

## **MEDIUM-TERM FORECAST OF OCCUPATIONAL SKILL NEEDS IN EUROPE: DRAFT FINAL RESULTS**

Skillsnet technical workshop

8-9 November 2007, Vienna, Austria

### **WORKSHOP CONCLUSIONS**

The workshop was coorganised by the European Centre for the Development of Vocational Training (Cedefop), within its network on early identification of skill needs 'Skillsnet', and by the Institute for Advanced Studies in Vienna in Austria.

Participants: 40 experts from 24 European countries (21 EU Member States) and several European institutions and organisations (DG EAC, DG Empl, Eurofound) attended the workshop.

#### **Background and objectives**

In October 2005, Skillsnet/Cedefop organised in **Cyprus** (in cooperation with Human Resource Development Authority (HRDA) in Cyprus and the Research Centre for Education and the Labour Market (ROA) in the Netherlands) an expert workshop exploring the feasibility of a European skill needs forecasting approach. All participants agreed on the desirability of launching a European-wide skill needs forecasting exercise and asked Cedefop to continue with this initiative<sup>1</sup> and coordinate further steps. The decision taken was to proceed along two main paths:

- ⇒ in the short term to create a Pan-European forecasting model which would use data available for all Member States (for example Eurostat data, such as LFS);
- ⇒ in the longer term to involve all European countries in this exercise with the view to harmonise or match sources used at national level, creating a new core forecasting system for use by all European countries.

The expert workshop held in **Warwick** in November 2006 aimed to build on this foundation, presenting various initiatives which might contribute towards the development of a common

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<sup>1</sup> This initiative respects the needs of Member States and does not affect the subsidiarity principle: Pan-European skill needs forecasting will not replace existing national forecasting systems. It is a voluntary exercise intended to complement, rather than replace, national forecasting.

approach to European skill needs forecasting. At this event Cedefop announced that a research team comprising IER, CE and ROA had been entrusted to develop a set of *Medium-term forecasts of occupational skill needs in Europe*. Some preliminary results demonstrating the feasibility of producing a regular and consistent set of Pan-European projections were presented. These results and the detailed debate amongst the assembled experts also highlighted some of the technical and other problems facing such a project.

The technical workshop held in **Maastricht** in May 2007 had the main objective of getting feedback from country experts on the interim results from the Medium-term forecasts of occupational skill needs in Europe project. The workshop reported on various developments towards producing a Pan-European forecasting model, presented interim results and discussed with experts related data quality issues, possible scenarios and approaches to modelling replacement demand.

This technical workshop, taking place in **Vienna**, aimed to take this process a further step forward, focusing upon the (draft) final results of the Medium-term forecast of occupational skill needs in Europe project.

The workshop:

- presented the (draft) final results of the medium-term forecast of occupational skill needs in Europe in detail, including details of the methodology used;
- discussed and verified with Member States related data quality, applied scenarios and final outcomes of the medium-term forecast;
- discussed identified obstacles and data gaps and possible ways to fill these gaps in the future.

## **Workshop conclusions**

### *1. Summary*

After the introduction by Cedefop, the project team (IER, CE and ROA) presented draft final results and progress to date with the development of medium-term forecasts of occupational skill needs in Europe. The project is using a modular approach involving 4 main modules: a multi-sectoral macroeconomic model; occupational and qualifications expansion demand modules; and a replacement demand module. During the initial phase of the project the team developed a database and tools required to produce comprehensive and consistent set of skill needs projections for all Member States (except Bulgaria and Romania). It is based on data from Eurostat, adopting common methods and models. The team highlighted the main data, methodological and technical problems that have to be addressed in developing a system for producing regular projections of future skill needs at European level.

The following issues were discussed in detail:

- general (macro) overview, including the alternative scenarios;
- sectoral results;
- expansion demands and changes in occupational structure (including qualifications);
- replacement needs;
- introduction to the country workbooks (results in detail).



## *2. Conclusions from the feedback provided by country experts: common points and/or points of a common interest*

Experts from all 24 countries participating in the workshop (with a single exception) agreed that the forecast prepared and presented by the team is very useful and unique at European level. The forecasts prepared for individual member states are useful as a point of reference and comparison with national forecasts, as an additional source of information and especially in cases where national forecasting systems do not exist yet. At the same time forecasts at individual member state level are sometimes problematic. This happens due to objective data limitations and problems which cannot be solved within the current project.

The following data problems have been repeatedly mentioned by country experts:

- short time series;
- breaks in time series due to changes in methodology or classifications;
- inconsistencies between the Eurostat data and national data;
- small data cells in case of small countries especially at disaggregated level;
- small sample of the LFS, etc.

The following common concerns about the forecast results at national level were identified by comparison with national forecasts, other data sources and by expert judgment:

- although overall trend in the sectoral employment demand forecast was considered adequate, concerns about results were repeated in case of some sectors (e.g. construction, health);
- the results are more problematic at occupational level, especially in case of 'corporate managers and legislators', 'professionals' and, in particular, 'elementary occupations';
- under/overestimation of the replacement demand (RD) (note: considerable variations among experts of understanding of what the RD is were recorded, which influenced the evaluation of the forecast results);
- missing data on labour productivity as an important input to the forecast;
- suspiciously uneven trends in case of some occupations – even in the European-level forecast in case of 4 occupations;
- results for ISCO 0-Armed forces were often mentioned as irrelevant due to small numbers and vulnerability to governmental decisions and political changes;
- supply-side effects have not been taken into account to a sufficient extent and it could be useful to invest some efforts in this direction in further forecasting projects (supply side and demand side, should the project continuation be confirmed);
- several problems related to results for new member states, mostly referred to shorter time series and effects of transition and enlargement, such as strong effects on projection in certain industries, net migration data for RD forecast (in the latter case a 5-year span might not be sufficient to average the effects of opening borders for the free movement of labour).

Taking into account the above mentioned data limitations and considerable discrepancies of the results of the forecast prepared by the team at country level, a question was raised whether the EU level forecast could be considered credible. The result of the workshop discussion

brought a general consensus that the European forecast provides a reliable result and general trends coincide even with national forecasts. The team need to take into account as much as possible, in the given timeframe of the project, the written comments provided by country experts in order to improve the European forecast.

Given the above mentioned problems, the question of publishing results becomes very sensitive. It can turn to be counterproductive to include in the final published report the results which are not plausible. A solution for the publication may be dissemination of data at a broader, more general, level, referring to trends, rather than specific quantified numbers, and presenting the results for Europe as a whole rather than for individual countries. A consensus was also reached among the workshop participants that the analysis and presentation of the results at the forthcoming Agora Skillsnet conference should be done with a special sensitivity and caution. With the view of the potential audience of the conference (experts, policy makers, social partners and practitioners) and bearing in mind the desirable continuation of the project, it is important not to seed unnecessary doubts in usefulness of the exercise and its results. The value and usability of current results at different levels of policy making must be presented and discussed at the conference with a clear reference to even greater potential value when a better robustness and reliability of results will be achieved in following project stages.

The issue of data insufficiency itself may be a useful point for discussion with policy makers. The following potential solutions were proposed for the discussion:

- to ask Eurostat to improve/expand the data base (e.g. expand the LFS sample);
- to put more pressure at national statistical agencies;
- to seek methodological solutions (at least as a temporary remedy);
- to seek alternative data sources (e.g. other than LFS survey).

The mentioned suggestions are not mutually exclusive and should be explored in parallel. The ESF funds at national level as well as the 'Progress' programme funds at the EU level can help to improve the situation.

As far as commenting by country experts is concerned, it was mentioned many times that the feedback from countries was extremely useful, especially where experts helped to correct historical data. At the same time it is clear that the team cannot tackle all comments due to time and resources limits. Also some comments is easier to use than others and some of them may be rather a guideline for the future and a question for further scrutiny and discussion in the forthcoming project stages. Some comments and data from country experts still need to be provided electronically. At the same time experts felt a need in a feedback to their comments wanting to know how the information provided has been used and whether, for instance, numbers from their national forecasts could be useful. In short, a more structured and guided way of organizing the commenting could be useful.

In spite of all mentioned data problems, the workshop enjoyed a very positive and optimistic atmosphere. Comments and discussions were very constructive. It has been clear to all participants that such a challenging task cannot be accomplished and perfected in one year and that we are at the end of only one particular project phase which in fact is only the beginning of a much longer and still very demanding process.



### *3. Further steps / timetable*

The team will complete the exercise after incorporating comments from country experts. The deadlines for experts to submit their comments were set as follows: 19 November for all comments related to sectoral projections and 29 November for comments related to occupational results, qualifications and replacement needs. Special guidelines for comments were sent to experts immediately after the workshop.

The results will be presented to a wider audience at Skillsnet's Agora conference taking place 21-22 February 2008 in Thessaloniki. A summary publication with broad results (mainly for a broader public and policy-makers) will be prepared for this event.

Further analysis of results and publications will follow in course of 2008.

Workshop documents (agenda, list of participants, presentations and papers) are available at Skillsnet webpage [www.trainingvillage.gr/skillsnet](http://www.trainingvillage.gr/skillsnet)).

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