

**Development of a methodology for a long term strategy
on the Continuing Vocational Training Survey (CVTS)
CVTS3 M**

Summary

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1. Continuing Vocational Training Surveys

At European level, the first enterprise **survey on continuing vocational training (CVTS1)** was carried out in 1994 in the then 12 member states of the European Union. The European Commission initiated a second European continuing vocational training survey (**CVTS2**) to satisfy the growing policy interest in data on continuing vocational training (CVT) in enterprises and to meet the demand for CVT data to cover all member states. CVTS2 was implemented in 2000 in the 15 member states of the European Union at that point of time, in Norway and in nine candidate countries.¹

The implementation of both CVTS1 and CVTS2 was based on “gentlemen’s agreements” between Eurostat and the member states of the European Union, but for the forthcoming CVT surveys it was decided to provide a **legal basis for the data collection** within the European Statistical System. The third European survey on continuing vocational training (**CVTS3**) will be based on the “Regulation of the European Parliament and of the Council on statistics relating to vocational training in enterprises” (Regulation 1552/2005/EC). The objective of the regulation is the creation of common statistical standards that permit the production of harmonised data. It establishes a common framework for the production of Community statistics on vocational training in enterprises. CVTS3 will take place in 2006, relating to CVT activities in the enterprises in 2005. For the purpose of CVTS, continuing vocational training was defined as training measures or activities, which enterprises finance, wholly or partly, for their persons employed.

2. The project “Development of a methodology for a long term strategy on the Continuing Vocational Training Survey (CVTS)”

The European Commission initiated a call for tender for the preparatory work relating to the implementation of CVTS3. The project “Development of a methodology for a long term strategy on the Continuing Vocational Training Survey (CVTS)” was then set up to prepare the CVTS3 survey and lasted from late September 2004 until November 2005. The project was carried out by an international consortium of key experts in the field of CVTS. Most experts have been involved in the implementation of CVTS2 and some already in CVTS1, and some have used CVTS data for national and comparative research activities. The members of this consortium were:

- Federal Institute for Vocational Education and Training (BIBB, Germany; project leader)
- 3s research laboratory (Austria)
- Statistics Finland
- Statistics Sweden
- FÁS – Training and Employment Authority (Ireland).

The central objective of this project was not only the **methodological preparation of CVTS3**, but also the designing of a long-term approach for future data collections on vocational training in enterprises including the development of the statistical methodology and the organisation of the data collection.

¹ Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia. Results of the survey are published in many publications. The most prominent summary of the results can be found on the internet (http://europa.eu.int/comm/education/programmes/leonardo/new/leonardo2/cvts/index_en.html). The key tables of CVTS1 and CVTS2 can also be found at the homepage of Eurostat (<http://epp.eurostat.cec.eu.int/>).

The main goals of the project were:

- To develop a questionnaire for CVTS3, based on a review of the outline questionnaire used in CVTS2 and the inclusion of new questions because of new demands (e.g. inclusion of initial vocational training in the survey)
- To refine the survey guidelines and the conceptual framework of the survey (codebook, manual with glossary, etc.)
- To contribute to the development of a harmonised and comprehensive picture of education and training.

In order to achieve the project goals the CVTS3 M consortium produced reports for the different project tasks (divided into eight work packages).² The consortium was assisted by other organisations and experts contributing special expertise on specified items, in particular Statistics Austria, National Statistical Institute of Bulgaria and infas. It elaborated a proposal of the CVTS3 questionnaire and contributed to the CVTS Working Group and the CVTS Task Force. There was a close cooperation with the European Commission (DG EAC) and Eurostat, and frequent communication with Cedefop.

3. Main results of the project

3.1. Refinement of the CVTS3 questionnaire

Two mutually contradictory targets were set for the project: Insuring **continuity between CVTS2 and CVTS3** as well as **improvement** of concepts, definitions and questions. Based on its analysis of the national CVTS2 quality reports and the non-response rates of variables, the CVTS3 M consortium identified questions in CVTS2 yielding low data quality. The consortium recommended skipping and rephrasing some questions with the objective of raising the quality of the data collection. However, no major changes of the core questions mainly relating to the quantitative data (structural data, CVT activities of the enterprises) were recommended.

The regulation stipulates that future CVTS (starting with CVTS3) have to include questions relating to the **initial vocational training** provided by enterprises. Initial vocational training (IVT) and continuing vocational training (CVT) are two elements in the development of employees' vocational skills. Both form core parts of lifelong learning and are partially complementary. CVTS1 and CVTS2 excluded IVT explicitly from the survey. The CVTS3 M consortium underlined the importance that the inclusion of IVT in future CVTS should not endanger comparisons of CVT between future and past surveys. Consequently, all parts of the CVTS3 questionnaire relating to the provision of CVT are excluding persons with an apprenticeship or training contract.

In order to collect data on IVT, a clear operational definition of IVT and a clear demarcation between IVT and CVT is essential for the quality of the data and necessary for comparisons with CVTS2. In an intensive discussion with contributions by many participants (e.g. European Commission (DG EAC), Eurostat, Cedefop, CVTS3 M consortium, countries' representatives) a criteria-based solution was found. As parts of the definition are still open to national interpretation, international comparability may not be fully guaranteed.

² All final versions of the papers are included in the annexes of the final report, most of them are available at Circa (http://forum.europa.eu.int/Members/irc/dsis/edtcslibrary?l=/working_groups/continuing_vocational_1&vm=detailed&sb=Title)

Article 3 of the regulation stipulates that participants and total expenditure on initial training are to be collected. Although total expenditure on IVT is requested in the regulation, the consortium for methodological reasons recommended to focus on costs of the participation of apprentices in training courses and, in addition, on total labour costs of apprentices. Regarding the latter it has to be taken into account that for an assessment of enterprises' real costs of IVT the value of the productive work of apprentices would need to be deducted. Experience shows that labour costs of trainers for on-the-job-training needs extensive treatment in a questionnaire. Given the restriction of not increasing the response burden of enterprises, we recommended to refrain from collecting these costs for IVT as well as for CVT.

The **costs of CVT** made up an important component of the past two surveys. Although the measurement of costs is not easy, it is very important to collect data in this area. Even estimates are very useful, as no alternative source of such data exists. As in past surveys, cost assessment in CVTS3 is focused on enterprises' investment in CVT courses. However, the CVTS3 M consortium recommended some changes to the collection of the cost data, which were implemented in the final questionnaire:

- Asking for every sub-item whether costs were incurred or not (to differentiate between non-response or in fact zero costs, an important improvement of data quality)
- Abandonment of the differentiation between the labour costs of full-time and part-time CVT trainers
- Deletion of the questions about the different sources of receipts and the number of CVT trainers.

From the very start of conceptualising CVTS, it was recognised that analysis of CVT is not complete if limited to the provision of training courses only. Information about so-called **“other forms of CVT”** also needs to be collected. These forms often are taking place at the immediate place of work, which makes it difficult to distinguish work and learning, both analytically and empirically. When analysing the outcomes of the two past surveys, it became clear that on the one hand the quality of the data was insufficient and on the other hand the data were not informative, because no information on the relevance of the other forms was provided. Therefore, the consortium originally proposed for CVTS3 a more comprehensive approach. However, because of the target not to increase the response burden, it was not possible to implement this approach in the final CVTS3 questionnaire. The consortium, nevertheless, proposed changes for the coverage of the other forms of CVT and concentrated on clarification of definitions and on collection of additional information on the number of participants.

Quantitative indicators are a central element for describing the structure of continuing vocational training in Europe. In CVTS2 four main quantitative indicators were used for the analysis of continuing vocational training in enterprises: training incidence, training access, training intensity and training costs. These main indicators are available at two levels, the national level and the level of training enterprises. We recommend to continue providing these indicators in CVTS3 and future CVTS. The CVTS3 M consortium suggested collecting participation of different age groups and broad occupational groups to analyse the access and the intensity of continuing vocational training for different groups of employees. However, the CVTS Working Group decided not to include questions about occupational groups in CVTS3.

The prime purpose of CVTS is to collect quantitative indicators of continuing vocational training in enterprises. Both CVTS1 and CVTS2 allowed for a number of supplementary qualitative questions concerning contents, character and organisation of CVT offered by enterprises. Some of the questions in CVTS2 provide a starting point for developing an opera-

tionalisation of a concept of “**professionalisation**” of enterprises’ approach to CVT. The CVTS3 M consortium proposed a set of qualitative questions – partly revised to enhance discriminatory power, partly new – to be integrated into an overall indicator, measuring the level of professionalisation of the organisation of CVT in an enterprise. The indicator should be able to classify enterprises by the scale of measures already taken to institutionalise CVT.

CVTS so far excludes enterprises employing less than 10 persons and enterprises in the sectors agriculture/forestry; fishing; public administration, government and municipal institutions; education; health; activities of private households; extra-territorial bodies. Extending the coverage of CVTS is desirable, as this would substantially enhance the representativeness and the quality of the results of the survey. The possibility of doing so depends inter alia on the state and coverage of national business registers. The consortium conducted a short survey on these issues and concluded that the integration of some of the economic sectors would imply additional conceptual and practical work. Policy interest in inclusion of small enterprises is high, considering the high share of small enterprises in all enterprises and all employees, but issues like the high volatility of the target population and a presumably higher response bias would require further efforts.

3.2. Refinement of the survey guidelines

Data availability in enterprises is one of the key factors for CVTS data quality. Enterprise surveys, because of the nature of the information required and data availability, are often more difficult than surveys of individuals. Some information on most of the variables included in the CVTS3 questionnaire is usually at hand, but the information is not always recorded in the enterprises’ accounting systems in a way that can be easily extracted when answering the questionnaire.

The CVTS3 M consortium analysed the data availability results of CVTS2 and the German extra survey and identified the most problematic items:

1. Data on participants (age, gender, occupational status)
2. Data on training hours, especially the subdivision by subject and provider
3. Data on training costs

The CVTS3 M consortium presented some proposals on how the answering of the problematic questions can be made easier for the enterprises (e.g. sending the questionnaire before telephone or face-to-face interviews).

Like in CVTS2 also for CVTS3 the data collection method was determined nationally - a unified approach was not possible. The CVTS3 M consortium compiled, based on an extensive assessment, the pros and cons of the use of the **different modes of data collection** (face-to-face interviews, telephone interviews, postal questionnaires, web based questionnaires).

In addition, the CVTS3 M consortium presented some recommendations for the **organisation of the field work** and addressed issues like the training of the interviewers and the supervision and monitoring of the field work. One of the most important recommendations concerns the implementation of national helpdesks or phone hotlines for the enterprises that should be administered professionally.

3.3. Conceptual informatics framework

The regulation stipulates that national **quality reports** containing all the information and data requested to verify the quality of the data are to be delivered. The consortium, as a conclusion

of their analysis of the national quality reports concerning CVTS2, stressed the necessity of including descriptions of all processes during the production of statistics, for example collection of data, editing, treatment of non-response and estimation. This information should include the concepts and methodology used in collecting and processing the data and other characteristics of the data that may affect their quality, use or interpretation.

There are two types of non-responses:

- **Unit non-response** arises when no survey data are collected for a unit (information is missing on all the questionnaire variables)
- **Item non-response** arises when some data are collected for a unit but values of one or more items are missing.

For CVTS3 it is important to have enough resources for re-contacting enterprises in order to reduce the unit and item non-response rates as much as possible. However, some non-response is inevitable. It is recommended that re-weighting be used to treat the problem of unit non-response, while imputation is used to treat problems of item non-response. However, it is not possible to base the imputation of qualitative variables on a model that uses a combination of other information in the enterprise record, like in the case of quantitative variables. This means that there are doubts if imputation of qualitative variables will improve quality in the estimates. It is also recommended that qualitative variables that have been imputed will not be used for further breakdown of enterprises within a NACE group or size class when the results are presented. The consortium strongly recommends analysing the effects of the imputations in different countries and for different variables. In order to do that, it is necessary that countries deliver datasets both before and after imputation of the variables for all participating countries.

4. Concluding remarks

The final results agreed upon by the CVTS Working Group meeting in September 2005 are a compromise between the conceptual discussion within the CVTS3 M consortium and with the other parties involved (e.g. the European Commission (DG EAC), Eurostat, countries participating in CVTS3), methodological requirements and the interests of the users of the data. Some of the objectives of the CVTS3 M project were difficult to bring in accord with each other and difficult to reach at the same time. The main restrictions to be considered during the preparation of the CVTS3 questionnaire were

- Costs of the survey,
- Burden on the respondents,
- Availability of detailed data on CVT in enterprises,
- Time schedule,
- Comparability with CVTS1 and CVTS2.

For future CVTS it should be considered to extend the coverage to enterprises with 5 - 9 employees and to include further NACE categories (e.g. agriculture/forestry, education, health and public administration, government and municipal institutions). Some topics are not yet sufficiently treated in CVTS, e.g. questions relating to the organisation of work of enterprises, the certification of CVT and the benefits of CVT could be included.

The information of CVT surveys is very important for the assessment of lifelong learning in the European Union despite the methodological and organisational pitfalls of these surveys. The CVTS3 M consortium hopes to have been contributing to the improvement of future CVT surveys with its work.