STATISTICS DENMARK

**Documentation of statistics for
Continuing Vocational Training Survey (CVTS) 2020**

1 Introduction

The purpose of the CVTS survey has been to create a comparable European statistics on Continual Vocational Training and education of the employees in enterprises. The statistic constitutes a part of the strategic goal of long life learning., which is a central feature in EU's strategy to increase the competitiveness of European enterprises hen hence the economic growth.

2 Statistical presentation

The data collected in the CVTS surveys (CVTS = Continual Vocational Training Survey) describes the enterprises activities in relation to continuing vocational training in the enterprises. The variables are specified in The European Parliament and Council Regulation No 1552/2005. Primarily it concerns the various types of training artivities, time usage and costs involved in the activities as well as planning aspects. In relation to CVTS2006 some variables are not included in CVTS2011. A few variables have been removed in CVTS2016 and a few has been simplified when compared to CVTS2011. Special COVID-19 questions were included in CVTS2020.

2.1 Data description

The data collected are specified in The European Parliament and Council Regulation No 1552/2005 as follows:

a) training policy and training strategies of enterprises in developing the skills of their workforce;

b) management, organization and forms of continuing vocational training in enterprises;

c) the role of social partners in ensuring all aspects of continuing vocational training in the workplace;

d) access to continuing vocational training, its volume and content, especially in the context of economic activity and enterprise size;

e) specific continuing vocational training measures of enterprises to improve the ICT skills of their workforce;

f) chances for employees in small and medium-sized enterprises (SMEs) to access continuing vocational training and to acquire new skills, and the particular needs of SMEs in the provision of training;

g) the effects of public measures on continuing vocational training in enterprises;

h) equal opportunities to access continuing vocational training in enterprises for all employees, with respect to gender and specific age groups in particular;

i) specific continuing vocational training measures for people with a disadvantage in the labour market;

j) continuing vocational training measures geared to different types of employment contract;

k) expenditure on continuing vocational training: funding levels and funding resources, incentives for continuing vocational training; and

l) evaluation and monitoring procedures of enterprises as regards continuing vocational training.

In relation to CVTS2006 some variables are not included in CVTS2011. A few variables have been removed in CVTS2016 and a few has been simplified when compared to CVTS2011. Special COVID-19 questions were included in CVTS2020.

2.2 Classification system

The statistic contain certain selected branches, 20 NACE categories (C-L) as well as three size categories of number of employees: 10-49, 50-249 and 250 or more.

2.3 Sector coverage

The statistic contain certain selected branches, 20 NACE categories (C-L) as well as three size categories of number of employees: 10-49, 50-249 and 250 or more.

- I=NACE 20 Section
- II=Section
- III=Description NACE rev.2

I II III

1. B B05-B09 = Mining and Quarrying
2. C C10-C12 = Manufacturing of food, drink and tobacco
3. C C13-C15 = Manufacturing of textiles, clothing, leather
4. C C17-C18 = Manufacturing of paper and paper products
5. C C19-C23 = Manufacturing of coke and refined petroleum products, chemical products, basic pharmaceutical products and -products, rubber and plastic products, other non-metallic mineral products
6. C C24-C25 = Manufacturing of basic metals, fabricated metal products
7. C C26-C28 + C33 = Manufacturing of computer, electronic and optical products, electric equipment, rep. of machinery and equipment
8. C C29-C30 = Manufacturing of motor vehicles, trailers and semi-trailers and other transport equipment
9. C C16 + C31-C32 = Manufacturing of wood products, furniture and other manufacturing
10. D D-E = Electricity, gas, district heating, water, sewerage, waste collection and management
11. F F = Construction activities
12. G G45 = Wholesale and retail trade and repair of motor vehicles and motorcycles
13. G G46 = Wholesale trade (except motor vehicles and motorcycles)
14. G G47 = Retail trade (except of motor vehicles and motorcycles)
15. I I = Accommodation and restaurants
16. H H = Transport and handling of goods, warehousing and storage
17. J J = Information and communication
18. K K64-65 = Banking and finance, insurance, pension funding
19. K K66 = Activities auxiliary to financial services and insurance activities
20. L L+M+N+R+S = Real estate activities, business- and scientific activities, engineering activities, administrative services, culture and recreation, sports and other services

2.4 Statistical concepts and definitions

Concepts: The surveys gather information about the employees participation in internal courses in the enterprise, external courses outside the enterprise, job rotation, job exchanges, job secondments, conferences and workshops, learning- or quality circles, self directed learning/e-learning

The number of participants is registered and the costs associated with the activities.

In addition :

- Evaluation of skills and competences according to importance
- Evaluation of skills and competences the enterprise want to promote
- Apprentices
- Reasons for no training activities (if no activities)

2.5 Statistical unit

Private enterprises.

2.6 Statistical population

Private enterprises, divided into three size categories and 20 branches groups according to the NACE nomenclature. :

2.7 Reference area

Denmark.

2.8 Time coverage

2006, 2011, 2016 and 2020.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

Enterprises.

2.11 Reference period

CVTS2020: 2020 CVTS2016: 2015 CVTS2011: 2010 CVTS2006: 2005

2.12 Frequency of dissemination

The survey will be conducted approx. once every five years.

2.13 Legal acts and other agreements

Regulation (EC) No 1552/2005 of The European Parliament and of The Council of 7 September 2005 on statistics relating to vocational training in enterprises. Commission Regulation (EC) No 198/2006 of 3 February 2006 implementing Regulation (EC) No 1552/2005 of the European Parliament and the Council on statistics relating to vocational training in enterprises.

Since 2005, the CVTS is underpinned by a Regulation of the European Parliament and of the Council on statistics relating to vocational training in enterprises. Implementing details were provided in the Commission Regulation No 198/2006 of 3 February 2006 which for CVTS4 has been amended by Commission Regulation No 822/2010 and for CVTS5 by Commission Regulation No 1153/2014.

2.14 Cost and burden

Danish enterprises have participated in the CVTS2006, CVTS2011, CVTS2016 and CVTS2020 on a voluntary basis. Therefore there is no estimate of the response burden. However, it is beyond any doubt that the burden was considerably for those companies who decided to answer.

2.15 Comment

For further information contact Statistics Denmark.

3 Statistical processing

Various procedures were conducted for data controlling and high quality. To assure consistency, answers which were not logic were checked and corrected by follow up by contact to the responding enterprises if necessary. Furthermore, an imputation on core variables was applied, the variables specified by Eurostat. A weighting procedure on 60 cells was applied (20 NACE categories and 3 size groups) in such a way that the sample was representative for the universe..

3.1 Source data

CVTS2006, CVTS2011, CVTS2016 and CVTS 2020: Data is mainly collected by a common European questionnaire translated into Danish and sent to a sample of Danish private enterprises. In addition to the data based on the questionnaire a small part of data has been collected from existing data registers of enterprises in Statistics Denmark.

The register of enterprises was used as basis for the sampling in relation to main branch (20 branches specified in NACE) and number of employments specifying three groups: 10-49, 50-249 and 250 or more employees.

For CVTS2006 2.819 enterprises were sampled as representative of the 19.295 enterprises representing the specified branches, which were registered in the register of enterprises the second quarter of 2005 with more than 10 employees. The response rate was 31 corresponding to 884 enterprises.

For CVTS2011 3.036 enterprises were contacted leading to a response rate of 41 pct. corresponding to 1.242 enterprises.

For CVTS2016 3.001 enterprises were contacted leading to a response rate of 50 pct. corresponding to 1.511 enterprises.

For CVTS2020 3.432 enterprises were contacted leading to a response rate of 47 pct. corresponding to 1.616 enterprises.

In order to have representative data for all all enterprises a weighting procedure has been carried out based on information from the register of enterprises.

3.2 Frequency of data collection

Every 5th year. However, the frequency of the statistics included in the program of life long learning are being re-considered.

3.3 Data collection

- CVTS2006: Mail interviews
- CVTS2011: Web- or telephone interviews
- CVTS2016: Web- or telephone interviews
- CVTS2020: Web- or telephone interviews

3.4 Data validation

Data were controlled for consistency concerning the answers to the questions related to persons, hours spent and costs for educational activities in the enterprises. Not logical answers and inconsistencies in the answers were always or as far as possible corrected.

3.5 Data compilation

Imputation was conducted on specific variables (so called core variables) specified by Eurostat. A weighting procedure was applied on 60 sampling cells (20 business categories and 3 size groups).

3.6 Adjustment

No further corrections apart from what is mentioned in Data Validation and Data Processing are conducted.

4 Relevance

The survey results are mainly of interest to persons engaged in the educational sector, educational institutions, ministries and business organizations.

4.1 User Needs

Users of the results from the surveys in all participating countries will in the first hand be the European Council, the European Parliament and the European Commission in monitoring and analyzing the development of Lifelong Learning among the adult population (25-64 years) in the European Union.

Results of the surveys is also expected to be used by the government bodies and the social partners for evaluation and possibly for defining new political initiatives in the area of continual vocational training within their own countries.

Besides, data from all countries will be available for researchers for further analysis.

4.2 User Satisfaction

No user satisfaction survey has taken place.

4.3 Data completeness rate

Data fulfill the demands in the EU-Regulation and in the manuals delivered by Eurostat for the survey.

5 Accuracy and reliability

CVTS2006: Postal questionnaires supplemented with data from administrative registers. About 60 per cent of the returned questionnaires ended up being scanned and the rest were registered manually. The scanning of the questionnaire gave problems with the data quality for some questions, in particular concerning the questions on amounts of money, number of persons and hours. CVTS2011, CVTS2016 and CVTS2020: Web interviews in combination with telephone interviews supplemented with data from administrative registers. The survey questions about amounts of money, number of persons and hours etc. in particular gave problems with the data quality as these questions needed several persons to be involved.

5.1 Overall accuracy

The questionnaire was sent to a selected sample of private enterprises.

For CVTS2006 there were 19.295 enterprises in the population and 2.819 enterprises in the selected sample. The response rate was 31.

For CVTS2011 there were 18.571 enterprises in the population and 3.036 enterprises in the selected sample. The response rate was 41.

For CVTS2016 there was 18.431 enterprises in the population and 3.001 enterprises in the selected sample. The response rate was 50.

For CVTS2020 there was 30.553 enterprises in the population and 3.432 enterprises in the selected sample. The response rate was 47.

Measurements have been taken to compensate for the item non response. The information from the enterprises not answering all quantitative questions has been imputed. The enterprises are divided to 60 categories by economic activity (20 NACE categories) and number of employed persons (three size categories).The imputation replaces missing data with data from enterprises with identical characteristics concerning the size and the economic activity of the enterprise. Measures are also taken to reduce unit non-response based on a weight applied to each data record. The method of weighting is based on information on number of persons employed from the register of enterprises and carried out by a regression estimation.

5.2 Sampling error

CVTS2020. The uncertainty as expressed by the variation coefficient for the one of the main variables: Enterprises offering CVT: The variation coefficient tells the uncertainty as a percentage of the mean of the variable. Based on the estimated value of the variable (i.e. the value related to the universe) a 95 percent interval of confidence can be expressed as plus/minus twice the variation coefficient.

For the total sample (I.e. All) the uncertainty is plus/minus 2,20

Alle: 2,20

Size groups:

- 1: 10-49 empl.: 2,77
- 2: 50-249 empl.: 4,27
- 3: 250+ empl.: 4,43

Groupings of enterprises (NACE-groups):

- Nace 1: 8,78
- Nace 2: 6,97
- Nace 3: 6,99
- Nace 4: 6,00
- Nace 5: 4,37
- Nace 6: 4,68
- Nace 7: 4,95
- Nace 8: 5,22
- Nace 9: 4,84
- Nace 10: 5,08
- Nace 11: 5,53
- Nace 12: 6,32
- Nace 13: 5,16
- Nace 14: 7,63
- Nace 15: 5,82
- Nace 16: 9,77
- Nace 17: 4,92
- Nace 18: 6,38
- Nace 19: 6,50
- Nace 20: 5,37

CVTS2016. The uncertainty as expressed by the variation coefficient for the one of the main variables: Enterprises offering CVT: The variation coefficient tells the uncertainty as a percentage of the mean of the variable. Based on the estimated value of the variable (i.e. the value related to the universe) a 95 percent interval of confidence can be expressed as plus/minus twice the variation coefficient.

For the total sample (I.e. All) the uncertainty is plus/minus 5,23

The uncertainty is larger for the small and large sized enterprises than for the middle size. For the small enterprises the uncertainty is plus/minus 3,11 and for the larger it is plus/minus 4,86. For the NACE-groups the largest uncertainty is for group 1: plus/minus 16,43.

All: 5,23

Size groups:

- 1: 10-49 empl.: 7,96
- 2: 50-249 empl.: 9,22
- 3: 250+ empl.: 6,86

Branches:

- Nace 1: 29,27
- Nace 2: 14,10
- Nace 3: 17,46
- Nace 4: 10,86
- Nace 5: 11,15
- Nace 6: 10,86
- Nace 7: 10,16
- Nace 8: 13,02

- Nace 9: 10,17
- Nace 10: 18,48
- Nace 11: 10,81
- Nace 12: 11,72
- Nace 13: 25,97
- Nace 14: 13,93
- Nace 15: 17,64
- Nace 16: 19,49
- Nace 17: 20,27
- Nace 18: 15,61
- Nace 19: 50,97
- Nace 20: 24,47

CVTS2011: The variation coefficient for enterprises offering CVT:

All: 2,52

Size groups:

- 1: 10-49 empl.: 3,11
- 2: 50-249 empl.: 2,68
- 3: 250+ empl.: 4,86

Groupings of enterprises (NACE-groups):

- Nace 1: 16,43
- Nace 2: 6,42
- Nace 3: 7,02
- Nace 4: 6,78
- Nace 5: 7,69
- Nace 6: 7,45
- Nace 7: 6,35
- Nace 8: 5,18
- Nace 9: 7,75
- Nace 10: 5,43
- Nace 11: 9,96
- Nace 12: 7,43
- Nace 13: 6,99
- Nace 14: 7,87
- Nace 15: 8,29
- Nace 16: 8,86
- Nace 17: 6,57
- Nace 18: 6,72
- Nace 19: 9,66
- Nace 20: 6,53

5.3 Non-sampling error

The enterprises are sampled based on their CVR-number. However, the activities of some companies are involving several CVR-numbers which means that the answers in the interview can't be related to the specific CVR-number sampled. As various people in the enterprise had to answer specific parts of the interview, a number on inconsistencies in the answers was found in the data. The follow up and corrections necessary demanded a considerably effort.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The questionnaire was sent to a selected sample of enterprises. To reach the final result the enterprises were weighted in relation to their size (by number of employees) and financial activity (by NACE codes).

For CVTS2006 there was 19.295 enterprises in the population and 2.819 enterprises in the selected sample. The response rate was 31.

For CVTS2011 there was 18.571 enterprises in the population and 3.036 enterprises in the selected sample. The response rate was 41.

For CVTS2016 there was 18.431 enterprises in the population and 3.001 enterprises in the selected sample. The response rate was 50.

For CVTS2020 there was 30.553 enterprises in the population and 3.432 enterprises in the selected sample. The response rate was 47.

For CVTS2011, CVTS2016 and CVTS2020: Some of the enterprises who had answered the questionnaire had not answered some of the questions. In the case of quantitative data the information was imputed (core variables). The imputation substitutes the missing data from the enterprises with the same characteristics. The criteria used was financial activity and size (number of employees).

Many working hours were executed in the process of ensuring logic and a reasonably consistency in the answers given by the enterprises. E.g. the relations between people who had been on courses, the number of working hours they had spent on this as well as expenses were not always logic and consistent.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the Revision Policy for Statistics Denmark. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Only final figures are published.

6 Timeliness and punctuality
- CVTS3: Published: 4th quarter 2007.
- CVTS4: Reference period: 2010. Published: 21st of Feburary 2014.
- CVTS5: Reference period: 2015. Published: 21st of February 2019.
- CVTS6: Reference period: 2020. Published: 28th of June 2022.

The period from the end of the reference period for CVTS until publication is mainly due to efforts carried out to increase response rate as well as data quality.

6.1 Timeliness and time lag - final results
- CVTS3: Published: 4th quarter 2007 .
- CVTS4: Reference period: 2010. First quarter 2014.
- CVTS5: Reference period: 2015. First quarter 2019.
- CVTS6: Reference period: 2020. Second quarter 2022.

6.2 Punctuality

The CVTS2016-survey was delayed concerning delivery of data to Eurostat. The reason was delay in data quality control procedures. The CVTS2011-survey was delayed concerning delivery of data to Eurostat. The reasons was delay in data corrections and quality control procedures.

7 Comparability

Eurostat publish data for the EU-member states for CVTS. The results are comparable across the member states as the same guidelines have been applied. The guidelines was specified by EU.

7.1 Comparability - geographical

Comparable data for the CVTS-surveys within EU-countries are being published by Eurostat.

7.2 Comparability over time

It can be problematic to compare the results of the earlier years, because:

- the response rate was 31 pct. in CVTS2006, 41 pct. in CVTS2011, 50 pct. in CVTS2016 and 47 pct. in CVTS2020.
- some variables included in CVTS2006 were discarded in CVTS2020 which means that a comparison is not always possible between the two surveys.

7.3 Coherence - cross domain

There is no direct comparable Danish statistics within this area. However, a few questions have related to participation within various periods have been included in the Labor Force Survey (LFS).

7.4 Coherence - internal

Often the answers to some of the questions were not logic or coherent in relation to each other which caused a considerably work related to control, follow-up and correction of the results.

Uncases with lack of answers in relation to quantitative data, these were imputed. The imputations substitutes the missing values by information from similar enterprises. The criteria used were financial activity and size.

8 Accessibility and clarity

News from Statistics Denmark and the Statbank.

The CVTS results from all participating countries will be published by Eurostat on New Cronos statistical data base.

Some data from CVTS2006, CVTS2011, CVTS2016 and CVTS2020 are available from the statbank: CVTS - Statistikbanken.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.4 News release
- CVTS2020
- CVTS2016
- CVTS2011
- CVTS2006

8.5 Publications

Not relevant for these statistics.

8.6 On-line database

The statistics are published in the StatBank in the table:

- CVTS1: Supplementary education in enterprises (CVTS) by type of continuing education in enterprises, number of employees and time

8.7 Micro-data access

Researchers can get access to micro-data by agreement with Eurostat.

8.8 Other

Not relevant for these statistics.

8.9 Confidentiality - policy

[Discretion polity of Statistics Denmark](#).

8.10 Confidentiality - data treatment

The standard procedures of Statistics Denmark are applicable.

8.11 Documentation on methodology

The European Union Manual of the CVTS2006 survey (English): "The 3rd Continuing Vocational Training Survey (CVTS2006)" Eurosat Working Papers. Population and social conditions 3/2006/F/No.32).

Manual for the CVTS2011 (English) can be downloaded from [CVTS2011 - Manual](#).

Manual for the CVTS2016 (English) can be downloaded from [CVTS2016 - Manual](#).

Manual for the CVTS2020 (English) can be downloaded from [CVTS2020 - Manual](#).

A quality report to Eurostat have been written by Statistics Denmark for CVTS2011, CVTS2016 and CVTS2020. This is not publically available.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of these statistics are in the division of Population and Education. The person responsible is Ingibjörg Sól Ingólfsdóttir, tel. +45 39 17 37 56, e-mail: isi@dst.dk

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Population and Education, Education

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