The ninth meeting of CEDEFOP (French acronym for the European Centre for the Development of Vocational Training) is summarized in this report. Attending the forum were representatives of the leading vocational training research and development institutions and ministerial departments from the European Community (EC) Member States and from countries of the European Free Trade Association (EFTA). Presentations and discussions focused on the response of the vocational training systems to training needs. Erik Winther-Schmidt and Ernst Piehl stressed the need to link the labor market and the training systems. Jurgen Schmehr provided an update on the development of the Skills Monitoring Project. Matti Haavio raised the issue of the involvement of the EFTA countries in the research activities of the EC. Enrique Retuerto de la Torre reviewed some research activities concerned with the links between employment and qualifications. Fernanda Oliveira Reis's presentation focused on her studies on the continuing training policies of enterprises and the training effect of different forms of work organization. Sally Dench of the United Kingdom described the background and approach to the Employers' Manpower and Skill Practices Survey initiated in 1991. Laszlo Alex described the econometric model used in Germany to determine and analyze skill needs. Soren Nielson focused on the recent reforms of the Danish education and vocational training system. Antonio Rueda Seron explained the extensive reform processes that have occurred in Spain. Claudio Tagliaferro described his institute's experience in analyzing and forecasting skill and training needs at a local level in Italy. The centerpiece of the debate on cooperation in the field of vocational training research in the Member States and the role of the European Centre for the Development of Vocational Training and the EC was the presentation by Reinhard Czycholl, who discussed the efforts of various official bodies in Germany to solve the problems of fragmentation existing there by setting up a vocational training network that would provide the needed coordination. (YLB)
For the ninth time in succession, representatives of the leading vocational training research and development institutions and ministerial departments from the EC Member States and from countries of the European Free Trade Association (EFTA) met in Berlin on 21/22 October 1993 for the 1993 CEDEFOP Research FORUM. The meeting was attended by representatives of the EC Commission, the EUROTECNET Technical Assistance Office and "Euroqualifications" - Permanent Transnational Technical Assistance Team. Together with the representatives of CEDEFOP’s Management Board, the Directorate and staff, the participants at this year's FORUM numbered 44. This year the main focus of the presentations and discussions was on

The response of the vocational training systems to training needs

The FORUM set out to examine and explore different methods and procedures adopted by the Member States in addressing this issue. The participants were also provided with information on relevant activities of the Task Force: Human Resources, Education, Training and Youth of the EC Commission, and of CEDEFOP.

From the outset, the FORUM has been concerned with the encouragement and support of cooperative ventures amongst the Member States in the field of vocational training research. This year, the President of the Working Group set up to create and develop a Vocational Training Research Network in the Federal Republic of Germany explained the reasons and objectives behind this institutionalized form of cooperation.
The topic of this year's FORUM was positioned at the interface between the needs of the labour market (companies and their employees) and the training systems (the teachers, trainers and trainees). In their opening addresses, Erik Winther-Schmidt, Member of the CEDEFOP Management Board and Ernst Piehl, Director of CEDEFOP, stressed the need to link these two spheres. The developments surrounding the Maastricht Treaty are indicative of the growing significance of vocational training in Europe, despite the limitations and reserve associated with the principle of "subsidiarity". Greater emphasis is also being placed on vocational training research activities, stimulated amongst other things by the Commission working paper "Guidelines for Community Action in the Field of Education and Training" (the Ruberti paper). As a consequence, CEDEFOP will be required to intensify its efforts to accompany and disseminate information on research activities in this field. The forthcoming association and possible accession of countries belonging to the European Free Trade Association (EFTA) give an added quality to these efforts. In future, it will be necessary to position the CEDEFOP Research FORUM in a broader context in order to ensure a greater coherence and continuity of effort in the field of vocational training research. Proposals will be submitted to the CEDEFOP Management Board in relation to the 1994 CEDEFOP Work Programme.

Following the introductory addresses, Jürgen Schmehr of the Task Force: Human Resources, Education, Training and Youth provided the FORUM with an update on the development of the "Skills Monitoring Project" which was launched on the initiative of the European Parliament in 1990, the interim results of which had been presented by Mr Schmehr at the 1991 CEDEFOP FORUM. The objective of the Skills Monitoring Project was to identify shortfalls, gather experience and explore examples of good practice. The organizers (TFHR) had set up a series of sectoral working groups which brought together, amongst others, employers, human resource managers, university researchers and training providers. The Commission plans to publish and distribute a report on the outcome of the project, which was conducted in 32 regions, on the occasion of the EUROPEAN FORUM to be held in Brussels on 8-10 November 1993. The results of this project have led to the launching of a larger scale survey concerned with women returners and their self employment as part of the "ATHENA" programme, launched in Spring this year. It has also provided the foundation for a study concerned with pervasive technologies in the "banking" and "environment" sectors. The Skills Monitoring Survey must also be seen in the context of the new objectives of the European Social Fund as a contribution to the restructuring of industries (the new

\[1\] COM (93) 183 final of 5 May 1993

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Objective 4). It is also linked with the research strain of the Fourth Framework Programme concerned with social science research. Mr Schmehr pointed out the multiplicity of skills observation and analysis undertaken within a number of Community programmes, for example COMETT, EUROTECNET, ERASMUS and FORCE. With reference to the Maastricht Treaty (Articles 126 and 127) and the "Guidelines for Community Action in the Field of Education and Training", attention was drawn to the lack of and need for cooperation between primary and secondary education and vocational training.

Mr Schmehr went on to describe the development of the EUROPEAN FORUM which the Commission is holding in Brussels on 8-10 November and to which CEDEFOP has made a substantial contribution, not least through the organization - in the context of CEDEFOP’s Study Visit Programme - of a series of workshops around the different themes to be discussed at that event. For the first time, four European institutions (the European Parliament, the Council, the Commission and the Economic and Social Committee) are jointly engaged in the treatment of central concerns such as the qualifications of young people and vocational training in response to unemployment.

Matti Haavio from Finland raised the issue of the involvement of the EFTA countries in the research activities of the Community. It was pointed out that whilst opportunities are for the time being limited to participation in the programmes for which formal agreements have been signed, negotiations are going on with the coordination group of the EFTA countries and their permanent representatives in Brussels.

Enrique Retuerto de la Torre, Deputy Director of CEDEFOP gave a review of some of the research activities of CEDEFOP concerned with the links between employment and qualifications - a vast area in which the boundaries are not clearly defined and in some cases impenetrable. There followed a presentation by Fernanda Oliveira Reis on the studies she has conducted on the continuing training policies of enterprises and the training effect of different forms of work organization.

The project consisted mainly of a series of case studies designed to show how new forms of organization may generate new formal and informal kinds of training. The study was directed at determining the environmental factors influencing firms in the development of organizations which "train". A macro-analysis was conducted in nine countries followed by a micro-analysis designed to...
validate the results and to ensure that they corresponded to conditions in practice. The final phase consisted of a comparative exercise terminating with a synthesis report.

The study examined the reasons underlying organizational changes, such as the issue of competitiveness, capacity for innovation/flexibility, quality improvement and new qualifications. The changes established ranged from the construction of new production plants, new forms of line organization and management and a strong emphasis on "just-in-time" operations. The study examined the implications of new organizational structures for the individual employees. It was found, for example, that group work entailed a high degree of autonomy with changing hierarchical chains. Workers within the group could arrange amongst themselves their working hours, holidays, etc., and in terms of skill development, the fact that the groups were made up of skilled and unskilled workers meant that the group had a "training" and "qualifying" effect. The study also revealed substantial differences amongst the Member States with regard to the attitudes of firms concerning the career development of their staff. In some countries, for example Belgium and Denmark, staff development was encouraged through the new work organizations whilst in the United Kingdom and Spain the new forms of organization tended to block career development.

With regard to training, the study showed that there is a general tendency towards a stronger mix between formal and informal training, with trainers assuming the role of facilitators. It was also found that new forms of work organization reduced the level of discrimination concerning access to training, although the numbers benefiting tended to be limited. The final report of the project is expected to be published in December 1993.

In the discussion, reference was made to other studies which had shown that change in work organization is not a rapid process, a reason being that often those who are required to take the decisions are the potential "losers", e.g. middle managers. It was found that there was a serious lack of information and instruction in the management of change enabling the development of skills strategies to account for changes in work organization. It was affirmed that whilst staff may be expected to have or acquire the necessary technical qualifications, the generation of the so-called "generic skills" (analytical and diagnostic skills, interpersonal/social skills), for which there is a growing demand, would appear to present some difficulty. Not only the transmission but also the assessment of these skills is a problem which has not yet been solved. On a critical note, it was pointed out that the hopes which had been placed in a more anthropocentric
approach to work organization in the form of group work, as opposed to the Taylorist model, had not on a general scale been fulfilled. Experience had shown that the hierarchical structures which develop within the group may take a worse form than in the traditional supervisor/worker relationship. The concept of skilled and unskilled workers sharing the same tasks for the same money had proved to be an unrealistic venture. A longitudinal study conducted at the Opel works in Bochum had shown that in time, group work led to a redivision of labour - a suspected reason being that it was simply an easier way of organizing work.

With regard to training and career development, the study had shown that whilst all the workers in the group were supposed to have the same status, those who went on a continuing training course were the subject of group jealousies. On the other hand, the US experience was cited as an example of the positive effects of group work where the success of the group was the guiding factor for its members.

The point was raised that whilst theoretical models exist in respect of group work within the logical structure of the education/school system, there appeared to be no similar model which could be applied to the less logical system of production and that the development of such a model might therefore be a worthwhile undertaking.

From the Member States, Sally Dench of The United Kingdom Employment Department described the background and approach to the Employers’ Manpower and Skill Practices Survey (EMSPS) initiated in 1991. The underlying concern was that many of the surveys conducted in the mid-80s on skill shortages were fragmentary and unrepresentative, and did not provide an accurate picture of the skill shortage/needs scene. What was frequently described as a “skill shortage” was in fact a “labour shortage”. EMSPS was thus designed as a nationwide survey covering all sectors of the British economy with the exception of agriculture, forestry, fishing and coal-mining. Its objective was to obtain data on the ways in which employers recruit, train, develop and retrain people and the skills they identify as necessary to compete effectively. Dr. Dench described the design, method and implementation of the project. The Employers’ Manpower and Skills Practices Survey has produced a wealth of data on the skill practices of employers and on the background characteristics of the workplaces. It included employers recruitment activities, the difficulties they have in recruiting and the effects on the workplace, their training activities, labour turnover, the types of people recruited to different occupational groups (including the importance of qualifications, experience and their characteristics), the age and

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gender structure of different occupations, the level of satisfaction with their
current workforce, changing working practices, the competitive pressures
experienced, the relationship between the workplace and its parent organization,
recent economic performance, labour productivity and relationships with other
workplaces. ENSPS served to complement the annual Skills Monitoring Survey
of the Employment Department, which besides collecting basic information on the
volume of training delivered, is being increasingly used as a means of measuring
the extent of knowledge and use of various Employment Department programmes.
The information obtained from these surveys is used by the Department for its
annual planning cycle.

In his presentation, Laszlo Alex of the Bundesinstitut für Berufsbildung - BIBB
(Federal Institute for Vocational Training) described the econometric model
employed in Germany to determine and analyse skill needs. In his contribution,
Dr Alex referred to the article he had produced for CEDEFOP on this topic in
1991. He explained that all the models employed in the Federal Republic of
Germany to determine "skill needs" are based on a calculatory method used to
forecast manpower needs. He first of all broached the problem of defining skills,
competences and qualifications, pointing out that the German term "Qualifikation"
has a vocational, social and societal dimension - a configuration which is gaining
in significance in the context of occupation-specific social or generic skills. Dr.
Alex described how the manpower needs analysis model had been applied to the
metal and electrical trade occupations in around twenty economic sectors. From
the results, projections had been made for future manpower and skill needs. The
analysis of vocational skill needs is undertaken at two levels. One is that of
"occupations" (macro-level), which is concerned with the issue of the present and
future supply of and demand for occupations in the labour market. The second
level concerns the "skill components" of an occupation (micro-level) and relates to
the elements, structure and level of individual skills and the way in which they
are transmitted or delivered.

Dr. Alex went on to describe the experience which had been gained with this
method and how it was necessary to take into account additional factors when
interpreting the findings. As an example he quoted the inflow/outflow analysis of

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2 Alex, Laszlo (1991) "Description and classification of qualifications" in
Vocational Training No. 2/1991, CEDEFOP, Berlin

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schoolchildren in the different types of school and the influences of the "economic cycle". A factor also to be taken into account concerns the aspirations of school-leavers. In Germany there is a tendency for more school-leavers to go on to higher education rather than entering the dual training system. The manpower needs surveys had shown that many skilled workers move on to jobs in other occupational areas than the one in which they were trained. Whilst the reasons are multifarious, diminishing career development opportunities are seen to play an important rôle in these developments.

In the following discussion, the question of reliability of method was raised. In relation to the United Kingdom survey, it was suggested that whereas EMSPS set the sample cut-off level at 25, the most important or interesting group of firms with regard to skills needs analysis consisted of those with a staff of 1 to 50. Mention was also made of the difficulties experienced by employers in determining and articulating their medium to long-term skill needs. Attention was also drawn to the risks involved in projecting established trends into the future and the example of the forecast shortage and need for teachers made in Germany in the early 80s, and which resulted in an enormous surplus, was cited as an example. The discussion led on to the issue of how the results are put to use and how the training systems respond to such surveys and analyses. From the German and United Kingdom experience it was established that, whilst the applied methods and procedures provided a framework and basis for decision-making, the decision and policy-making structures in these countries did not ensure that the research findings were transformed into practical training provision and delivery.

The presentation of Soren Nielsen of Staatens Erhvervspædagogiske Laereruddannelsen - SEL (Royal Danish School of Educational Studies for Teachers at Technical and Commercial Colleges) focused on the recent reforms of the Danish education and vocational training system. The essential features of the reform are the decentralization of responsibility and authority to local (school/college) level, and the application of the market principle of competition, with schools and colleges vying for finance. Social elements are not however disregarded in this new system and much responsibility continues to lie with the social partners and trade committees. One of the reasons for the changes is to be found in the inadequacy of a purely top-down administrative and decision-making structure. There was also a fear that vocational education and training was becoming too theoretical and there was some anxiety concerning the high drop-out rates. Mr Nielsen went on to describe the structures and workings of the new system and the efforts undertaken to determine its impact in terms of developing a training response to vocational education and training needs. The discussion
addressed the question of local and central interaction in the development of training curricula, the rôle of firms in the training of trainers and the provision made by the system for the "mobility" of students and trainees from the general grammar schools to the technical schools and vice versa. Mr Nielsen was also asked to describe the mechanisms which are applied to ensure that the weakest members of society are catered for by the new "market-led" system.

It was agreed that the Danish model contained a number of interesting features and that its further development should be closely monitored.

Antonio Rueda Serón of the Ministry of Education and Sciences of Spain explained the extensive reform processes which have taken place in his country. Here it had not been just a case of modifying, but rather of reconstructing the former vocational training system. Currently, vocational training in Spain consists of two sub-systems. The first is the "Regulated" Vocational Training which comes under the responsibility of the Ministry for Education and Sciences and the autonomous communities. This system covers a broad area of training of long duration (2-3 years). The second sub-system is that of the "Occupational Vocational Training" which comes under the responsibility of the Ministry for Employment and the autonomous communities. This sub-system provides for training courses of short duration (3-6 months) and offers skills and qualifications targeted to the needs of specific occupations. Mr Rueda described the innovative aspects of the system. Compulsory education had been extended to 16 and elements of vocational training had been included in general education. Vocational training subjects may also be taken as part of the "Baccalaureate". Mr Rueda indicated that the new system had been designed along the lines of the modular system of National Vocational Qualifications operating in the United Kingdom, one objective being to achieve a degree of "horizontal and vertical" mobility through and across the general education and vocational training paths. An important feature of the system is that the skills and qualifications are recognized throughout the country.

In Spain, too, cooperation and interaction amongst the social partners on the General Council for Vocational Training (which establishes the "National Programme of Vocational Training") is a mainstay of the Spanish system.

Claudio Tagliaferro of the Istituto per lo Sviluppo della Formazione Professionale dei Lavoratori - ISFOL (Institute for the Development of Vocational Training for Employers) described the experience this institute had gained in Italy in analysing...
and forecasting skill and training needs at a local-level. Dott. Tagliaferro pointed out that in Italy the labour market structure is predominantly local and that it had therefore been found expedient to develop a local-level system of skills and training needs analysis targeting small areas of the economy. He, too, referred to the issue of concepts and terminology, pointing out that "needs analysis" was often used in Italy as a metaphor to define the relationship between training and the world of work, between planning processes and the requirements of the employers. There being no "one best way" to the problem of forecasting and planning, the local level approach represented just one option. This model has two dimensions: one is that of the product (data, information, techniques, etc), the other relating to the process (product deriving from a system of exchange/negotiation amongst the various "actors").

As an example of the application of this method, Dott. Tagliaferro described its application in the region of Piemonte and the province of Ravenna. Two areas were chosen - Canavese/Ivrae and Faenza - which were confronted with problems of transformation in the production sector, a development which had had direct repercussions both with regard to job content and skills/qualifications. Both are predominantly "monocultural areas", Canavese specializing in hot-press techniques and Faenza in ceramics. The surveys conducted in these areas were to serve as a test for the subsequent application of the model in other regions and sectors. It was pointed out that such surveys are only possible with the strong support of the social partners in close cooperation with the public authorities. The discussion focused on the differences (similarities) between the "local" and "national" approach to skill and training analysis. The question arose as to the compatibility of the two approaches and whether in ISFOL's experience, local-level surveys produced more accurate results in terms of the ability to transpose the findings into training provision. The question was also asked as to whether a local training response is one way of obtaining nationally approved qualifications. It was the general view of the FORUM that the issue of local versus national-level analyses/responses should be an object of further investigation and discussion.

In summarizing the debate around the various presentations, it was established that although a lot had been said about the different approaches, methods and procedures and results of skill and training needs analysis, the discussions had produced little in the way of information on how the findings are transposed into training provision/delivery. This criticism was taken as an indicator of the general problem facing decision and policy-makers at the interface between training needs analysis and training development and provision, an issue which needs to be examined more closely.
The centrepiece of the debate on cooperation in the field of vocational training research in the Member States and the role CEDEFOP and the Community may play, was the presentation by Reinhard Czycholl, the President of the Arbeitsgemeinschaft Berufsbildungsforschungsnetz (Working Group - Vocational Training Research Network). Prof. Czycholl explained how universities in Germany specialize in the different areas of educational, vocational and labour market research and described the division of public responsibilities for vocational training research in its various facets. The federal structure of the country meant that in addition to the public institutes existing at federal level, each of the Länder has its own separate institution to cover those areas of research falling within their competence, for example the Institutes for educational pedagogics/curriculum research and development. This fragmentation meant that there had been limited coordination amongst the various bodies and that there was no central documentation covering all the research activities. In order to attain a higher degree of transparency and coordination, the Kommission Berufs- und Wirtschaftspädagogik der deutschen Gesellschaft für Erziehungswissenschaft (Commission for Occupational and Industrial Pedagogics of the German Society for Educational Science) together with the Institut für Arbeitsmarkt- und Berufsforschung der Berufsanstalt für Arbeit (Institute for Labour Market and Occupational Research of the Federal Labour Office) and the Bundesinstitut für Berufsbildung (Federal Institute for vocational training) decided to establish a vocational training network. The network pursues three main lines of action. Firstly, the development of a vocational training research documentation, a literature documentation and the organization of a two-yearly "Vocational Training Research Congress".

Central areas of interest to the network are the stocktaking of current research projects, the identification of thematic gaps and the issue of terminology/methodology. It is also concerned with introducing European Community themes in university education, for example course elements concerned with the economic structures and vocational training systems of the Member States. In the ensuing discussion, Annie Baudry of the Centre d’Études de Recherche sur les Qualifications - CEREQ (Centre for studies and research on qualifications) outlined the cooperative structures and network operated by CEREQ and the Centre National de la Recherche Scientifique - CNRS (National Centre for Scientific Research). CEREQ’s associated centres are regionally based and consist of research laboratories situated in universities and/or are members of the CNRS network. CEREQ currently has sixteen associated centres with which it collaborates through an annual contractual joint research programme. To support the implementation of these programmes CEREQ gives financial support
to research fellows based in the regional centres. CEREQ is also a member of a European network together with BIBB, Centrum Innovatie Beroepsonderwijs Bedrijfsleven - CIBB (Centre for Innovation in Vocational Training and Employment) and ISFOL.

In concluding the debate, Enrique Retuerto de la Torre presented a series of proposals for the development of cooperation in research and of activities relating to the CEDEFOP FORUM. These proposals will form part of a submission to the CEDEFOP Management Board when constructing next year's Work Programme. The papers on which the presentations to the FORUM were based will be published by CEDEFOP.

In his concluding address, Mr Helmut Brumhard, Chairman of the Management Board thanked the speakers and participants for their contributions and encouraged the represented institutions to intensify their cooperative efforts in the field of vocational training research.

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