to create temporary jobs in the central, autonomous and local government services mainly concerns collective utility or community works and services. These are intended for unemployed workers hired with a temporary employment contract aimed at reducing difficulties on the labour market in regions affected by high rates of unemployment.

Among the actions in question are 'community works of social value' which, since they are not contractual, do not appear in placement figures. These actions are aimed at carrying out community works of social value by unemployed persons in receipt of benefit. Most of this community work is implemented in the context of INEM (the national employment institute) agreements. The figures in the table for 1985 and 1986 only cover actions implemented outside the INEM agreements.

These contracts resulting from agreements between INEM and the public administration are the most numerous of the financial support schemes. The 134 582 contracts registered during the period reviewed represent an annual increase of 105.5%. This provides some idea of the progress made by these public sector actions aimed at improving the employment situation in specific geographical areas. Contracts signed on the basis of INEM agreements with local corporations are

the largest part of the programme (86.5%). The amounts allocated to these agreements have grown significantly compared with the previous year: from PTA 14 900 million in 1984 and PTA 29 774.5 million in 1985, the estimates for 1986 have reached PTA 32 400 million.

France: Differentiated work

On 11 August, 1986 the government issued an Ordinance aimed at making it easier, on the one hand, to use fixed term and temporary work contracts and, on the other, to promote part-time work.

1. Fixed term contracts

Current legislation is being relaxed and simplified in a number of ways to facilitate the use of fixed term employment contracts (CDDs).

Abolition of the list: The Labour Code laid down 11 instances in which CCDs could be used. This restrictive list

Employment promotion contracts

Types of contract	Registered contracts				Percentage changes	
	1984	1985	1985 January—July	1986 January—July	1985/1984	January—July 1986/ January—July 1985
Without financial incentives						
Temporary contracts	235 368	432 175	259 727	316 616	83.6	21.9
Part-time and 'replacement' contracts	47 940	123 849	65 056	95 536	158.3	46.9
Special retirement at 64 years	94	978	648	788	940.4	21.6
With financial incentives						
(a) Private sector:						
Work experience contracts	14 002	51 766	25 472	44 920	269.7	76.4
Training contracts	27 410	112 736	63 550	93 328	311.3	46.9
Young persons under 26 years of age ¹	—	55 785	10 911	64 212	—	488.5
Other programmes ²	6 885	8 579	4 324	8 259	24.6	91.0
(b) Public sector:						
On the basis of agreements	100 559	270 171	65 492	134 582	168.7	105.5
'Community works' ³	15 923	14 450	9 186	6 367	-9.3	-30.7
Total	448 181	1 070 489	504 366	764 608	138.9	51.6

¹ This measure came into operation in June 1985.

² Including employment promotion measures for the disabled and for workers over the age of 45 who have been unemployed for more than a year.

³ These are no-work contracts and do not appear in the placement figures given the fact that these actions are aimed at carrying out community works of social value by unemployed persons in receipt of benefit.

Source: MTSS, INEM, employment statistics.

has now been abolished and replaced by a general definition: A CDD can be concluded for performing a specific task. Its purpose cannot be to permanently fill a job connected with the normal on-going activity of the enterprise.

Term of the contract: A CDD must comprise a term which is clearly specified at the time of its being signed. However, there are three instances in which no such precise term is required:

- (i) for replacing an absent wage-earner or one whose employment contract has been suspended;
- (ii) for seasonal jobs;
- (iii) for jobs in specific sectors where it is standard practice not to make use of open-ended contracts because of the nature of the work and of the short-term nature of this job. These sectors have been listed and can be added to by collective agreement or extended collective agreement.

In each of these three situations a minimum length must nevertheless be set and the contract expires with the return of the wage-earner or with the fulfilment of the aim for which the contract was concluded.

Duration of the contracts and renewal: The maximum duration of the contracts which, depending on the case, was of 6 or 12 months (and exceptionally 24 months) has been raised in all cases to 24 months (including possible renewal). The CDD can be renewed twice, each time for a duration at the most equal to that of the initial period (without exceeding two years altogether).

Calculating numbers: The wage-earners with a CDD will be taken into account in the total number of employees on a pro-rata basis of the time they have been at work over the last 12 months. If they replace an absent wage-earner, they are not taken into account for the numbers.

In addition to this increased flexibility, the Ordinance maintains a number of rules already established:

Maintaining the waiting period: To fill the job of a wage-earner whose contract

has come to an end, use cannot be made of either a fixed term contract or a temporary work contract before a period equal to one third of the duration of this contract has elapsed, 'including renewal'.

No recourse during strikes: As previously, under no circumstances can a wage-earner with a CDD or a temporary work contract be called upon to replace a worker whose employment contract has been suspended because of an industrial dispute.

2. Temporary work

As for CDDs, the list of cases justifying temporary work contracts has been abolished and replaced by a general rule: A user can call on the services of a wage-earner of a temporary work agency 'to carry out a non-lasting task called an assignment'. The 'objective of the temporary work contract cannot be to permanently fill a job connected with the normal on-going activity of the user enterprise'.

The assignment must comprise a term clearly specified at the very moment of concluding the contract making the services available. The three cases of exemptions are the same as those for CDDs.

The temporary work contract can also be renewed — but only once — for a length of time at most equal to that of the initial period. The conditions for the renewal must be provided for from the very beginning of the contract or be the subject of a supplementary agreement to this contract which must be put to the wage-earner concerned before the expiry of the contract. The total duration of the contract, including renewal, cannot exceed 24 months. The rule of not being able to use such contracts during strikes is maintained.

When calculating the number of workers, wage-earners are taken into account on a pro rata basis of their presence during the 12 preceding months. However, these wage-earners are excluded from the total head-count when they replace an absent wage-earner or one whose employment contract has been suspended.

3. Part-time work

The Ordinance covers three measures aimed at enhancing part-time work:

- (i) Taking into account on a pro rata basis the working time of part-time wage-earners when calculating the numbers employed in the enterprise. For in France, these numbers determine the level and form of the compulsory representation of wage-earners.
- (ii) The creation of a new form of part-time work, spread over the whole year and termed 'intermittent work'. This is an employment contract of unspecified duration which provides for regular or irregular periods of not working. Implementing these contracts is through agreement with the social partners at either the firm or industry level.

The intermittent work contract is an open-ended contract. It must be in written form, indicating in particular:

1. The qualification of the wage-earner,
2. The elements of pay,
3. The annual minimum duration of work of the wage-earner,
4. The periods during which he/she works,
5. The break-down of working hours within these periods.

The hours over and above the annual duration fixed in the contract cannot exceed one quarter of this time.

In cases where the nature of the activity does not enable the periods of work and the break-down of the working hours within these periods to be clearly specified, the collective agreement determines what adaptations are necessary. This covers in particular the conditions under which the wage-earner can refuse the dates and the hours of work being proposed to him.

Wage-earners with an intermittent employment contract have the same

rights as those working full time without prejudice, as regards collective agreement rights, to the specific restrictive clauses provided by the agreement or the extended agreement.

As regards determining rights connected with seniority, periods of non-work are taken fully into account.

- (iii) Extension of part-time early retirement: In regions or for occupations facing or threatened by a serious imbalance in employment, special allowances can be given to certain categories of older workers. These require the signing of an agreement for these older workers when it is proven that they are unsuitable for requalifying measures or that the situation of the enterprise leads to changing their job, with their agreement, from full time to part-time.

This possibility of part-time early retirement has until now depended on the enterprise's commitment to maintain numbers employed. From now on, even in cases of reductions in numbers, wage-earners aged over 56 years have the opportunity of keeping part-time employment, the pay for which will be topped up by special allowances.

Portugal: Open-ended employment contracts

In October 1986 a programme has been started to encourage enterprises to create permanent jobs for young people aged less than 25 years and the long-term unemployed of more than 25 years. Co-financed by the European Social Fund, it is managed by IEFP, the employment and vocational training institute.

The programme provides grants to enterprises which present investment projects which are technically, economically and financially viable. Grants corre-

spond to 12 times the national minimum wage for each job created.

The programme covers 2 000 workers in 1986, which should be extended to 4 200 in 1987.

United Kingdom: Reform of the wages council system

The Wages Act 1986 received Royal Assent on 25 July 1986. In addition to repealing legislation giving manual workers the right to insist on payment in cash, and modernizing the law on deductions from wages, it is a major deregulatory and job-promoting measure through the reforms it makes to the wages council system.

Wages councils set minimum remuneration for over 2 million workers in 26 different trades, mostly in the service industries. Under previous legislation they were empowered to fix whatever minimum terms and conditions they wished. Although in practice they confined themselves to regulating pay, holidays and holiday pay, their Orders contained a great number of statutorily enforceable details leading to complex problems of interpretation and application. Because of the concern it felt about the way in which the system imposed burdens on employers and inhibited employment, especially for young people, the government suggested in a consultative exercise that the system had to be either drastically reformed or abolished. The consultative exercise demonstrated that the majority of industries already within the system felt that it should be retained but reformed on the lines that the government had proposed. These reforms are reflected in the new legislation.

Young people under 21 are now no longer covered by wages council regulation. In the future, employers will be able to offer them jobs at wages which reflect their level of training and experi-

ence and which young people are prepared to accept. This will do much to enable young people to get a foothold on the ladder of employment and so improve their long-term prospects. About 500 000 young workers are affected.

For workers of 21 and over, the wages council Orders are to be greatly simplified. Wages councils are now limited to fixing the two central elements of pay — a basic minimum hourly rate and an overtime rate (and of course the point at which overtime should start), and a limit on charges an employer can make in certain circumstances for accommodation he provides.

Other matters such as holiday pay and entitlements will be for direct settlement between employers and workers, as happens in the rest of industry.

Another important change to the wages council system is that councils must now consider the impact on jobs of the minimum rates they set. In the future they will have to take account — along with other factors they consider appropriate — of the effect of any rate they set on the level of employment of the workers concerned and particularly among the workers in areas of the country where pay is below the national average for such workers.

In addition to these changes, the government will be able to vary the boundaries and coverage of the councils more freely; for example, individual employers or groups of workers covered by special employment schemes could be removed from scope, though the Secretary of State must have regard for the current levels of pay among workers affected and undertake consultations before seeking parliamentary approval for such changes.

The provision to exclude young people from the system came into operation immediately on Royal Assent. The introduction of the new simpler Wages Orders for those aged 21 and over will be phased over a period ending in July 1987.

Special categories of workers: long-term unemployed

Belgium: Recent developments

An examination of the structure of long-term unemployment in Belgium shows that specific groups experience particularly lengthy periods of inactivity. At the end of June 1986 more than 73% of unemployed females had been out of work for more than one year, a figure which rose to 85% for the partly or severely disabled.

The risks of experiencing long-term unemployment also vary according to the level of training. The proportion of young people who have not gone further than primary or lower secondary education increases as the periods of being out of work get longer: from being 52% of the young who have been out of work for less than one year, it rises to 73% of the young who have been unemployed for more than two years.

Early retirement

The early retirement scheme by collective agreement enables older workers who are about to be made redundant to opt for early retirement.

This early retirement scheme was originally collective (work) agreement No 17 of 19 December 1974 (official gazette (MB) of 31 January 1975). It has been amended several times, the last being by Royal Decree No 443 of 14 August 1986 (MB of 30 August 1986) and Royal Decree of 20 August 1986 (MB of 10 September 1986). It provides for applying to older redundant workers a more advantageous unemployment regulation and granting them a supplementary allowance which has to be paid by their last employer.

To be able to claim an early retirement, the older worker must be made redundant by an enterprise which is bound by a collective (work) agreement dealing with early retirement. These agreements can be at the national, industry or enterprise level. The age limit is specified in the agreement.

However, collective agreements filed at the record office of the collective relations service of the Ministry of Employment and Labour after 31 May 1986 cannot provide for early retirement for workers aged less than 57 years.

Beneficiaries of an early retirement by collective agreement must also fulfil specific conditions as regards length of service: 5 years in the same enterprise, or 10 years (over a period of 15) in the same industry or 20 years as a wage-earner.

Workers taking an early retirement have neither to sign on daily nor to be registered as a job-seeker. They continue to receive unemployment benefits calculated at the rate of 60% provided that their employer is committed to replacing the early retiree for a 36-month period by an unemployed person or a beneficiary of the 'minimum means of existence' who has at least the same number of working hours as the early retiree.

Derogations are foreseen for workers made redundant by an enterprise which is in trouble or experiencing exceptionally unfavourable circumstances. For workers belonging to an enterprise recognized as such by the Ministry of Employment and Labour, the minimum age is brought down to 50 years and there is no replacement requirement.

Actions to reintegrate LTUs into working life

1. The third work circuit, TCT (Royal Decree No 25 of 24 March 1982, MB of 26 March 1982) consists of the State providing at its expense, while fully respecting the prerogatives of the traditional networks of public and private jobs, new and lasting jobs. These are to

carry out tasks which must at the same time meet a need in the non-market sector and enable the recruitment of long-term unemployed persons.

To be able to benefit from this measure, a person must be fully unemployed and receiving benefit for at least two of the last four years. Since the coming into force of the Law of 1 August 1985 (MB of 6 August 1985), the jobs created by the TCT can also be taken up by:

- (i) a fully unemployed person in receipt of benefit of at least 40 years of age who is living alone or under the same roof with persons having no resources or whose sole resources are social security or social assistance allowances;
- (ii) a recipient of the minimum means of existence, of at least 40 years of age who is living alone or under the same roof with persons having no resources or whose sole resources are social security or social assistance allowances.

The job performed must:

- (a) be permanent (hence contracts are not limited in time),
- (b) be of public or social utility or cultural interest,
- (c) not be for profit,
- (d) meet collective needs which would not otherwise have been satisfied.

Workers are bound by an open-ended full-time or part-time employment contract as a worker or employee. The State covers the pay and the social security contributions for the entire period of employment.

2. The purpose of the Interdepartmental Budgetary Fund for Promoting Employment is to encourage job creation in the non-market sector by means of financial support.

The new jobs created in this way must be such as to improve both quantitatively and qualitatively, in Belgium or in a developing country, the services which the promoters are in charge of. These promoters can be the State, the (Belgian) communities or the regions with the exception of teaching.

To be able to be hired with the financial backing of this Fund, a person must, at the time of being recruited, have been wholly unemployed and in receipt of benefit for at least a year or have been unemployed one year of the last four.

Evaluation of the LTU aid measures

Workers hired through these LTU aid measures presumably enable the overall level of employment to be increased since these jobs cannot displace other jobs created by the same employer or subsidized by the same authority.

The LTUs are put back into contact with the world of work and can thus preserve their working skills. It would also seem that some 20% of those employed by the TCT subsequently move back into a normal job.

Furthermore, these systems enable more positive use to be made of the money earmarked for unemployment compensation.

Statistical data

Early retirement by collective agreement

Numbers of beneficiaries:

- 1984: 83 500
- 1985: 97 500
- July 1986: 115 400

Third work circuit

Numbers of beneficiaries (annual average):

- 1983: 7 600
- 1984: 19 500
- 1985: 26 500
- August 1986: 34 859

France: Training and help for reintegration

Supplementing the youth employment emergency plan which is based upon alternance training and easing corporate charges, the government decided to bring in a new programme for

the long-term unemployed. It consists of training and helping the reintegration into working life of some 107 500 persons. This number consists of 60 000 training periods for young people aged between 18 and 25 years and 45 700 training periods for adults.

A. Actions for young people

The target groups of activities for young people are:

- (i) Young people aged from 16 to 18 years who left school at the lowest levels (35 000 traineeships).
- (ii) Young people aged from 18 to 25 years who are looking for their first job having had a very low level of initial training (25 000 traineeships).
- (iii) Long-term unemployed young people aged from 18 to 25 years who are looking for their first job.

The average duration of these traineeships must be 6 months, consisting of 550 hours of training and 2 months within the enterprise, the exact structure of which is decided upon according to the characteristics of the beneficiaries.

B. Activities for adults

The activities for the adults concerned are divided up between the following:

- (i) 10 000 National Employment Fund traineeships for the long-term unemployed. These traineeships are either short (300 hours) or 'long' (600 hours).
- (ii) Modular training: 29 500 trainees, each receiving on average 550 hours training.
- (iii) Upgrading activities ('actions de mise à niveau'): 4 000 trainees with the average traineeship lasting 700 hours.
- (iv) Local programmes for integrating women living alone: 4 000 trainees.

The 'départemental' authorities have been invited to ensure that for the whole of these activities, for young people and

adults alike, at least 40 hours training is provided in the new technologies.

Ireland: New initiatives

Three new initiatives to help the long-term unemployed have recently been introduced. They are:

- (i) job search,
- (ii) part-time allowance, and
- (iii) educational opportunities programme.

The programmes are at present operating on a pilot basis in a number of locations, around the country.

The job search programme is designed to improve the job-searching skills of the long-term unemployed. Participants are invited to join a job search group where, over a period of four weeks, they receive coaching in how to look for jobs more effectively. During this period, all necessary job-searching facilities (postage, telephones, typewriters etc.) are provided free of charge, while in certain cases expenses will be paid to cover the cost of travelling to job interviews. Participants will continue to receive their normal unemployment pay entitlements during the duration of the programme.

The part-time job allowance scheme allows persons who have been unemployed for more than 12 months to take up a part-time job while continuing to receive a special allowance. The allowance amounts to IRL 25 per week for a single person and IRL 40 per week for a married person, and is payable to any person who works part-time up to a maximum of 24 hours per week. Earnings derived from the part-time employment do not affect payment of the allowance, but the employment must be for less than 24 hours a week. Participants in the scheme are still required to register once a week at their local employment exchange and produce a regular employer's statement of the weekly hours worked.

The educational opportunities scheme allows long-term unemployed persons over the age of 25 to pursue a

full-time education course for one year. The scheme, which is operated in conjunction with the National Manpower Service and local Vocational Education Committees (VECs) is intended to give people a chance to study a range of Leaving Certificate subjects. Those persons who avail themselves of the scheme are paid an allowance equivalent to their normal welfare entitlements.

An integral feature of the three pilot programmes will be a continuous evaluation by independent experts. In the light of the evaluation the government will decide whether the balance between costs and benefits is such that the schemes should be launched nationwide and legislated for as statutory entitlements for the long-term unemployed.

Netherlands: MLW measure in force

Under the MLW, the scheme for the long-term unemployed, employers are exempt for a specified period from paying social security contributions if, between 1 October 1986 and 31 December 1987, they contractually hire a LTU either for an indefinite period or for a fixed term of at least two years' duration. The contract must provide for an average work week of 15 hours and collectively agreed wages or, failing that, the statutory minimum wage. The unemployed person to be hired must have been registered as a job seeker at the employment office for a continuous period of more than three years and must be at least 21 years of age. The director of the regional employment office (GAB) can authorize a person who has not been registered as a job seeker to benefit from this measure provided that he/she can prove to have been unemployed for more than three years and to be actively looking for a job.

The exemption from employers' contributions lasts for the duration of the employment contract up to a maximum of four years. In order to be granted such an exemption, a declaration by the director of the GAB is required. A num-

ber of specific clauses have been included in the scheme to prevent regular workers from being displaced by the long-term unemployed. For instance, the director of the GAB would not issue the declaration if the employer had made other workers redundant (dismissed them for 'business economic' reasons) in the six months preceding the recruitment.

The employer will be able to claim an allowance of HFL 4 000 for each person taken on under the scheme to cover the costs of training and accompanying support, provided he has drawn up a retraining programme which has been approved by the director of the GAB.

Portugal: Temporary work programmes

These programmes aim to improve temporarily the unemployment situation of special categories of workers, notably the long-term unemployed and the seasonally unemployed. Two types of programmes are currently in operation:

- (i) A special programme for the long-term unemployed aged at least 25 years (ATD) seeks to provide them with temporary employment (6 months) in community activities (DN of 19 June 1986). The programme is co-financed by the European Social Fund. The amount of money earmarked for each worker corresponds to the amount of the minimum national wage during a 40-hour working week. This programme was started in 1986. Its enlargement to 14 000 workers is foreseen for 1987.
- (ii) Programmes for seasonally unemployed persons (DN No 86/85 of 2 September 1986 and DN No 76/86 of 29 August 1986), the duration of which corresponds to the low season periods determined by the respective regions. These programmes are developed by the local authorities, public services, 'social solidarity' or public utility bodies and public, private and cooperative enterprises. Financial support from

IEFP (the national employment and vocational training institute) varies, with the maximum corresponding to the whole of the remuneration of workers in the regions facing the most problems. These programmes have so far been carried out in limited areas, reaching 5 000 persons in 1986. This number should be increased to 12 000 in 1987.

Special categories of workers: Youth

Netherlands: Youth employment guarantee scheme

A scheme enabling young people to be guaranteed a job is being prepared. Its purpose is to replace the income guarantee with a view to fostering the integration of school-leavers in the regular labour market.

By means of this scheme the Minister of Social Affairs and Employment wants to guarantee all under 21-year olds a job if they have been unable to find one within six months.

The original intention was to discontinue the entitlement of all under 21-year olds to social assistance under the State group regulations for unemployed workers (RWW) and replace it by a job and/or training guarantee. In the meantime, the plan of a training guarantee has been withdrawn.

For the time being the minister is taking the line that this scheme will enable a much narrower interpretation to be given to the concept of 'suitable work'. In principle, every place selected will be considered suitable. Since the target-group tends to consist of young persons who have little or no work experience, attention will have to be focused on whether the job content is in line with the candidate's level of training.

Since training plays an important part in integration prospects, the supply of training for this target group will be particularly fostered.

United Kingdom: The New Workers Scheme

A number of schemes designed to alleviate the problem of youth unemployment are current. YTS provides the opportunity of 2 years training for school leavers, thus preparing young people for their first full time job. In order to encourage employers to provide junior posts to under 21-year olds, the New Workers Scheme offers a UKL 15 a week payment in respect of each eligible employee in a suitable job. The payments, although not directly a contribution towards wage costs, will, in effect, offset the expense to an employer of hiring a young worker.

The purpose of the scheme is not just to create job opportunities for young people in the short term. The government's aim is to change employment patterns in the long term, so that under 21-year olds will once again form a significant proportion of the labour force. To achieve this long term aim, wage limits have been incorporated into NWS, which will encourage employers to pay realistic wages to young people. The limits have been set according to the employee's age on the day the job starts; young people aged 19 and under can be paid UKL 55 or less, and those aged 20 can be paid UKL 65 or less.

The New Workers Scheme takes over from the Young Workers Scheme which covered jobs started on or before 31 March 1986. YWS was designed to help under 18-year olds find full time employment, but with the extension of YTS to a 2-year course, provision was already made for this group of young people. The government wished to continue supplying aid for young people searching for their first jobs, but without interfering with their training opportunities. Using the experience gained from YWS, and the proposals for 2-year YTS a new scheme was designed for under 21-year olds.

To ensure that there is as little conflict as possible between YTS and the New Workers Scheme, it is a condition of the scheme that young people have no entitlement to YTS training remaining when they start the job to be supported. Another eligibility requirement for employees is that they have not worked for more than an aggregate period of 52 weeks in a job or series of jobs since leaving full time education or a government sponsored training scheme. Thus the scheme is focused on young people who are struggling to find their niche in the labour market, having completed a period of training.

The scheme will be operative throughout Great Britain for jobs started on or after 1 April 1986, and a similar scheme is to be introduced in Northern Ireland. All employment sectors are eligible for support except public services and domestic households. The only requirements regarding the job itself are that it should average 35 paid hours per week, and be expected to last a minimum of 52 weeks.

Support in respect of any one employee can be given for a maximum period of 52 weeks, providing that no payments have been made previously in respect of that young person under either NWS or YWS. If some payments have previously been made the residual periods may be claimed by a new employer providing that all the conditions of the scheme are still satisfied.

NWS will be a worthwhile successor to YWS, and will complement 2-year YTS helping young people along their path from school, through training and into full time employment.

Placement

Germany: Trans-border placement

Job seekers living near the Franco-German border can now receive information on job offers across the border

from their own labour office. This is the outcome of an agreement signed in Strasbourg between the director-general of the French (ANPE) and the president of the German (BA) employment bodies.

There are currently some 17 000 cross-border commuters in both directions between France and Germany. The legal basis for this is the freedom of movement Order of the European Community. On this basis and following an EC Commission initiative, France and Germany had already in 1982 and 1983 declared their willingness to exchange job offers in the border areas of Alsace-Lorraine, Rhineland-Palatinate-Saarland and Baden-Württemberg.

The job offer exchange was agreed between the employment offices of Strasbourg (West) and Wissembourg, on the French side, and of Offenburg, Rastatt, Karlsruhe, Pirmasens and Landau, on the German. It was tested over a one-year period during which no major problems arose. Cooperation between the French and German employment offices went off without any major hitches, difficulties only arising when interested job seekers did not have sufficient mastery of the foreign language in question.

Job offers are filmed in an anonymous form on microfiche. The job seekers can draw on the information by means of microfilm readers at the employment offices indicated above. Office staff in both countries have in addition all important information such as the names of the firms, contact persons and pay, on the screen. In this way jobs offered could be filled during the test period with job seekers from France and Germany. The range of occupations extended from highly skilled workers in the engineering industry, such as turners, lathe operators, welders and mechanics through to service occupations such as sales personnel and interpreters.

Spain: New structure for public employment services

INEM is the national employment institute which is entrusted with administering employment policy: placement, vocational training and guidance, employment incentives and unemployment benefits. It is an autonomous body linked with the Ministry of Labour and Social Security by the General Secretariat for Employment and Industrial Relations. By Royal Decree 1458/1986 (BOE of 16 July) it has been significantly restructured.

The main changes brought in at present by the reform concern the cen-

tral structure depending on the Directorate-General of INEM. Whereas previously there were 5 sub-directorates, there are now 7: resources management, economic and budgetary management, technical service, information and statistics, employment promotion, management of vocational training and indemnification. This change bears witness to the absolute priority given to INEM of carrying out administrative and executive functions which are clearly distinguished from other central managerial functions such as the Directorate-General for Employment which is entrusted with designing, programming and setting out regulations, evaluations and the follow-up of employment policy.

In fact, the reform is the first step in the process for bringing about enhanced management by specially trained staff endowed with appropriate computerized tools. Staff are specially trained for their tasks of training, guidance, employment promotion, and management of manpower movements. All these tasks are carried out within the guidelines drafted by the Ministry of Labour according to the action and control criteria defined by INEM's governing bodies, i.e. the General Council and the Executive Committee. These two are tripartite bodies with trade union, employer and public administration representation, a structure which is also found in the executive committees within the regions.

New technology and social change

Overview of recent events in the Community countries¹

Introduction

I. Government policies

1. Promotion of R&D
2. Industrial policy
3. Education and vocational training policy

II. The attitudes of the two sides of industry towards new technologies

1. Employers and trade unions
2. Collective agreements and labour disputes

III. Studies and research on the social effects of new technologies

1. Diffusion of information technology
2. Employment
3. Work organization, qualifications and skills
4. Working conditions, health and safety

Introduction

This survey of events in the field of the social implications of technological change in the period summer-autumn 1986, covers three main aspects. First, government policies addressed to new technology sectors and related education requirements. Common issues of debate in many countries are the priority to be given to different types of measures, particularly the choice between direct and indirect support to industry, and the role of public procurement policy. Moreover, increasing interest is developing towards technology assessment. The changes occurring in the telecommunications sector are briefly mentioned, since they are likely to have important implications for the structure of the sector and for employment in Europe.

The second section is on the attitudes of the two sides of industry. Main events to be observed are the debates and policy re-considerations taking place in the trade union movement in several countries, since technological change upsets traditional demarcation lines and leads to the emergence of new problems and needs. Some important collective agreements have been signed in this period in Italy, in both State-owned and private firms, which contain a number of innovative measures in the field of workers' information and consultation on the introduction of new technologies.

Finally, the last section reports on studies and surveys. In many countries information technology sectors appear to perform much better than manufacturing industry in general, and in several countries surveys have been recently carried out on the number and utilization of robots and computers. Specific attention is given to the information technology market situation in Spain and Portugal, covered for the first time in our surveys. The studies on employment have recently become somewhat more optimistic, pointing more to the shortages of specific skills than to the negative employment effects of technological inno-

vation, thanks, probably, to the improved economic situation in most countries. A matter of concern remains, in the field of working conditions, the work on VDUs (video display units): both trade unions and public institutions continue to analyse the problem and some proposals are being put forward where no regulation yet exists.

I. Government policies

1. Promotion of R&D

In June 1986 the Danish Government presented an 'Action plan for research and development', with the following objectives: — to double the total funds for research as a percentage of the national product by the end of 1990; — to improve national infrastructure; — to ensure the promotion of promising fields of research; — to ensure that highly qualified researchers will be available to companies and research institutions. DKR 1 400 million of public funds have been allocated to the programme for the period 1986—90, and the government expects that they will be supplemented by DKR 4—5 000 million invested by private companies.²

In the framework of the Spanish 'National electronics and informatics plan' (Plan Electronico e Informatico Nacional-PEIN),³ a sub-plan on advanced industrial automation (Plan de Automatizacion Avanzada-PAUTA) was approved

¹ Prepared by the Commission on the basis of information provided by the EPOS network of correspondents on new information technologies, which comprises the following experts: G. Valenduc (B), J. Reese (D), N. Bjørn-Andersen (DK), J. I. Palacio Morena (E), B. Quelin and N. Azulay (F), M. Nikolinos (GR), M. E. J. O'Kelly (IRL), B. Ingraio (I), C. Rottländer-Meijer and D. Van Der Werf (NL), L. Tadeu Almeida (P), T. Brady (UK). Coordinator for the Commission: A. S. Piergrossi.

² *Regeringens Handlingsplan for Forskning og Udvikling*, May 1986.

³ For details on the PEIN, and for a description of the situation in Spain, see *New technology and social change in Spain and Portugal*, Supplement to *Social Europe*, 1987.

in 1985 and started its implementation phase. Its basic aims are: promoting the use of flexible manufacturing technologies in Spanish industry and generating basic technologies, products and application technologies that advanced automation requires, so that a competitive supply of these products can be generated by Spanish industry. Total financing is PTA 5 205 million for the period 1985–88, to be borne partly by the Ministry of Industry and Energy, partly by the Ministry of Education and Science, and partly by companies' contributions. The plan covers the whole range of activities in industrial automation, from the development of basic technologies, to the development of industrial technologies, to the diffusion of industrial networks. A training component is also included, addressed to research person-

nel, manufacturing engineers and technical staff, and production managers.¹

Some fiscal measures were decided by the Belgian Government on 5 December 1986 to encourage research and innovation in the enterprises. They raise the share of tax-exempt profits to 25% of R&D investment, including non-material investment and R&D investment made by research centres of the enterprises. Consultative committees, both at national and at regional level, are assessing the effectiveness of fiscal measures, which are criticized by the trade unions and by some employers' federations. These would prefer direct support measures for R&D, rather than fiscal exemptions.

In the Netherlands, HFL 4 100 million have been allocated to R&D pro-

grammes under the 1987 budget, which raises government R&D expenditure to 2.2% of GNP, still 0.5 percentage points below the OECD norm of 2.7%. The increase in the budget is accompanied by a shift in favour of applications of information technology. Among ongoing programmes, an evaluation of Instir (Innovation stimulation regulation) for the period October 1984–March 1985 was presented by the Ministry of Economic Affairs in September 1986. It shows that small and medium-sized firms have much more use of Instir than larger firms. In August, the Council for Information Technology (RIT) was installed, in which 24 firms in EDP industry and ser-

¹ Ministerio de Industria y Energia, *Plan de Automatización Industrial Avanzada*, Madrid, 1985.



Copyright D. Maillac/R. E. A.

vices are represented. Among its tasks, the RIT will fulfil an intermediary role between government and the business world in the framework of the Informatics stimulation plan (INSP), i.e. a forum where INSP projects are developed and supported. Another committee, the 'Advisory Committee for Technology Policy', chaired by the former president of Philips, was established in September. It has the task of advising the Ministry of Economic Affairs on technology policy and particularly on government instruments to stimulate research, on public procurement policy, on the relationship between innovation and the education system, on the problem of shortage of qualified personnel.

In Italy, the president of the National Research Council CNR presented, in September 1986, the annual 'General report on the state of scientific and technological research in Italy'. Expenditure for scientific and technological research is estimated to have risen from 9 245 000 million LIT in 1985 to LIT 11 173 000 million in 1986, with a real rate of growth of about 14%. In 1986 national research expenditure thus accounted for 1.46% of GDP. According to the report's estimates, 17% of total expenditure went into fundamental research, 40% into applied research, and 42% into development. Public administration accounted for 48.9% of total expenditure, private firms for 31.2%, the remainder having been spent by firms under public control. As far as future plans are concerned, 10 new 'finalized projects' should become operational in 1987: they include 'robotics', 'telecommunications' and 'electro-optical technologies'. A problem stressed at the presentation of the report was the persistent gap in scientific research between the north and the south of the country. From the data bank on scientific and technological research created by the CNR in the south it emerges that the southern regions account for only 8% of the national number of researchers, that is no more than 9 000 persons, almost totally employed by the public administration. As a matter of fact, only 5% of the total number of researchers in the south are employed in firms (both

public and private), while in the north the corresponding figure is 50%. These data show how difficult it will be to implement the target of devoting 40% of public research funds to southern regions.

The Greek Government Council on Informatics, whose establishment was announced in previous surveys,¹ held its first meeting in July 1986, with the participation of the Ministers for National Economy, Industry Research and Technology, Finance, Education, Transport and Communication, and National Defence. At the meeting, the Prime Minister gave a detailed account of the technological developments in the last 40 years and of the importance of information technology for the development of the Greek economy; he stressed the risk, more important than in the case of traditional technologies, of the creation of monopolistic centres of production and distribution of technology worldwide, with the undesired consequence for smaller countries in the periphery of the world economy to become more dependent on the metropolitan centres. He put forward a number of policy lines to be followed by Greece in order to catch up in the area of informatics, namely: full knowledge of the developments worldwide; selective application of informatics in education, information, production and administration; the formulation of rules, incentives and prerequisites for the utilization of the existing potential; the division of labour among the various sectors of the economy; State initiative to transfer and acquire technology; the promotion of the necessary measures and institutions to overcome the negative effects of the introduction of informatics; the awareness of citizens of the structural changes expected from technological developments.

In September 1986, a report on the public bodies and institutions supporting the development of the French information technology industry, prepared by the former president of CII-HB J. P. Brulé, was presented to the French Minister for Industry. According to the report, the amount of public expenditure allocated to information technology studies (excluding Ministry of Defence

and BULL), i.e. FF 2 400 million in 1985, is a comparable amount to that spent in the FRG or in the UK for similar purposes, and should not be decreased. Of this total, in 1985, 36% went to public research institutes, 33% to State enterprises, and only 16% to private industry. Overall, small and medium-sized enterprises receive less than 5%. The report criticizes this distribution of expenditure, and proposes, in the first place, to abolish a number of public bodies. Moreover, the way the money is spent is not considered the most effective. One of the proposals it puts forward is to replace direct aids to industry by indirect forms of support, such as fiscal measures, or joint research programmes associating several enterprises, like those in existence in Japan, the USA and the UK. The government has implemented the first suggestion, namely to abolish some public institutes.²

In the field of technology assessment, two new initiatives can be mentioned. In July 1986, the UK Government chief scientific adviser announced the establishment of a new Cabinet Office unit to assess the economic value of research and development programmes funded by the government. This Science and Technology Assessment Office will complement the work of Acard (the Advisory Council for Applied Research and Development); it will be made up of professional staff and will make independent assessment of the economic returns expected from R&D programmes. In the Netherlands, the Minister for Education and Science inaugurated in October 1986 a new Steering Group for the Organization of Technology Assessment; leading scientific organizations were asked to provide members. Technology assessment is now also promoted in university circles, with the first post-doctoral course being organized by the Interuniversity Group for TA (Internationaal Overleg Technologisch Aspectenonderzoek).

¹ See *Social Europe*, No 1/1986 and No 3/1986.

² See below, the chapter on industrial policy.

2. Industrial policy

The changes being implemented by the French Government in industrial policy are having some repercussions also in the information technology sectors. On the occasion of the 1986 SICOB (International Office Automation Fair), the French Prime Minister declared that the French information-technology industry no longer needed protection from the State, although it still needed support. The options outlined include two sets of measures in the first place. First, three of the public bodies which support demand or help the diffusion of information technology are being abolished; they are the 'Centre Mondial de l'informatique', deemed not to have obtained any result; the 'Agence de l'Informatique', whose tasks are believed to be no longer needed; and the 'Mission à l'informatique'. The abolition of the latter is linked to the second set of measures, i.e. the autonomy granted to State enterprises and public administrations in their procurement policy. State enterprises will be totally free in their information technology policy; administrations will be free in their purchases.¹

In Italy, existing legislation to support industrial innovation is being re-financed under the 1987 budget: LIT 1 400 000 million have been allocated to financial support for technological innovation and applied research, evenly shared between the innovation fund and the applied research fund, both created by Law No 46/1982. Special attention will be given to financial support for industrial automation and technology transfer, especially towards small and medium-sized enterprises, by refinancing the so-called 'Sabatini Act' (No 1329/1965), which proved one of the most effective instruments to support innovation investment in small firms. Moreover, the Ministry of Industry announced a new act to promote investment in automation: it will offer a grant-in-aid of up to 25% of investment to firms investing in automation equipment (CAD, CAM, numerically-controlled machine tools, robot systems and others). It will be addressed to small industrial firms and to small firms in the services sector and will include some novelties,

in so far as investment in software, consultancy services, design of projects and the training of personnel will also be eligible, provided it includes a hardware component. So far, industrial policies have been restricted to financing real investment in equipment and construction.

Still in Italy, a rather peculiar application of information technology for the preservation of cultural assets has been launched, with the approval in August 1986 by the Interministerial Committee for Economic Planning CIPE of 39 projects to be financed under what is referred to as the 'cultural assets act'. The projects are aimed at filing cultural assets with the help of new information technologies. Young people will be hired to implement the projects by the companies or agencies involved. They will receive advanced on-the-job training in the relevant techniques. The aim of most projects is not only to offer an advanced service to improve the currently poor management of cultural assets, but also to suggest possible profit-oriented utilizations for the files and other material produced within the projects. Major computer companies and software houses are participating.

In the telecommunications sector, the July 1986 agreement between the American firm ITT and the European holding Eurotel, whose main shareholders are the French CGE (Compagnie Générale d'Electricité) and the Belgian Société Générale de Belgique, had repercussions in several countries. The European holding has the majority share (63%) in the equity of the new joint venture. For the French CGE, the agreement follows the partially unsuccessful agreement with ATT, and the difficulties encountered in the takeover of the telecommunications activities of Thomson. Now, the telecommunications activities of ITT (some 12 companies in Europe) are merged with those of Alcatel-Thomson in the new company 'Téléglobal Communication Network'. CGE becomes the third French industrial group with some 240 000 employees and 60% of its activities in telecommunications. The implications of this agreement for employment are still unknown. The new

company will have around 150 000 employees in 75 plants throughout the world; the International Metalworkers' Federation estimates that some 20 000 jobs could be lost in Europe if the company rationalizes production in its European plants.²

The agreement is of importance also for Belgium where, in August 1986, another agreement was announced between the American company GTE and the German Siemens, according to which Siemens takes over the public switching equipment sector in some European countries, among which Belgium. Both new companies are candidates for a major contract with the Belgian RTT (Régie des Télégraphes et Téléphones), which will extend over the next 10 years and is expected to amount to between BFR 50 000 and 170 000 million, according to different hypotheses concerning the network and the services that it will include.

As far as the institutional structure is concerned, a report prepared by an expert committee for the State Secretariat for PTT, finalized in November 1986, supports strongly the principle of a State monopoly of all telecommunications networks, as well as of transmission and switching systems and basic services, while it accepts the prospect of a partial privatization of terminals and certain advanced services. Fundamentally different recommendations are put forward by a study carried out, at the initiative of IBM Belgium, by Professors Beaufays and Van Omeslaghe of the Université Libre de Bruxelles.³ The study puts forward the proposal for a radical deregulation and privatization of the network, arguing, among other things, that the public procurement policy for digital switching will have a marginal impact on employment creation.

¹ *Le Monde Informatique*, No 248, 22 September 1986; *01-Hebdo*, No 923, 22 September 1986.

² *Unions and the ITT-CGE Merger*, Geneva, International Metalworkers' Federation, September 1986.

³ Beaufays, Van Omeslaghe, *Impact économique d'une déréglementation des télécommunications en Belgique*, ULB/IBM, 1986.

In the UK, on the other hand, the proposed takeover of Plessey by GEC, the two largest UK manufacturers of telecommunications and defence electronics equipment, was blocked by the government, following the majority view expressed by the Monopolies and Mergers Commission¹ that such a merger would have reduced competition in the UK defence electronics market. The liberalization of the telecommunications sector has meanwhile continued, with the liberalization of all value-added services except telex, and with new branch system licences allowing companies to make distant calls via their internal networks at the local rate. Nevertheless, the privatization of British Telecom is still not accepted by all parties in the country. In June 1986, the National Communication Union (NCU) published a report calling for the return of British Telecom to public ownership, and for the reconstitution of the BT board with up to 50% of members representing BT workers.²

The Irish Industrial Development Agency, IDA is developing a new service for industry called technology transfer programme. It follows a previous phase of IDA's policy, aimed at attracting foreign investment to Ireland: in carrying out this activity, it was realized that the IDA's access to nearly every company in the world could be utilized to a far greater extent. The technology transfer programme is mainly addressed to mature indigenous companies which need advice to identify new products to replace obsolete lines. In its contacts with foreign companies about locating in Ireland, IDA enquires whether there is a possibility of producing under licence in Ireland, whenever the foreign company is not interested in direct investment. The response has been surprisingly good, so much so that IDA has formalized its approach towards licensing through the technology transfer programme; it should lead to the important goal of increasing the added-value in the Irish production process.³

The Greek Undersecretary of Industry announced the establishment of a new company called 'Hellenic Information Systems SA', with a majority (75%)

stake held by the Hellenic Industrial Development Bank, the rest of equity being contributed by the Hellenic Organization of Small and Medium-Sized Industries and Handicrafts. The new company aims at the development and production of software and hardware, the development of infrastructure for the introduction of know-how, and the planning and evaluation of information systems. It will participate in joint ventures, coordinate the supply of components, and enter contracts for technology transfer.

3. Education and vocational training policy

In Belgium, the Ministry of Education for the French-speaking part of the country is planning to invest BFR 1 000 million over five years in a project involving the computerization of the school system: in the first phase it will computerize the management of the school system, by connecting each school to the central administration; in the second phase, it will create information technology courses in all secondary schools. Meanwhile, the Club Athena Technologies-Education, set up by the French-speaking Regional Ministry for New Technologies, has published the results of a survey carried out in firms of the Wallonia and Brussels regions, on their training needs in relation to new technologies.⁴ For all technologies considered (micro-electronics, EDP, robotics, office automation, new materials), people with high-school or university-level training are most in demand; however, for robotics, secondary-level technicians are also extensively demanded to work on numerical control machines. As far as training systems are concerned, the firms clearly expressed their preference for in-firm training when technologies are already in use, and for training by an external instructor (usually, the hardware producer) in the case of technological innovations. Nevertheless, firms demand people with a sound basic training and a broad technological background knowledge, who can easily adapt to new situations and problems.

Plans to introduce information technology in schools are being speeded

up also in the Netherlands. In May 1986 the Minister for Education and Science announced that all schools in the secondary general education system would receive a software voucher of HFL 2 000. This strategy is meant to stimulate publishers and software producers to develop education software. The vouchers will be available in August 1987, implying a total cost for the Ministry of HFL 4.5 million. Moreover, it is planned to introduce information technology into the ordinary third and fourth year secondary school curriculum. Meanwhile, the NIVO programme, in which government and the business world together supply schools with hardware and provide teacher training facilities, is raising much interest in secondary schools. By June 1986, 282 schools had joined the first phase of the programme. Much discussion went on about the choice of hardware, and eventually three models were chosen, compatible with each other. Equally successful has been, in the vocational training field, the ISI project for those who have just left school and are unemployed.⁵ The project, which offers five months of theoretical courses and five months of practical training in informatics, is entering its third year. The private sector reacted very positively to the programme, and many small firms took advantage of the scheme to fill vacant posts; as a result, more than 60% of the students found a permanent job before they finished their training.

In Spain, a new 'national training and employment preparation programme' (Programa de Formacion e Integracion Ocupacional) was passed in July 1985 and modified by decree in February 1986: its basic aims include the devel-

¹ *The General Electric Company plc and The Plessey Company plc: a report on the proposed merger*, HMSO, 1986.

² *Returning of BT to public ownership and control*, NCU, 1986.

³ Fitzgibbon, F., 'IDA chief unveils plan for new technology drive', *Irish Business*, August 1986.

⁴ 'La formation aux technologies nouvelles' *Bulletin Athena*, Bruxelles, Ministère de la Région Wallonne pour les Technologies Nouvelles, No 24, October 1986.

⁵ See *Social Europe*, No 3/1986.

opment of new teaching systems directed at preparing the labour force for the new needs resulting from the introduction of new technologies and from the innovations in the methods of production and business management.

The 'White Paper on manpower policy', published in Ireland in September 1986, puts forward a large number of proposals for restructuring present manpower policy and the social welfare system, with particular attention being paid to the long-term unemployed. Some of the proposals concern training for new technologies, namely: the replacement of the existing technical assistance grants scheme by a more selective management and supervisory staff training scheme which may be targeted towards new technology, and the introduction of new training schemes for the relevant new technologies. The proposals are not expected to become law until 1987 or 1988.¹

Three Danish municipalities, Struer, Agvad and Lemvig in Western Jutland, are carrying out an experiment with the use of computers to improve the life of rural communities. The experiments are funded by central and local government grants and by a contribution from the EEC. 'Telehuse' have been established, i.e. local centres where citizens can use computers for a variety of purposes, such as: education in the use of computers themselves and of data bases; support for local companies and advice in the training of employees; distance learning in connection with the university and the Technical School of Aarhus; on-line connection with distant experts for farmers and dentists who need immediate help and advice. A similar centre is planned in Brabrand, in a neighbourhood with a large number of unemployed, single-parent families, immigrants and young people. The centre is expected to provide vocational training in new technologies and, as a result, attract companies to settle in the area. The Committee on General Education is evaluating the first results of the projects already started throughout the country.

In Copenhagen the municipal authorities have established a combined employment and education initiative

'Teknologi og Informatikcentret' (Technology and Informatics Centre), where pupils and teachers from primary and secondary schools can use computers and receive training. The instructors are former unemployed who have in turn been trained at the centre. Previous experience shows that 80% of unemployed people who have worked at the centre have subsequently found employment.

At the level of formal education, the Danish Ministry of Education paid an extra grant to university students in computer science, engineering and biotechnology, so that they could carry on studying during the last summer holidays and thus complete their studies faster. The reason for this experiment, which concerned two universities, is that the country badly needs computer scientists, engineers and biotechnologists.

In the *Federal Republic of Germany*, while the Standing Conference of the Ministers for Culture and Education (Kultusministerkonferenz) intends to establish training courses on information technologies in all schools, specific problems are tackled by less conventional means. Having observed that girls showed less interest in learning computing when directly competing with boys in the same classes, a women's magazine organized a 'computer camp' for 160 young women, with the support of a DM 80 000 grant from the Federal Ministry of Education and Science. Within a few days, over 20 000 women applied.²

II. The attitudes of the two sides of industry towards new technologies

1. Employers and trade unions

The positions of the *Spanish* trade unions with respect to technological innovation have been clearly set out at a

number of recent events and in publications. The UGT (Union General de Trabajadores) discussed the issue on the occasion of its XXXIV Congress. UGT believes that technological change is an unavoidable reality, but calls for supervision and active control of the introduction of techniques and investment in new technologies. In particular, it puts forward a number of conditions, namely: that the general lines of technological and industrial policy should be agreed upon, ensuring effective participation of employers and unions; that the economic and industrial aspects should be considered together with the social aspects and with the improvement in the quality of life; that the introduction of new technologies should be conceived to promote new processes and new products designed in Spain with the Spanish and EEC markets in mind, since this is the only guarantee that it will ensure the creation of new jobs, the satisfaction of social needs and a greater degree of technological and economic independence; finally, that R&D projects must include a study of the social consequences of new technologies, including all education and vocational training aspects.³ Various concrete measures are proposed, such as: the creation of regional support services for companies, financial aid and tax relief, the introduction of CAD/CAM systems and the setting-up of centres for the collective use of small and medium-sized firms, technology procurement programmes for the public administration, concertation of R&D activities by grouping together research firms and specialized centres. As concerns collective bargaining, UGT demands prior consultation and negotiation in order to control the effects of the introduction of new technologies; and agreements on health and safety at work, training and

¹ Osborne, J. 'Main proposals in the White Paper on manpower policy', *Irish Business*, October 1986.

² *Frankfurter Rundschau*, 10 April 1986, *Computer Magazin*, No 1-2, 1986.

³ UGT, *Politica Sindical*, 1986.



Copyright D. Giry/R. E. A.

retraining programmes, and the sharing of productivity gains.¹

As far as the other main union, the Comisiones Obreras (CCOO), is concerned, its policy is set out in various working documents, having as more general reference the resolutions of its III Congress held in 1984. Since 1981, the CCOO have been running a project on 'industrial policy and new technologies' with the participation of union members and experts. Like the UGT, the CCOO have an open attitude towards technological development but believe that its effects will depend on national economic policy and on the actual way in which new technologies are introduced in companies.² Two basic requirements are set forth in order to avoid negative effects: that the existing

technological dependence be reduced and the production of new equipment and services and the improvement of the quality of products be promoted; and that greater resources be invested in R&D. To achieve this, the public sector must take an active and major role, and negotiations must take place at two levels: between the government and the two sides of industry on government policy, and between employers and workers in technology agreements at the level of firms and sectors. These agreements should include the early provision of information on the equipment to be introduced, the reduction of working time, the retraining of workers and the new design of jobs, the guarantee that no dismissal will occur as a result of the introduction of new technologies, the involvement of the union in

changes concerning the staff, a ban on the utilization of data for purposes of control, the protection of the working environment and of health, and the destination of the economic benefits produced by the increase in productivity.³

¹ For UGT's positions, see also 'UGT ante el Libro Blanco de la Reindustrialización', *Economía Industrial*, No 232, July–August 1983.

² Confederación Sindical de Comisiones Obreras, 'Ponencias del III Congreso Confederado', Madrid, June 1984, in *Gaceta Sindical*, special issue, October 1984.

³ For the recent developments of CCOO's position, see the minutes and documents of the meetings of the group of experts and union members on 'Nuevas Tecnologías' of the Confederación Sindical de Comisiones Obreras, held on 22 May and 25 June 1986.

The challenges of the technological revolution are producing some changes in the *Danish* trade union structure. Three federations, namely those of the metalworkers, electricians and sheet-metal and pipe workers have agreed to create a new 'technicians cartel' in order to respond to the technological revolution by education. However, the Semi-Skilled Workers Trade Union (SID) has strongly criticized the new cartel, stating that the three unions involved are protecting their own interests and excluding other groups. SID suggests that the overall education policy should be the responsibility of the central federation LO. The latter has agreed to prepare a joint programme on trade union education policy. However, the need for organizational restructuring is emerging also in other areas: thus the National Union of Clerical Workers HK has invited typographers, lithographers, bookbinders and journalists, together with HK members working with computers, to create a new 'media cartel'. Other trade union federations have put forward the need for new structures, in order to keep up with technological developments. Equally, the need for education and training in new technologies is being stressed by several unions and some initiatives are being taken. For example, the HK has set up a large project in vocational in-service training in information technology, offering a wide range of courses to its members. By the end of 1987, 16 educational centres will have been established throughout the country and in 1988 each member will pay an annual fee to allow 25 000 members to participate in the courses each year.

Other unions are producing handbooks for their members to assist them with the introduction of new technologies. The Dansk Kommunalarbejder Forbund DKA (Federation of Danish Municipality Workers) has published a booklet 'Teknologi', to enable its members to use the Cooperation Agreement and the Technology Agreement¹ to become involved in technology decisions at an early stage. The booklet is primarily aimed at the health and hospital field but could also be used in other spheres. It stresses that all staff categories

should be involved in the decision-making process. A handbook has also been published by the social workers trade union Dansk Socialradgiverforening, where a method for assessing the possible impact of new technology on the work situation is presented. The assessment of technology is based on how it responds to the needs of the users and how it affects the employment and working conditions of social workers.

Some ideas on trade union strategy in relation to new technology are set out in a number of articles published in the *Federal Republic of Germany*. An article by a member of the Economics Institute of the trade unions association (Wirtschaftswissenschaftliches Institut der Gewerkschaften WSI) on information technology as a challenge to trade unions, comes to the conclusion that, besides traditional protection against the adverse effects of rationalization for employees, the trade unions have a number of new tasks, namely: the reduction of working time together with qualitative changes in work; co-determination at all levels of the decision-making process in firms and in society; an economic framework which allows the involvement of the employees and citizens concerned in the control and design of new information and communication technologies.²

Another article was written by the secretary general of the post office workers' trade union (Deutsche Postgewerkschaft). He notes that the trade unions have concentrated their strategy too much on the defence against capital-oriented strategies, as an answer to the economic crisis. He proposes a radical change of thinking, which takes more account of the attraction of conservative and liberal thinking, as well as that of the 'green' positions and of alternative models of living and working. Thus, the unions cannot ignore the fact that many employees are in favour of the decentralization of work, of greater freedom in working time, and of the removal of a strict separation between work and home.³ It may be recalled that the German unions have expressed their opposition to decentralization and tele-home-work several times. As recently as

March 1986, the convention of the salaried employees of the Industriegewerkschaft Metall passed a motion to call on the board of the union to influence the federal and State governments against the possible spread of telework.⁴

The proposal of the *Dutch* trade unions to set up, with the support of the government, 'Technological Advisory Centres' (TAP) to disseminate knowledge and experiences⁵ has met with strong opposition from the Association of Dutch Employers (VNO). The employers object to government financing for an activity which is of interest only to the workers, and fear that the TAPs will claim free access to firms in order to carry out research, as is reported to be happening in the Federal Republic of Germany where similar centres are already in existence.⁶

Alternative proposals have since been put forward and common agreement has developed on the setting up of a 'Common Support Institute for Works Councils in Matters of Technology' (GBIT), which should be a technological twin institution to the existing 'Common Support Institute for Works Councils'. This is in turn part of the tripartite Stichting voor de Arbeid (Foundation for Labour).

Meanwhile, the Dutch Trade Union Federation FNV continues with its own activities of research and information on new technologies. Two initiatives can be mentioned: one is the publication of a manual called 'Working better with screens', to help employees to organize their work as well as possible and in accordance with the legislation on work

¹ Replaced in 1986 by the new Cooperation Agreement. See *Social Europe*, No 1/1987.

² Briefs, U., 'Die informationstechnologische Entwicklung und die Zukunft von Arbeit und Gewerkschaften', *WSI-Mitteilungen*, No 3, 1986.

³ Klose, H.U., Müller, M. (eds.), *Strategien gegen Arbeitslosigkeit, Naturzerstörung und Entfremdung*, 1986.

⁴ *Nachrichten zur Wirtschafts- und Sozialpolitik*, No 4, 1986.

⁵ See *Social Europe*, No 3/1986.

⁶ Van Der Vaart, S.P., 'Technologiesteun voor bonden: "wordt vervolgd"', *Het Financieel Dagblad*, 22 July 1986.

environment;¹ the second initiative is a technology project in 20 firms in the banking, insurance and retail sectors, in order to make an inventory of automation developments to be used to design a strategy for the trade unions.

On screens again, the *Danish* National Union of Clerical Workers, (HK) demands that the 30 000 visual display terminals to be bought for central government administration in the next 10 years should be of the low radiation type. The union wants a thorough investigation of the radiation hazard, and refers to the situation in Sweden, where the government accepted that employees should approve of new VDUs. Some local technology agreements signed in Danish organizations state that pregnant employees can be exempted from working with VDUs if they so wish.

2. Collective agreements and labour disputes

The protocol statement on industrial relations, signed in *Italy* in December 1984 by the Stateholding IRI and the trade unions,² was renewed in July 1986 after a trial period. The agreement fixes procedures and mutual guarantees between IRI management and unions, with the aim of reducing conflicts and promoting the development of companies within the group. It is based on a system of information and consultation, so that unions participate in the design and implementation of the industrial and labour policies of the group in all phases. The renewed agreement confirms the system of committees with a fifty-fifty representation of employers and unions; one of their main tasks is the evaluation of strategic decisions and major innovation projects, all to be discussed before being implemented with particular regard to their effects on employment, training and skills. The committees, although their suggestions and evaluations are not mandatory, may propose alternative policies and have the institutional task of drafting proposals for labour policy, industrial relations and the labour market. The members of the

committees are granted special information rights, which include: information on the market forecasts of the companies concerned; information on the planned investment and divestment by sector, area and company; information about the main programmes of technological and organizational innovation by sector, area and company. Moreover, preliminary information has to be supplied to the trade unions when major technological innovations are planned, if they involve changes in work organization or work schedules. Another task of the committees is to settle conflicts by conciliation and agreement, avoiding as much as possible, strikes and recourse to labour tribunals.

In this respect, a recent application of the agreement concerned a conflict at a metalworking factory at Terni. The committee concerned intervened to disapprove of the strikes, because the shop stewards had not implemented the consultation procedure as laid down in the agreement, which provides for a three-day period of consultation with management before a strike is declared.

A similar protocol statement was signed in September 1986 by the trade unions and the Stateholding EFIM. Consultation committees are to be established, with a composition and tasks similar to those of the IRI agreement. Since EFIM is having to contend with serious industrial crises in some of its industries, this agreement may mark an important turning point in unions' attitudes towards the management of sectoral crises.

Still in Italy, several national collective agreements for the private sector have been concluded or are approaching conclusion. They all contain clauses on information rights, with special emphasis on technological innovation. Among those which have been concluded, the agreement for the printing and publishing industry centres on three main issues: a reduction in working hours to 38.5 hours a week, an increase in wages, and the establishment of information rights on technological innovation, with special regard to information technologies. Both agreements in the

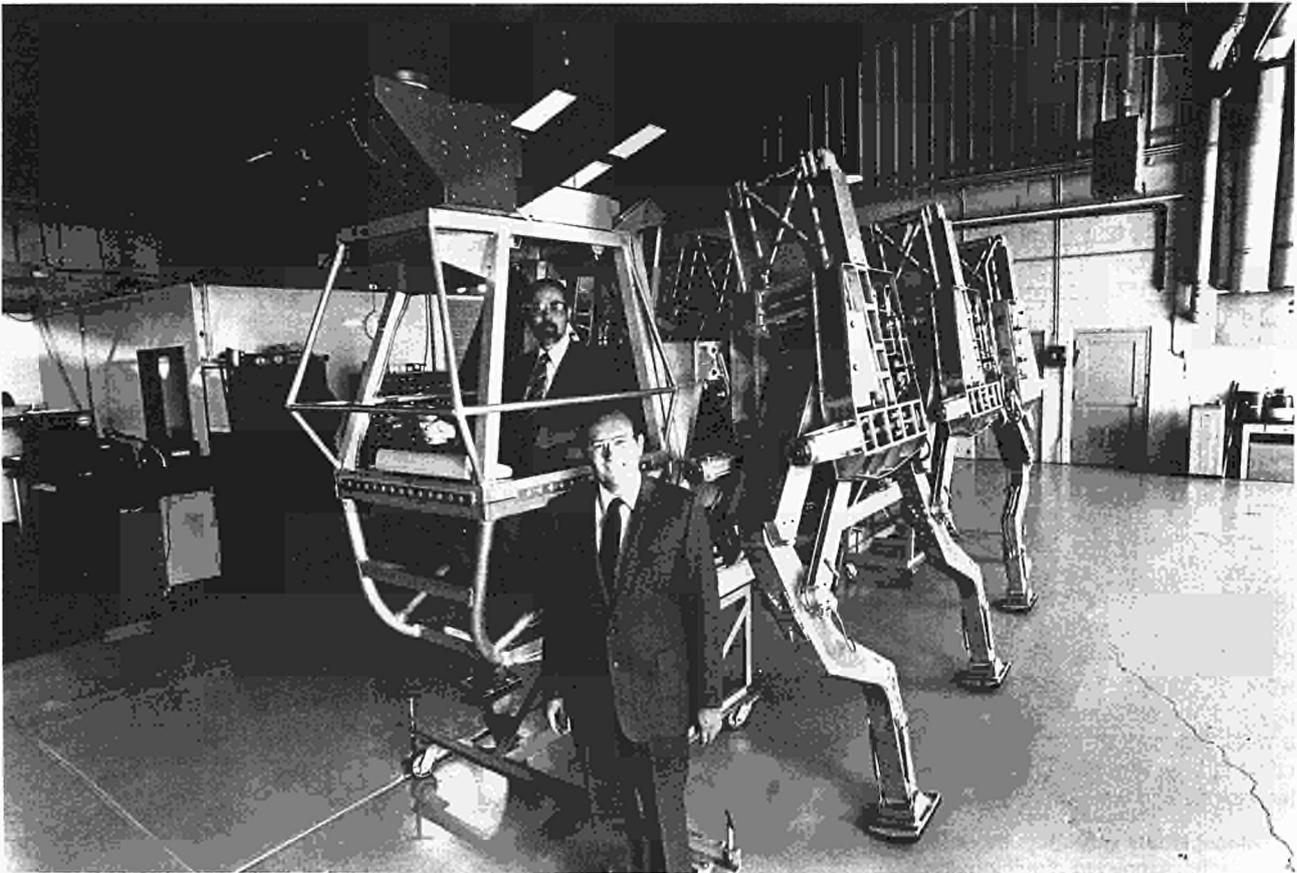
chemical industry, concerning respectively public and private employers, refer to information rights and industrial relations. The agreement with the public employers' association ASAP, signed in July 1986, establishes a national committee with representation of unions and employers on a fifty-fifty basis, along the lines of the IRI protocol. In the private chemical industry, where trade unions obtained a reduction in annual working time in exchange for more flexible working schedules, 'information clauses' were included in the agreement, providing for prior information and discussion in joint committees of all innovations having consequences for manning levels and work organization. These will apply to all firms employing more than 500 workers, and local unions will be entitled to assistance from external experts in the discussion. Moreover, a 'national observatory' is to be set up, with experts representing employers and unions, to make periodical assessments of production and employment trends in the industry. Finally, a more specific agreement has been signed by unions and private employers in the oil industry, under which unions and employers will meet periodically to discuss market prospects, employment trends, health protection at the workplace, training programmes and the foreseeable effects of innovation programmes.³

In *Belgium*, a national interprofessional agreement was signed in September 1986, after 10 years during which such agreements no longer formed part of the system of industrial relations. It covers three main items: training for young workers (part-time work/part-time training programmes as possible ways of absorbing youth unemployment); employment (wage moderation combined

¹ Burringh, E., *Beter werken met beeldschermen*, Stichting FNV Pers/Uitgeverij Raamgracht, Amsterdam 1986.

² See *Social Europe*, No 3/1985.

³ Information about the agreements under conclusion when this survey was being prepared will be provided in the next issue.



Copyright J. L. Atlan/Sygma/Van Parijs

with reduction of working time and compensatory recruitment); and some recommendations to the government. Among the latter, the introduction of new technologies is mentioned, only in so far as they make reference to collective agreement No 39 and ask the government to carry out an assessment of the social consequences of the introduction of new technologies.

In October 1986, the Belgian Christian Union (CSC-Confédération des Syndicats Chrétiens) published an analysis of the strikes which occurred in 1985. This was the first time that a significant number of strikes which can be considered to express opposition to the introduction of new technologies was recorded. These can be found among

the strikes on wage issues (20% of the total), most of which were precipitated by changes in tasks and professional profiles; moreover, almost all strikes on working conditions (7% of the total) concern changes in work organization. According to the study, one strike in four is linked to the difficulties which workers face when new production techniques are introduced.¹

Some judicial decisions in the *Federal Republic of Germany* concerned issues relating to the introduction of new technologies. The Constitutional Court of the *Land* of Hessen declared the law on the representation and co-determination of civil servants in the public administration of the State not to be in accordance with the Constitution of Hessen.

The law gave shop stewards a power of veto when the introduction of new information technology was planned.²

In another case, the Federal Labour Court prohibited the installation of control machines at welding units, that indicate the number of items produced in a given time. The court argued that such installations generate a feeling of being controlled and supervised, which is against the basic rights of the individuals.³

¹ 'Les grèves en 1985', Service d'Etudes CSC et ACV, *Vakbeweging/Syndicaliste CSC*, No 267, 25 October 1986.

² *Frankfurter Rundschau*, 2 May 1986.

³ *Frankfurter Rundschau*, 19 February 1986.

The disputes in the press continue in the *United Kingdom*. In the conflict opposing the print unions and the News International Group,¹ after the refusal by both unions concerned of the compensation offer from the Group, the unions continued their mass-picketing of the Wapping plant and stepped up their campaign for a boycott of the NI titles. The continuation of the conflict produced further disagreements within the trade union movement, with the NGA (National Graphical Association) delegates voting unanimously at their annual conference to seek the expulsion of the electricians' union (EETPU) whose members ensure the operation of the Wapping plant. Other newspapers reached agreements in a quicker and more conciliatory way. Journalists at the *London Standard* achieved a pay and technology agreement which includes a year-long strike-free deal plus a clause preventing journalists taking over the work of printers. Besides the general pay rise, the agreement gives a UKL 15 a week payment to journalists who become familiar with new computer-based technology and write on screens.

Management will not be able to make editors move to direct inputting of material, thus safeguarding traditional print union jobs.

Also the *Daily Telegraph* reached agreement with its production unions at the new printing plant in East London. Under the terms of the agreement, there will be a 60% reduction in manning levels and binding arbitration.

The new plant will be operated by 670 workers, compared with 1 680 in the old Fleet Street plant. All disputes will be dealt with by a joint committee of unions and management and, if agreement cannot be reached, arbitration will be used.

The computerization of the daily press goes on also in other countries, albeit with fewer conflicts than it is generating in the UK. The largest *Belgian* French-speaking newspaper, *Le Soir*, is in the process of computerizing its editing and composing rooms. A project of technological change has been studied for two years, as well as the choice of

equipment and software best adapted to the needs of the newspaper. As a result, journalists will input their work directly into video terminals. So far, no negative impact on employment has occurred; retraining programmes have been envisaged for workers made redundant by the new technology.

In *Denmark*, after the major changes that have taken place in the printing industry, the prospects for the printers are improving. The trade has now an unemployment rate as low as in the early 1970s. In July 1986, the printing union had 9 000 members of which 3.6% were unemployed. However, the number of printers enrolled in the union 10 years ago was 12 000.²

III. Studies and research on social effects of new technologies

1. Diffusion of information technology

In the *United Kingdom*, the Policy Studies Institute published a new report, on the diffusion of microelectronics in UK industry, using the same sample of firms as their first study in 1981. According to the report, 53% of all factories are now using microelectronics compared with 39% in 1983 and 21% in 1981. More factories use the technology in processes than in products — 49% of factories use microelectronics in processes compared to 13% for products. The report suggests that between 1983 and 1985 86 000 jobs were lost in manufacturing as a result of the introduction of microelectronics.³

A boom in the production of computers has been reported in the *Federal Republic of Germany*. In 1985 the production of computers increased by 25%

over the previous year; the growth over 1980 has been 132%. From 1980 to 1985 the number of people employed in the computer industry increased from 57 000 to 73 000.⁴ Moreover, the Institut der Deutschen Wirtschaft published some figures that run counter to the widespread German opinion that the country lies behind in the production and application of new information technology. For instance, the German machine-tool industry produced in total 10 614 computer-aided machines, i.e. as many as the USA, UK and France together. In the use of robots, the Federal Republic of Germany holds second place in a comparison with France, the UK, Japan and the USA, having 10 robots per 10 000 employees in manufacturing.⁵ The FRG is however behind in other fields, such as banking automation, since there are only 2 700 ATS's installed, as compared with more than 7 000 in both the UK and France.⁶

To map out the renewal of technology in *Danish* industry, the Industriradet (Council of Industry) carried out a survey among its members in April-May 1986. It found that: half of the companies have made considerable investment in new process or production technology in the last year and 70% have plans for new investment in the next year; in about one third of the companies which have invested, problems of unexpected magnitude have emerged in the implementation of the new technology; lack of qualified labour makes the use of new technology difficult in many companies.⁷

Difficulties in introducing new technology in Danish firms were found also by a study carried out by the Department for Labour Psychology at the Technological Institute (Afdelingen for Ar-

¹ See previous issues of *Social Europe*.

² *Aktuelt*, 23 August 1986.

³ *Microelectronics in industry: Promise and Performance*, Policy Studies Institute, 1986.

⁴ *DIW-Nachrichten*, 29 May 1986.

⁵ *Frankfurter Rundschau*, 7 February 1986.

⁶ *Frankfurter Allgemeine Zeitung*, 20 June 1986.

⁷ *Ny teknologi-forskning og udvikling. Resultater fra et rundspørge i industrien*, Copenhagen, Industriradet, May 1986.



Copyright J. Pottier/R. E. A.

bejdpsykologi ved Teknologisk Institut). The study found that introduction is not as easy as management wish or suppliers promise. Neither are the advantages of the new technology to the employees and the company altogether

clear. Work organization proved to be a crucial factor at the time when the technology is introduced, and the report suggests that the participation of the employees and of their representatives in the decision-making process from the

very beginning is of vital importance to obtain good results.¹

The French 'Groupe de Stratégie industrielle' (Industrial Strategy Group) prepared a report on the diffusion of new technology in France, focusing on microelectronics, micro-informatics, new materials and biotechnologies. In all cases, the report found that, in spite of the rapid diffusion of these technologies, France remains behind in comparison to the other industrial countries, both in the development of supply of high technology products (which has adverse effects on the balance of trade), and in the utilization of new technologies (which has negative effects on the competitiveness of French firms). The report puts forward a large number of proposals, some general and some specific to particular industries. Among the general proposals, the report stresses the need to adapt technological information to the requirements of SME, the need for a public procurement policy which encourages the creation of an information technology market, the need to strengthen initial training for a number of 'new' professional profiles and to open up training in informatics to students with a non-scientific background. Firms should also increase their efforts in vocational training. Finally, the social dimension of new technologies is dealt with, by proposing the participation of the employees in technological projects, and awareness activities for the general public. It may be observed that the proposals on public procurement policy run counter to recent government decisions in this field.

The Hellenic Computer Scientists Association carried out a market research on computer equipment in Greece. The value of total installed equipment (mainframes, mini, supermicro and microcomputers) is rather evenly distributed between the private (52.3%) and public (47.7%) sectors; however, in terms of installed units, the majority of mainframes are to be found in the public sector (61%), while the pri-

¹ *Lo-Nyt*, 21 August 1986.

vate sector holds the large majority of minis, supermicros and microcomputers. In terms of market shares, IBM holds almost half (45.2%) of the Greek market, while the rest is shared out between several producers, all, with the exception of Sperry Univac, having less than 10% of the market. As far as utilization is concerned, the largest number of computers (31.5%) can be found in commerce, followed by manufacturing (23.9%), services (12.1%) and banking/insurance (9.5%). The latter, however, accounts for the greatest share (26.2%) in the total value of installed equipment.¹

To celebrate the 25th anniversary of the installation of the first robot in *Belgium*, an exhibition and a colloquium were organized in September 1986 by ISIR (International Symposium on Industrial Robotics). According to a paper presented by the Institut belge de robotique et d'automatique (Belgian Institute of Robotics and Automation), about 960 robots are currently installed in Belgium, two thirds of which in the automobile sector; 56% of robots come from Europe, 35% from the United States of America and 9% from Japan. Additional information is provided by a special issue of the *Bulletin Athena*.²

Belgian industry is third, after Sweden and Japan, in a ranking which relates the number of robots to the volume of production; however, the high rate of robotization of the automobile industry is not matched by a similar degree of robotization of other industries, such as engineering and plastics, despite the importance of these industries in the Belgian economy. Moreover, a significant difference emerges between large and small-scale enterprises: the latter are much more reluctant to use robots, due not only to the size of the investment required, but also to the lack of adequate training of the managers of SME in new technologies.

A much lower degree of diffusion of robots emerges, on the contrary, from a recent *Spanish* study.³ The study points to the scant use of robots in Spanish industry as compared to other European countries and thus to the potential for tremendous growth of the Spanish mar-

ket. As far as supply is concerned, several multinational firms are present on the Spanish market, and recently the first robots developed and manufactured in the country have made their appearance; this seems to indicate that the basic technology is now available.

The Spanish market is expanding more rapidly in computers. According to the latest estimates, the sales of the 10 largest companies increased by over 30% in 1985. As in other countries, market leader is IBM, with a strong competition, particularly among European companies, to occupy the next places. Among the top ten, only one national company is recorded, namely Secoinsa, in which, however, the Japanese Fujitsu now holds the majority of equity. A sub-market of special importance is that of professional microprocessors, of which 52 000 were sold in 1985, a figure that puts Spain in sixth place in Europe. Three companies, of which only one European, share more than half of the microprocessor market, and no Spanish company is recorded among the main producers. The growth of the market for software and services is also of importance; even in 1985, the value of software and services for microprocessors was twice as high as the value of hardware.⁴

Microcomputers are far less widespread in *Portugal*. According to market research carried out by Emitel, more than 93% of companies and organizations did not have microcomputers in 1985. The low development of the market is attributed to the existing systems of business organization, the lack of credit availability and inadequate information from the suppliers. Nine producers dominate the market, accounting for 70% of all installed micros. Microcomputers are used mostly for management functions (64%), followed by automation (28.5%), while training and education and scientific research account for small percentages of use (4.2% and 3% respectively). As far as sectoral use is concerned, two thirds of micros can be found in trade and services, and in manufacturing industry. From the supply side, most of the major hardware producers worldwide are present on the Portuguese market, in spite of its small size.

Of the top ten companies, eight are subsidiaries of multinational firms and only two are national companies which distribute products of foreign firms. Computer services firms are hard to identify, since they generally supply a number of diversified services and consulting activities. Software production by independent firms is almost non-existent and only three of the main service firms can be strictly considered software houses.⁵

On the occasion of the 1986 International Office Automation Fair (SMAU), held in Milan (*Italy*) in September, the organizers published a survey of the market for information technologies in Italy. In 1985, total sales of hardware and software on the Italian market showed a 26.6% increase over 1984. About 240 hardware suppliers were recorded, and concentration in this segment of the market seems to be decreasing, in so far as the market share of the top seven suppliers was 74% in 1985, as compared to 79% in 1983. The rate of growth of the hardware market was 21%. On the other hand, the market for software and services grew by 31.1% in 1985; the number of suppliers recorded in the survey was 2 850, and employment is calculated to have reached 37 000 units (the estimated number of employees was 34 000 in 1984).

The conditions for the emergence of new firms in the computer services sector have been studied in the *Netherlands* by a graduate student at the University of Nijmegen, M.W. L. Dingenouts. By examining a relatively large sample of newly created firms, he found that many start off with little initial capital (half of the firms started with less than HFL 10 000); they have a small number of fixed clients (2 or 3 on average) and they

¹ Market research for electronic computers, Athens, Hellenic Computer Scientists Association, 1986.

² Goretz, R., 'Robotique: bilan et perspectives', *Bulletin Athena*, No 23, September 1986.

³ Angulo, J.M., No, J., *Robotica*, Madrid, Paraninfo, 1986.

⁴ *El Pais*, 12 November 1986.

⁵ For a general description of the new technology situation in Portugal, see *New technology and social change*, Supplement to *Social Europe*, 1987.

sell their services predominantly in the region where they are located. Newly created firms are mainly active in four fields: programming for specific applications, consultancy for advanced techniques, office automation, and data bases. They are less present in more advanced fields, such as CAD and CAM. The profile of newly created firms suggests that they may have problems of survival, as the market becomes more crowded; in order to maintain a competitive position, they should increase their turnover, invest in innovation, specialize, and build up a position on the export market.¹

Still in the Netherlands, a study carried out by the market research bureau Heliview shows a low level of computerization of administrative functions in the private sector in 1986. The degree of computerization is the highest in accountancy (63%), followed by stock control, cost control, purchases and sales (43%). Much lower degrees are recorded in production planning (21%) and maintenance control (11%). All functions, and particularly the least automated ones, are expected to increase their degree of computerization substantially in the next two years. Another issue examined in the survey is the degree of integration of computerized functions: only 24% of firms using in-house computers have administrative functions totally integrated; at the other extreme, in 47% of such firms the functions are not integrated at all.²

2. Employment

In July 1986, the Dutch Minister for Social Affairs and Employment presented to Parliament a memorandum on 'Information technology and employment'. It gives an overview of the results of studies recently completed on the effects of the application of information technology in firms. Many studies point to the labour saving effects of technology. However, it is also shown that the use of information technology helps firms to reduce costs and that flexible automation enables firms to improve the quality and enlarge the range of their products, thereby creating additional

demand for hardware, software and services. In the long term, these factors are expected to have beneficial effects on employment. The structure of qualifications is expected to change, with a shift towards higher levels on the professional ladder. Routine manufacturing jobs are forecast to decline sharply.³

In France, a survey carried out by BIPE (Bureau d'information et de prévisions économiques) for the APEC (Association pour l'emploi des cadres) in 353 firms using automated production equipment, came to the conclusion that since 1980 automation had had little effect on employment levels. On the other hand, in the last 15 years 57% of the enterprises experienced a reduction in employment. The introduction of automated equipment brought about changes in the structure of the enterprises and in job content. New coordination and management functions have emerged, and often the firms had problems in finding suitably qualified personnel for these functions. As far as middle management specifically is concerned, two thirds of the firms surveyed recruited for tasks directly related to the automation of production, particularly for computer-assisted production management and for product development. The managers to be recruited are required to have some experience in automation and some knowledge of the specific sector; moreover, they are sent for specific training organized by hardware producers.

As far as total employment is concerned, BIPE argues that industrial employment is a function primarily of the output level, while technology is of secondary importance. This conclusion is based on two observations: first, productivity gains induced by information technology are not greater than those obtained in the period of high growth (the annual rate of productivity growth was 4.6% in the period 1963—73 and 3% from 1974 onwards); secondly, new technologies maintain employment levels in the production of equipment goods and in certain user branches. In the last few years, some manufacturing branches have even increased employment, and these are precisely the

branches which have maintained their investment level. To the year 2000, BIPE estimates that employment creation in industry will be greater than employment losses.

Rather optimistic evidence emerged also from a number of employment surveys in the UK. A report from Strathclyde University suggests that few major job losses have occurred in manufacturing industry because of new technology. The technologies studied included computer-aided design, flexible manufacturing systems, computerized typesetting, and centralized computer systems with satellite visual display systems. Based on interviews with managers and workers in 42 companies, the report found little evidence of worker resistance to new technology. Training was often seen by companies as a nuisance and expense rather than an important part of the installation process. Most of the workers thought their work had either become more skilled or that their skills were unaffected by the introduction of new technology.⁴

A major survey of private and public sector employers carried out by the Institute of Manpower Studies for the Occupational Study Group concluded that the size of the overall workforce is unlikely to change significantly over the rest of this decade. However, major qualitative changes are expected to occur. Employers' central thrust is towards improved work performance, greater knowledge intensity, multiple skills, innate attributes and greater flexibility. This applies particularly to management and professional staff.⁵

¹ 'Geen continuïteit starters in dienstverlening', *Automatiserings Gids*, 4 May 1986.

² Brogt, J.W., 'Achterstand wordt nu snel ingelopen', *AG-Report*, September 1986.

³ Ministerie van Sociale Zaken en Werkgelegenheid, *Informatietechnologie en werkgelegenheid*, Den Haag, June 1986.

⁴ Simpson, D., Love, J., Walker, J., *The effect of new technology on work*, Strathclyde University, Fraser of Allander Institute, 1986.

⁵ Rajan, A., Pearson, R., *UK occupation and employment trend to 1990*, Butterworth, 1986.



Copyright P. Sittler/R. E. A.

Two studies just completed provide an overview of the employment situation of university graduates in *Spain*. First, a study of the *Fundacion para el Desarrollo de las Comunicaciones*, Fundesco (Foundation for the Development of the Social Function of Communications) and of the *Escuela Técnica Superior de Ingenieros de Telecomunicaciones* (University School for Telecommunications Engineers) on the supply of and demand for engineers and university graduates in electronics, computer science and telecommunications, estimates a deficit of 12 820 graduates over the period 1985–88. This results from a supply of 8 430 and a demand of 21 250. The largest deficits are expected in telematics engineering and software technology. Moreover, a qualitative discrepancy is found between company re-

quirements and the knowledge provided in university education.

The second study, by the Ministry of Education and Science,¹ is broader in scope as it covers all university disciplines, and analyses separately the demand of industrial and services firms, and of public administration. In the production sector, the share of graduate employees in jobs related to information technology is still quite small (telecommunications engineers account for 3.1% and computer science graduates for 1%); they can be found mostly in larger firms. From the point of view of growth in demand, however, the jobs related to computer science are second only to commercial jobs. Moreover, they are better paid than other jobs; experience is demanded, while qualifications may

have been obtained in a wide and varied range of disciplines. On the other hand, the share of scientific and technical graduates going to work in public administration is much smaller than in firms: this may point to a lower degree of utilization of information technology, but also to the fact that the demand from public administration is far less specific than that of the private sector. Finally, the study points out that computer science know-how is fundamental in complementing graduate training, especially that of economists and engineers.

¹ *Secretaria de Estado de Universidades e Investigación, El mercado de trabajo de los titulados universitarios en España*, Madrid, Ministerio de Educación y Ciencia, 1985.

The *Danish* EDP (data processing) workers trade union, Prosa, carried out a survey among the approximately 500 EDP assistants who graduated in June 1986. The survey shows that three out of four acquired a job soon after graduation. According to Prosa, this indicates that the present supply of assistants is sufficient to satisfy the need for this category of computer staff, and contradicts the demand of the Employers' Association DA to have the capacity of this kind of education enlarged substantially.¹

Nevertheless, public employers experience great difficulties in holding on to their computer staff, because the private sector offers considerably higher wages. Counties and municipalities report problems in this respect. For example, the county of Frederiksborg loses every year about 20% of its computer staff and now has to hire consultants to fill the gaps. Also the municipality of Copenhagen lost 57 out of a total of 175 computer staff since the beginning of 1985. On average, the staff in the computing centre stays with the municipality for three years. Even the Data Processing Centre of Defence loses people to private companies and has to hire consultants at much higher salary rates.²

Still in Denmark, The Labour Market Board (Arbejdsmarkedsnaevnet) of Vejle county made a forecast of employment in the office sector to the year 1991, in which 41 companies participated. A decrease in the number of clerical staff is expected, affecting largely women, while their tasks are expected to be taken over by people already employed in the companies. The amount of work will increase but this will not mean more employment; a closer integration of work functions will continue to be an important effect of the use of computer technology.³

A report on automation and employment in the wholesale trade was published in the *Netherlands* in July 1986.⁴ In 1985 more than 50% of firms had computerized their administrative functions and another 20% planned to do the same. The automation of storage is expected to have labour saving effects:

so far, some 100 000 people working in this branch have been confronted one way or another with automation; their number is expected to increase to 170 000 by 1988. Nevertheless, total employment may well increase, thanks to the growth in turnover: the report advances the figure of 330 000 employees in 1988, as compared to 315 000 in 1985. Shortages of qualified staff to handle the automated systems are reported by half of the firms: shortages are particularly felt in management, purchases and sales, and administrative functions.

3. Work organization, qualifications and skills

The study of the *Spanish* Instituto Nacional de Empleo INEM (National Employment Institute) on 'Employment and training requirements in 1985',⁵ contains an analysis of the effects of technological innovation on labour demand and on vocational training needs. In general, the study indicates that technological innovation creates a large demand for a great variety of skills. It imposes, in the first place, a 'common minimum' of know-how and attitudes, common to a large part of the working population. Basic know-how is required in many areas, such as: computers, BASIC language, basic information on technological innovation and its main social implications, automation, CAD/CAM, flexible manufacturing and 'just-in-time' systems, as well as a knowledge of English and sometimes French, and an introduction to the economy, the firm and working life. As far as specific professional groups are concerned, the study identifies an increase in demand for professionals, technicians and the like; and for managerial staff both for the public administration and for companies. On the other hand, demand for personnel in administrative services will decline, as well as demand for traditional professional groups, with the exception of 'service staff in the hotel industry, domestic and personal services, and security staff'. Among industrial jobs, a decrease in the demand for direct labour in assembly and manufacture is expected, while there will be an increase

in indirect jobs involving maintenance and quality and process control.

In the *Federal Republic of Germany*, two industrial sociologists from the University of Göttingen carried out an empirical analysis of the impact of information technology on clerical staff in different sectors (industry, banking, insurance, and public services). They observe that comparisons of statistical data over time are not appropriate for an analysis of qualifications, since there is a structural change going on which encompasses the definition of qualifications. In any event, the main conclusions of the study are the following: the services sector no longer compensates for the losses of jobs in the industrial sector; the demand for employees with low level of skills will continuously decrease, while the demand for highly skilled staff will remain unchanged; however, the ongoing centralization of administrative functions will produce a polarization of the job structure and vertical mobility will become more difficult; women will be particularly affected by the negative impact.⁶

A study on work organization following the introduction of new technologies, published in the *Netherlands*, examines in detail two cases of firms in the engineering sector.⁷ Although the limited number of cases does not allow any generally valid conclusions to be drawn, the study does provide some interesting indications. In both cases, opportunities

¹ *Aktuelt*, 5 July 1986.

² *Berlingske Tidende*, 21 Juli 1986; and 18 September 1986.

³ *Aktuelt*, 16 July 1986.

⁴ Economisch Instituut voor het Midden- en Kleinbedrijf, *Groothandel en werkgelegenheid*, EIM Zoetermeer, 1986.

⁵ INEM, *Requerimientos de empleo y formacion profesional 1985*, Madrid, 1986.

⁶ Baethge, M., Oberbeck, H., *Zukunft der Angestellten — Neue Technologien und berufliche Perspektiven in Büro und Verwaltung*, Frankfurt a.M./New York, Campus, 1986.

⁷ Berting, J., Van Den Braak, H., *Technological changes in two Dutch factories: Control, flexibility and learning*, Rotterdam, Erasmus University, 1986.

for individual advancement during working life appear to decrease, as promotion ladders become more limited. The possibility is envisaged that greater inter-generation social mobility will be accompanied by decreasing working life mobility. Besides this aspect, no evidence was found of a systematic downgrading of the quality of work. Old types of craftsmanship are increasingly being replaced by new jobs and new requirements, which imply autonomy on the part of the workers and the ability to see one's job as part of an integrated network. The two cases show that the same technological developments may have different consequences, depending on a number of variables, such as the prevailing market conditions, the strategic decisions taken in earlier stages, and the type of work organization.

The proceedings of the third 'Journées de Réflexion sur l'Informatique' have been published by the Institut d'Informatique of the University of Namur (Belgium). Title of the seminar was 'les informaticiens', and it focused on information technology professionals and their relationship with the users. First, the participants examined how professionals intervene in the processes of computerization in the firms, on the basis of case studies in different sectors; secondly, they analyzed the professional profiles of informaticians and their social identity, coming to the conclusion that there is not one common profile of EDP professionals, but a variety depending on the organization, its products, its technology, and the social and technical division of labour. More specifically, they addressed issues such as the qualifications of informaticians and their use in the firms; the social responsibility of computer professionals in a better negotiated development of information technology and their relationship with the trade unions; the problems faced by women in the profession; the development of expert systems and the standardization and obsolescence of informaticians' work, which is, paradoxically, the very product of their own technological achievements. In the conclusions, the need to encourage the crea-

tivity of the users and the social responsibility of EDP professionals were stressed.¹

In the *Netherlands*, the annual salary review of Berenschot Informatica, published in June 1986, provides some information on composition and mobility of EDP staff. Mobility keeps on increasing, though at lower rates than in the past: in 1986 the mobility rate of EDP staff was 10.5%, as compared with 6.2% in 1984 and 9.6% in 1985. On the other hand, the rate of vacancies is still increasing significantly: it went up from 7.1% in 1984 to 11.6% in 1985 and 14% in 1986. Vacancies are particularly found in information management and in system development. As far as earnings are concerned, the average annual earnings of EDP personnel increased by 2% in 1986 over 1985. Overall, in the past few years, their salaries have increased much more than those of employees and of academics. The percentage of women in the profession has remained stable since 1981 at about 6.6%; however, their percentage share can be expected to increase in the coming years, since female employees are relatively more numerous in the starting grades of the profession (ranging between 10% and 17%).²

The *UK Income Data Services* published a report on secretarial workers with word-processing skills. According to the report, most of the 48 organizations in the survey have raised pay grades in order to accommodate word-processor operators or have had to resort to special payments which bypass the normal salary structures. The skill shortage has benefited temporary staff with word-processing skills, many of whom are now earning more than the permanent staff. Many temporary agencies are now offering skilled staff sick pay, holiday pay and long service bonuses to try to attract and keep them.³

4. Working conditions, health and safety

In July 1986 the *British National Economic Development Office (NEDO)* published a report on flexibility based

on a study carried out by the Institute of Manpower Studies in 1985. The report confirms a change in working practices towards more flexible working in a wide range of industry and commerce in the UK. Most of these changes have occurred as a result of collective bargaining rather than being imposed on the workforce but many were marginal in effect.⁴

The *Danish National Union of Clerical Workers (HK)* carried out a survey of retailers who have installed cash terminals using laser beam scanners to read EAN codes. The union found that working conditions for terminal staff have worsened, because the scanners have not been installed properly, and the staff has not been trained as it should. The new terminals have also induced a change in the division of labour because stock control is performed automatically by the system, whereas previously it was done manually by the staff. The old system meant more variety in the staff's daily work.⁵

Studies about the effects of working on screens continue to be carried out in various countries. Recently, a survey by TNO in the *Netherlands* commissioned by the Ministry of Social Affairs and Employment found that workers spending 60% or more of working time on VDUs show significant fatigue, muscular pain, headache and stress. The reasons are attributed mostly to the lack of natural pauses, especially in typing, and to the physical environment, bad lighting etc. No eye damage was however traced.

Working on screens has been the subject of several studies also in

¹ Berleur, J. et al., *Les informaticiens, Actes des troisièmes Journées de Réflexion sur l'Informatique*, Presses Universitaires de Namur, 1986.

² 'Verloop onder automatiseerders stijgt minder snel dan vorig jaar', *Computerworld*, 17 June 1986.

³ *IDS Study 368*, Income Data Services, 1986.

⁴ Atkinson, J. and Meagher, N., *Changing working patterns — How companies achieve flexibility to meet new needs*, NEDO, 1986.

⁵ *HK-bladet*, No 9, 1986.

Spain.¹ Problems of vision, posture and mental health caused by inadequate utilization of screens have been identified, and the measures to be taken have been analyzed. The Department for Health at Work (Gabinete de Salud Laboral) of the Comisiones Obreras, having observed that there about 300 000 screens in Spain being used by about 500 000 workers, has just drawn up a law draft to prevent risks to workers' health.²

The proposed bill is largely inspired by similar legislation in EEC countries, and deals with preventive medicine, protection of pregnant women, a maximum working day on the screen of four and a

half hours, technical and environmental specifications, and protection against radiation.

The Union General de Trabajadores UGT has also shown interest in the subject, and has produced a publication giving guidelines to workers negotiating agreements and for daily union practice.³

Finally, the National Institute for Health and Safety at Work (Instituto Nacional de Seguridad e Higiene en el Trabajo) has collected various papers on screens in a publication which includes also the proposal for a bill on risk prevention.⁴

¹ The first studies were carried out by the CCOO's Gabinete de Salud Laboral, *Pantallas de visualización: criterios básicos de diseño, iluminación y ventilación*, III Simposium de Higiene Industrial, 1979, Madrid, MAPFRE, 1980; the most recent study is by the Asociación de Medicina y Seguridad en el Trabajo of UNESA for the electrical industry (AMYS), *El trabajo sobre pantallas de visualización. Informe del Programa de Investigación*, Madrid, 1986.

² Gabinete de Salud Laboral de la Confederación Sindical de Comisiones Obreras, *Proposición de ley sobre prevención de riesgos para la salud en los lugares de trabajo en que se utilicen pantallas de visualización*, mimeo.

³ UGT, *Guía técnica para el trabajo ante pantallas de datos (directrices sindicales)*. Madrid, 1986.

⁴ INSHT, *Nuevas tecnologías y condiciones de trabajo. Problemática de los trabajadores y usuarios de la Informática: el trabajo con pantallas de visualización de datos*. Madrid, 1985.

ORDER FORM
for Social Europe and Supplements

ORDER FORM

Social Europe

ISSN 0255-0776

Number
of copies:

Price annual subscription

(3 issues per year):

BFR 1000 / UKL 16.50 / IRL 17.60 / USD 24.00

Social Europe + Supplements

Price combined annual subscription:

BFR 3000 / UKL 49.40 / IRL 52.80 / USD 72.00

Name and address:

Date: Signature:

ORDER FORM

Social Europe

ISSN 0255-0776

Number
of copies:

Price annual subscription

(3 issues per year):

BFR 1000 / UKL 16.50 / IRL 17.60 / USD 24.00

Social Europe + Supplements

Price combined annual subscription:

BFR 3000 / UKL 49.40 / IRL 52.80 / USD 72.00

Name and address:

Date: Signature:

ORDER FORM

Social Europe

ISSN 0255-0776

Number
of copies:

Price annual subscription

(3 issues per year):

BFR 1000 / UKL 16.50 / IRL 17.60 / USD 24.00

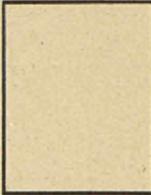
Social Europe + Supplements

Price combined annual subscription:

BFR 3000 / UKL 49.40 / IRL 52.80 / USD 72.00

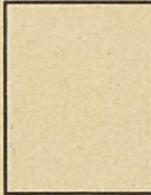
Name and address:

Date: Signature:



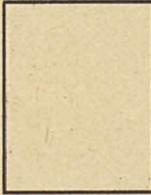
Office des
publications officielles
des Communautés européennes

L-2985 Luxembourg



Office des
publications officielles
des Communautés européennes

L-2985 Luxembourg



Office des
publications officielles
des Communautés européennes

L-2985 Luxembourg

- . For the first time, Conclusions have been issued on the subject of in-service training for teachers. Five common themes were emphasized to assist the 3,800,000 school teachers in the Community to cope with the increasingly rapid advances in our society: the clarification of objectives in this area; the establishment of a consistent, flexible and diversified training supply; the linking together as far as possible of in-service training programmes and vocational development projects drawn up by those benefiting from them; the development of in-service training resources; improved continuity between initial and in-service training. The Ministers called upon the Commission to develop meetings and exchanges in this area. They welcomed the comparative study carried out by the Commission on this subject and requested that it be widely distributed and regularly updated through the EURYDICE network.
 - . The Ministers have tackled, also for the first time, the problem of school failure, an issue concerning the significant number of educationally unqualified young Europeans leaving the school system who have to face an increasingly demanding labour market in terms of training. The Ministers for Education called upon the Commission to prepare a Communication on this problem containing information on the situation in the Member States.
 - . The Ministers were, in addition, informed of the development of such programmes as the introduction of the European dimension in schools, the promotion of foreign language teaching and the measures proposed by the Commission to combat AIDS, cancer and drug-abuse, of direct concern to education in their preventive aspects.
- It is important to note the positive and constructive impression given by this Council, which enables a decisive move towards a new stage in achieving Community co-operation in the field of education. This new stage rests on solid foundations built up over 10 years of work from the time of the first action programme in the field of education in 1976.

Three major principles emerge for the future:

- to make education the spearhead of the People's Europe;
 - to couple the tightening of economic and social links between the Member States with the education and training of young people;
 - to exploit the wealth and diversity of the educational traditions present in the Community in order more effectively to take up together such challenges as improving the quality of training for young people.
- The optimization of the use of human resources is more than ever essential given the new targets which the Community has set itself, in particular the completion of the internal market by the end of 1992 and the strengthening of economic and social cohesion. What is involved is a quality leap which is important from two aspects: one, the means of taking up external challenges and of rediscovering the path of stronger economic growth, leading to the creation of more jobs, and the other, the construction of a People's Europe.

The Community today numbers nearly 120 million children and young people under 25 and it is they who constitute the life blood of our human resources, the Community's most valuable asset. It is vital, therefore, that their education and training should be a matter of ever-increasing moment in Community co-operation.

As previously announced, the editors of Social Europe will in future be giving information with each issue on events of importance that have happened since the main review went to press.

On this occasion, we are concentrating on the meeting of the Education Council (and of Ministers of Education within the Council) of 14 May 1987.

Education on course for a People's Europe
Agreement on the Erasmus Programme

- The Council and the Ministers for Education, meeting within the Council on 14 May 1987, approved the launching of the ERASMUS programme, the European Community's action programme in the field of student mobility. After discussions based on the compromise proposed by the Belgian Presidency according to which financing of 93 MECU would be allocated to the programme (as opposed to the 175 MECU originally proposed by the Commission), an agreement was finally reached on financing of 85 MECU. The 85 MECU covering the first three years of the programme will be divided as follows: 10 MECU for 1987/88, 30 MECU for 1988/89 and 45 MECU for 1989/90.

The ERASMUS Programme, the aim of which is to increase student mobility, involves four lines of action: the establishment and operation of a European co-operation network between universities; direct financial support for students pursuing a period of study at a university in another Member State; measures to improve the academic recognition of diplomas and study periods in another Member State; and further measures such as conferences, intensive courses, ERASMUS prizes, etc.

- The scale and diversity of the other subjects dealt with in the Council's Conclusions also provide a clear indication that a new step has been taken in Community co-operation in the field of education. These Conclusions concern:
 - . the adoption of an initial programme of Community measures in favour of the educational integration of handicapped pupils. The Council of Education Ministers thus allows more than 30 million people (+ 10% of the total E.C. population) to benefit from additional chances for success. The programme encompasses four major themes: the relationship between special education and integrated situations in normal education; teacher training and parental participation; the development of educational curricula and methods; and the study of social and physical barriers to the integration of handicapped persons. The contribution of the new technologies and the establishment of a network of positive experience at local level are seen as priorities. Information exchanges will in particular be assured with the assistance of the EURYDICE network and the HANDYNET data base. The programme will cover the period 1988-1991.
 - . The pursuit of the Community programme to combat illiteracy. The Ministers recalled their common will to combat certain persistent forms of illiteracy in our societies and adopted the Commission's proposals to continue Community actions in the form of a work programme which will cover 1987/88. The programme involves in particular the holding of a European colloquium in September 1987 and the organization of a research-action in pilot schools in several Member States to test some of the measures proposed at the level of pre-school, primary and lower secondary education.

**Venta y suscripciones · Salg og abonnement · Verkauf und Abonnement · Πωλήσεις και συνδρομές
Sales and subscriptions · Vente et abonnements · Vendita e abbonamenti
Verkoop en abonnementen · Venda e assinaturas**

BELGIQUE / BELGIË

Moniteur belge / Belgisch Staatsblad
Rue de Louvain 40-42 / Leuvensestraat 40-42
1000 Bruxelles / 1000 Brussel
Tél. 5 12 00 26
CCP / Postrekening 000-2005502-27
Sous-dépôts / Agentschappen:
**Librairie européenne /
Europese Boekhandel**
Rue de la Loi 244 / Wetstraat 244
1040 Bruxelles / 1040 Brussel
CREDOC
Rue de la Montagne 34 / Bergstraat 34
Bte 11 / Bus 11
1000 Bruxelles / 1000 Brussel

DANMARK

Schultz EF-publikationer
Møntergade 19
1116 København K
Tlf: (01) 14 11 95
Telecopier: (01) 32 75 11

BR DEUTSCHLAND

Bundesanzeiger Verlag
Breite Straße
Postfach 10 80 06
5000 Köln 1
Tel. (02 21) 20 29-0
Fernschreiber: ANZEIGER BONN 8 882 595
Telecopierer: 20 29 278

GREECE

G.C. Eleftheroudakis SA
International Bookstore
4 Nikis Street
105 63 Athens
Tel. 322 22 55
Telex 219410 ELEF
Sub-agent for Northern Greece:
Molho's Bookstore
The Business Bookshop
10 Tsimiski Street
Thessaloniki
Tel. 275 271
Telex 412885 LIMO

ESPAÑA

Boletín Oficial del Estado
Trafalgar 27
28010 Madrid
Tel. (91) 446 60 00
Mundi-Prensa Libros, S.A.
Castelló 37
28001 Madrid
Tel. (91) 431 33 99 (Libros)
431 32 22 (Suscripciones)
435 36 37 (Dirección)
Télex 49370-MPLI-E

FRANCE

Journal officiel
**Service des publications
des Communautés européennes**
26, rue Desaix
75727 Paris Cedex 15
Tél. (1) 45 78 61 39

IRELAND

Government Publications Sales Office
Sun Alliance House
Molesworth Street
Dublin 2
Tel. 71 03 09
or by post
**Government Stationery Office
Publications Section**
6th floor
Bishop Street
Dublin 8
Tel. 78 16 66

ITALIA

Licosa Spa
Via Lamarmora, 45
Casella postale 552
50 121 Firenze
Tel. 57 97 51
Telex 570466 LICOSA I
CCP 343 509
Subagenti:
Libreria scientifica Lucio de Biasio - AEIOU
Via Meravigli, 16
20 123 Milano
Tel. 80 76 79
Libreria Tassi
Via A. Farnese, 28
00 192 Roma
Tel. 31 05 90
Libreria giuridica
Via 12 Ottobre, 172/R
16 121 Genova
Tel. 59 56 93

**GRAND-DUCHÉ DE LUXEMBOURG
et autres pays / and other countries**

**Office des publications officielles
des Communautés européennes**
2, rue Mercier
L-2985 Luxembourg
Tél. 49 92 81
Télex PUBOF LU 1324 b
CCP 19190-81
CC bancaire BIL 8-109/6003/200
Abonnements / Subscriptions
Messageries Paul Kraus
11, rue Christophe Plantin
L-2339 Luxembourg
Tél. 49 98 888
Télex 2515
CCP 49242-63

NERDERLAND

Staatsdrukkerij- en uitgeverijbedrijf
Christoffel Plantijnstraat
Postbus 20014
2500 EA 's-Gravenhage
Tel. (070) 78 98 80 (bestellingen)

PORTUGAL

**Imprensa Nacional
Casa da Moeda, E. P.**
Rua D. Francisco Manuel de Melo, 5
1092 Lisboa Codex
Tel. 69 34 14
Telex 15328 INCM
**Distribuidora Livros Bertrand Lda.
Grupo Bertrand, SARL**
Rua das Terras dos Vales, 4-A
Apart. 37
2700 Amadora CODEX
Tel. 493 90 50 - 494 87 88
Telex 15798 BERDIS

UNITED KINGDOM

HM Stationery Office
HMSO Publications Centre
51 Nine Elms Lane
London SW8 5DR
Tel. (01) 211 56 56
Sub-agent:
Alan Armstrong & Associates Ltd
72 Park Road
London NW1 4SH
Tel. (01) 723 39 02
Telex 297635 AAALTD G

UNITED STATES OF AMERICA

**European Community Information
Service**
2100 M Street, NW
Suite 707
Washington, DC 20037
Tel. (202) 862 9500

CANADA

Renouf Publishing Co., Ltd
61 Sparks Street
Ottawa
Ontario K1P 5R1
Tel. Toll Free 1 (800) 267 4164
Ottawa Region (613) 238 8985-6
Telex 053-4936

JAPAN

Kinokuniya Company Ltd
17-7 Shinjuku 3-Chome
Shiniuku-ku
Tokyo 160-91
Tel. (03) 354 0131
Journal Department
PO Box 55 Chitose
Tokyo 156
Tel. (03) 439 0124

FOR A DIFFERENT VIEW OF EUROPE READ 'SOCIAL EUROPE'!

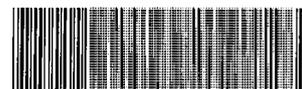
Price (excluding VAT) in Luxembourg

	ECU	BFR	IRL	UKL	USD
<i>Single issues</i>					
Social Europe: General review	8.40	360	6.40	6	9
<i>Annual subscription</i>					
Social Europe: General review	23.10	1000	17.60	16.50	24



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg



Catalogue number: CE-AA-87-002-EN-C