



**An  
Phríomh-Oifig  
Staidrimh**

Central  
Statistics  
Office

# **Standard SIMS Report:**

## **Continuing Vocational Training Survey**



# **Single Integrated Metadata Structure (SIMS) Report**

## **For**

# **Continuing Vocational Training Survey**

This documentation applies to the reporting period:  
**2020**

Last edited: 13/4/2023



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## 2. Introduction

The continuing vocational training survey (CVTS) collects information on enterprises' investment in the continuing vocational training of their staff. Continuing vocational training (CVT) refers to education or training measures or activities which are financed in total or at least partly by the enterprise (either directly or indirectly).

Enterprise investment in CVT promotes competitiveness, productivity and employment in Ireland and Europe while resolving labour market imperfections and employment imbalances.

A high-quality data set reflecting the continuing vocational training activities of European enterprises is an indispensable asset in the assessment of enterprise competitiveness and workforce employability and is the key to the analysis of

- Labour skills supply and demand
- The forms, skills targeted, and volume of training provided as well as training needs
- The enterprises' own internal provision of vocational training as a function of that provided on the external market
- Costs of enterprise financed vocational training

## 3. Contact

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## 4. Metadata Update

### 4.1. Metadata last certified

13/4/2023

### 4.2. Metadata last posted

21/4/2023

### 4.3. Metadata last update

13/4/2023



## 5. Statistical Presentation

### 5.1. Data Description

The Continuing Vocational Training Survey (CVTS) collects information on enterprises' investment in the continuing vocational training of their staff. Continuing vocational training (CVT) refers to education or training measures or activities which are financed in total or at least partly by the enterprise (directly or indirectly). Part financing could include the use of work-time for the training activity as well as financing of training equipment.

Information available from the CVTS is grouped around the following topics:

- Provision of CVT courses and other forms of CVT (training/non-training enterprises)
- CVT strategies
- Participants in CVT courses
- Costs of CVT courses
- Time spent in CVT courses
- Characteristics of CVT courses
- Assessment of CVT activities

The CVTS also collects some information on initial vocational training (IVT).

For further information see the CVTS 6 legislation (<http://ec.europa.eu/eurostat/web/education-and-training/legislation>) and the CVTS 6 implementation manual (<http://ec.europa.eu/eurostat/web/education-and-training/methodology>).

### 5.2. Classification System

#### Sector

The NACE Rev 2 sections (NACE is the EU classification of Economic Activity):

Section B: Mining and quarrying  
Section C: Manufacturing  
Section D: Electricity, gas, steam and air conditioning supply  
Section E: Water supply; sewerage, waste management and remediation activities  
Section F: Construction  
Section G: Wholesale and retail trade; Repair of motor vehicles and motorcycles  
Section H: Transportation and storage  
Section I: Accommodation and food service activities  
Section J: Information and communication  
Section K: Financial and insurance activities  
Section L: Real estate activities  
Section M: Professional, scientific and technical activities  
Section N: Administrative and support service activities  
Section R: Arts, entertainment and recreation  
Section S: Other service activities

NACE sections O (Public administration and Defence), P (Education), Q (Human Health and social work activities), R (Arts, entertainment and recreation), S (Other service activities) were not included in the survey.

The results in the publication are grouped as follows:

NACE Rev. 2 groupings	NACE Rev. 2 Codes
Industry	B – E
Construction	F
Wholesale and retail	G
Transport and storage, information and communication	H,J
Accommodation and food services	I
Financial and insurance	K



Real estate, professional, admin, arts and other services L,M,N,R,S

### 5.3. Sector Coverage

NACE Rev. 2 sectors B-N, R,S.

### 5.4. Statistical Concepts and definitions

**Continuing vocational training (CVT)** are training measures or activities which have as their primary objectives the acquisition of new competences or the development and improvement of existing ones and which must be financed at least partly by the enterprises for their persons employed who either have a working contract or who benefit directly from their work for the enterprise such as unpaid family workers and casual workers. Persons employed holding an apprenticeship or training contract should not be taken into consideration for CVT. The training measures or activities must be planned in advance and must be organised or supported with the special goal of learning. Random learning and initial vocational training (IVT) are explicitly excluded. CVT measures and activities cover both CVT courses and other forms of CVT.

**CVT courses** are typically clearly separated from the active workplace (learning takes place in locations specially assigned for learning like a class room or training centre). They show a high degree of organisation (time, space and content) by a trainer or a training institution. The content is designed for a group of learners (e.g. a curriculum exists). Two distinct types of CVT courses are identified: internal and external CVT courses.

**Other forms of CVT** are typically connected to the active work and the active workplace, but they can also include participation (instruction) in conferences, trade fairs etc. for the purpose of learning. These other forms of CVT are often characterised by a degree of self-organisation (time, space and content) by the individual learner or by a group of learners. The content is often tailored according to the learners' individual needs in the workplace. The following types of other forms of CVT are identified:

- planned training through guided-on-the-job training;
- planned training through job rotation, exchanges, secondments or study visits;
- planned training through participation (instruction received) in conferences, workshops, trade fairs and lectures;
- planned training through participation in learning or quality circles;
- planned training through self-directed learning/e-learning.

**Training enterprises** are enterprises that provided CVT courses or other forms of CVT for their persons employed during the reference year.

A **participant in CVT courses** is a person who has taken part in one or more CVT courses during the reference year. Each person should be counted only once, irrespective of the number of CVT courses he or she has participated in. E.g. if a person employed has participated in two externally managed courses and one internally managed course, he or she should be counted as one participant.

The **costs of CVT courses** cover direct costs, participants' labour costs and the balance of contributions to and receipts from training funds (net contribution).

#### **Direct course costs:**

- fees and payments for CVT courses;
- travel and subsistence payments related to CVT courses;
- the labour costs of internal trainers for CVT courses (direct and indirect costs);
- the costs for training centres, training rooms and teaching materials.

**Participants' labour costs** (personal absence costs) refer to the labour costs of participants for CVT courses that take place during paid working time.



The **net contribution** to training funds is made up of the amount of contributions made by the enterprise to collective funding arrangements through government and intermediary organisations minus receipts from collective funding arrangements, subsidies and financial assistance from government and other sources.

**Time spent on CVT courses** refers to paid working time (in hours) spent on CVT courses, i.e. the time that all participants have spent in total during the reference year. This should only cover the actual training time, and only the time spent during the paid working time.

Since 2005, the CVTS contains some variables on **initial vocational training** (IVT). IVT within enterprises is defined as a formal education programme (or a component of it) where working time alternates between periods of education and training at the work place and in educational institutions or training centres.

The number of **persons employed** is defined as the total number of persons who work in the observation unit *excluding persons employed holding an apprenticeship or training contract* (i.e. the definition of persons employed in CVTS deviates from the one used for structural business statistics as regards the treatment of persons employed holding an apprenticeship or training contract). According to the CVTS legislation, the number of persons employed should refer to the 31.12. of the reference year. However, the annual average is considered the better measure, as quantitative CVT measures (such as costs, hours) refer to the calendar year.

A full list of definitions as well as the list of variables covered are available in the CVTS 6 implementation manual <https://ec.europa.eu/eurostat/web/education-and-training/methodology>

## 5.5. Statistical Unit

Information is collected from enterprises.

## 5.6. Statistical Population

The survey population is made up of enterprises with 10 or more persons employed in the Irish structural business economy (NACE Rev. 2 sectors B-N, R,S). This population is identified on the CSO's Central Business Register.

## 5.7. Reference Area

Republic of Ireland, although training units responsible for activities in Ireland could be abroad.

## 5.8. Time Coverage

1999, 2005, 2015, 2020

## 5.9. Base period

Not applicable.

## 6. Unit of Measure

The final results are expressed in terms of the percentage of enterprises. Numbers of enterprises and staff are expressed as integers. Labour cost share is expressed in Euro.

## 7. Reference Period

2020.





## 8. Institutional Mandate

### 8.1. Legal Acts and other agreements

Nationally the CVTS is governed under Statistics (Continuing Vocational Training Survey) Order 2021 (S.I. No. 89/2021).

The European legislative basis is European Commission Regulation (EC) No 1552/2005 of the European Parliament and the Council Implementing act: Commission Regulation (EU) No 1153/2014, amending Commission Regulation (EC) No 198/2006

### 8.2. Data Sharing

Not applicable.

## 9. Confidentiality

### 9.1. Confidentiality – policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit:

<https://www.cso.ie/en/aboutus/lqdp/csodatapolicies/statisticalconfidentiality/>

### 9.2. Confidentiality – data treatment

All data are treated as strictly confidential in accordance with Part V of the Statistics Act, 1993. In order to ensure confidentiality, NACE Groups are amalgamated where individuals and/or companies are identifiable.

## 10. Release Policy

### 10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

### 10.2. Release calendar access

The release calendar can be accessed via the CSO website, [www.cso.ie](http://www.cso.ie), or directly from this link:

<https://www.cso.ie/en/csolatestnews/releasecalendar/>

### 10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.



The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at <https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/>

The various results are published nationally in statistical release format as well as on the CSO website ([www.cso.ie](http://www.cso.ie)) Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.

## **11. Frequency of Dissemination**

Every five years.

## **12. Accessibility and clarity**

### **12.1. News release**

Not applicable.

### **12.2. Publications**

The published release can be found in the CSO website or directly from this link <https://www.cso.ie/en/statistics/education/continuingvocationaltraining/>

### **12.3. On-line database**

The data tables associated to this release can be found in the CSO's dissemination database PxStat. They are available directly from this link. <https://data.cso.ie/product/CVT>

#### **12.3.1. AC 1. Data tables -consultations**

Not calculated.

### **12.4. Micro-data Access**

Micro data is not publicly available.

### **12.5. Other**

Data are sent to Eurostat to be used in European aggregates and/or to be released as national data.

#### **12.5.1. AC2. Metadata consultations**

Not calculated.

### **12.6. Documentation on Methodology**

Documentation on methodology can be found on the methods page of the latest continuing vocational training survey documentation <https://www.cso.ie/en/methods/education/continuingvocationaltraining/>



Eurostat has published guidelines ([https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Continuing Vocational Training Survey \(CVTS\) methodology](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Continuing_Vocational_Training_Survey_(CVTS)_methodology)) to assist countries and to ensure that there is a consistent methodology followed in all member states.

#### **12.6.1. AC3 – Metadata completeness – rate**

Not calculated.

### **12.7. Quality Documentation**

Further information on the documentation associated with this output can be found in the Methods page in cso.ie

<https://www.cso.ie/en/methods/multisectoral/continuingvocationaltrainingsurvey/>

## **13. Quality Management**

### **13.1. Quality Assurance**

#### **Quality Management Framework**

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCoP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

### **13.2. Quality Assessment**

The statistical activities carried out by CSO are done according to the UNECE's Generic Statistical Business Process Model (GSBPM). Assessments of Quality Management are carried out during each relevant phase of the model using feedback from users and staff and system metrics collected during processing. The information is used currently on an ad-hoc basis to design and implement improvement actions.

## **14. Relevance**

### **14.1. User Needs**

The CVTS is a unique source providing quantitative information on enterprises' investment in continuing vocational training of their staff, providing information on participation, time spent and costs of such training. The CVTS also provides qualitative information on enterprise strategies towards training, on the skills targeted as well as on obstacles to continuing vocational training. Accordingly, CVTS data are used to evaluate and better understand training practices across Europe and allow policy decision-making on vocational training.

CVTS data are widely used across the EU in particular for the monitoring and evaluation of EU policies in the field of vocational training. Other main users of CVTS statistics may be classified into the following categories:

- government institutions, ministries of education, labour and other ministries;
- universities, research institutions, vocational institutions, students;
- enterprises, training companies, management consultants;
- social partners (e.g. trade unions), media, multi-national organizations.

#### **14.1.1. Main National Users**

Government, Economic analysts, Professional bodies, General public



#### **14.1.2. Principal External Users**

Eurostat

### **14.2. User Satisfaction**

A user satisfaction survey was conducted in 2011 for CVTS 3 in the framework of a rolling review of EU education statistics.

No recent index for user satisfaction is available, but there are regular meetings with national experts and essential users to react to new requirements, if these are not in contrast with legal necessities or constraints. In addition, an office wide user satisfaction survey takes place in periodic intervals.

### **14.3. Data Completeness**

All data required by Eurostat is currently disseminated.

#### **14.3.1. Data Completeness rate**

100%

## **15. Accuracy and reliability**

### **15.1. Overall accuracy**

The main sources of error affecting this survey are sampling errors, non-response errors and measurement errors.

The sample selection technique used minimizes sampling error (details given in 13.2). Also non-response contributes to non-sampling error but with response rates of over 40% achieved across almost all NACE groups the effect should be minimal. The response rate by size class was 46% for enterprises with 10-49 persons employed, 42% of enterprises with 50-249 persons employed and 40% for enterprises with 250 or more persons employed.

Measurement errors are monitored and corrected via the generation of regular reports and using editing procedures.

### **15.2. Sampling Error**

All enterprises with 10 or more persons employed in the NACE sections B to N, R and S were included in the sampling frame.

Targeted, systematic and intensive follow-up for non and partial response was carried out. And when core variables remained missing these respondents were converted to non respondents.

Item non response was measured for the key variables and each case fulfilled the criteria agreed in section 4.3.8 Treatment of non response in the CVTS manual. Item non response in these key variables were imputed using the average experienced in the sample cell. No estimation was carried out. Unit non response was treated by weighting.

Coefficients of variation were calculated uses SAS procedure proc surveymeans for the totals and a combination of proc surveyfreq and proc surveymeans for the ratios. The coefficient of variation of the Ratio of the total number of participants in CVT courses to the total number of persons employed was not calculated.



### 15.2.1. A1. Sampling error indicator

The coefficients of variation associated with each key variables are as follows:

Key Statistic	Estimated value	Coefficient of variation
Total number of enterprises	22,838.95	0
Total number of persons employed	1,238,551.03	0.03
Total number of enterprises that provided any form of CVT	15,622.12	0.02
Ratio of the total number of enterprises that provided any form of CVT to the total number of enterprises	0.68	0.02
Total number of enterprises that provided CVT courses	11,053.27	0.03
Ratio of the total number of enterprises that provided CVT courses to the total number of enterprises	0.48	0.03
Total number of persons employed in enterprises that provided any form of CVT	1,015,801.98	0.03
Total number of participants in CVT courses	459,052.22	0.04
Ratio of the total number of participants in CVT courses to the total number of persons employed	0.37	0
Ratio of the total number of participants in CVT courses to the total number of persons employed in enterprises that provided CVT courses	0.56	0.03
Total costs of CVT courses (direct costs plus net contributions to training funds)	299,830,733.99	0.13
Direct costs of CVT courses	266,996,658.75	0.15
Labour costs of participants in CVT courses	976,914,601.00	0.2
Total number of enterprises providing IVT	4,009.20	0.06
Ratio of the total number of enterprises providing IVT to the total number of enterprises	0.18	0.06

For more information see [https://ec.europa.eu/eurostat/cache/metadata/EN/trng\\_cvt\\_sims\\_ie.htm](https://ec.europa.eu/eurostat/cache/metadata/EN/trng_cvt_sims_ie.htm)

## 15.3. Non-sampling Error

The main sources of non-sampling error in the CVTS survey refer to coverage error (over and under coverage) and measurement errors and are detailed further in the sub-concepts listed below.

### 15.3.1. Coverage error

The Business Register was the sampling frame used for CVTS 6.

In preparation for CVTS a Contacts Survey was carried out in at the end of 2020 to ensure the form reached the right desk in June 2021 when the CVTS survey was issued to the field.

As the Earnings, Hours and Employment Costs Survey (EHECS) is one of the surveys used to validate the frame and it captures employment and other labour-related variables it is considered to the best proxy for the CVTS (for sampling and other considerations).

There were 5,706 enterprises in the gross sample with 56 enterprises out-of-scope.



#### **15.3.1.1. A2. Over coverage rate**

1.0%.

#### **15.3.1.2. A3. Common units – proportion**

Not applicable.

#### **15.3.2. Measurement error**

This type of error mainly occurs because of the respondent misunderstands the question being asked or because the information requested is difficult to obtain.

When a survey e-questionnaire is returned to the CSO, the e-questionnaire is scrutinised to catch any errors. If there are errors, the enterprise is contacted to confirm and/or correct the data.

Measurement Error is not formally calculated for the survey. The following should be noted:

1. Questionnaire – the questionnaire is clear with definitions provided where necessary. The design of the questionnaire is monitored, and changes made if necessary.
2. Data collection method – the collection method is by eQuestionnaire. This method is unlikely of itself to be a source of measurement error.
3. Respondent - survey data can contain sensitive and confidential information. The survey publishes aggregated results at NACE sector level; no information on individual people or companies is disclosed in the results.

#### **15.3.3. Non-Response Error**

The CVTS survey required data from multiple departments of a single enterprise and required a coordinated response. The affected both the unit and item response rates. The bigger the enterprise the more difficult the challenge. Typically training managers do not know the labour costs of their organisation, and finance departments don't know the training strategy. IT training departments don't know the training requirements of other departments etc.

Anticipating this challenge, a website was designed to answer most respondents questions (<http://www.cso.ie/en/methods/education/continuingvocationaltraining/>) and legislation was enacted to enforce it.

The questionnaire was issued electronically and a dedicated team engaged with enterprises to reduce non-response.

The population for the survey is all enterprises with 10 or more persons engaged operating in NACE Rev. 2 sectors B-N,R,S. More than 5,000 enterprises were surveyed and the response rate to the survey was 47.5%. Returned survey forms were verified and edited before the data was weighted up to the frame population.



### 15.3.3.1. Unit non response rate

	Unit non-response Rate
<b>NACE Rev. 2 Sector</b>	
B05-09 Mining and Quarrying	54.7
C10-C12 Manufacturing of food products; beverages; tobacco products	55.4
C13-C15 Manufacture of textiles; wearing apparel; leather and related products	50.0
C17-C18 Manufacture of paper and paper products; printing and reproduction of recorded media	51.4
C19-C23 Manufacture of coke and refined petroleum products; chemicals and chemical products; basic pharmaceuticals products and preparations; rubber and plastic products; other non-metallic mineral products	51.1
C24-C25 Manufacture of basic metals; fabricated metal products; except machinery and equipment	54.3
C26-C28+C33 Manufacture of computer, electronic and optical products; electrical equipment; machinery and equipment n.e.c; repair and installation of machinery	53.7
C29-C30 Manufacture of motor vehicles; trailers and semi-trailers; other transport equipment	56.8
C16+C31-C32 Manufacture of wood and of products of wood and cork; except furniture; manufacture of articles of straw and plaiting materials; furniture; other manufacturing	56.9
D-E Electricity, gas, steam and air conditioning supply; water supply; sewerage; waste management and remediation activities	63.1
F Construction	58.8
G45 Wholesale and retail trade and repair of motor vehicles and motorcycles	58.3
G46 Wholesale trade, except of motor vehicles and motorcycles	47.8
G47 Retail trade, except of motor vehicles and motorcycles	63.3
H Transportation and storage	60.7
I Accommodation and food service activities	69.2
J Information and communication	56.2
K64-K65 Financial service activities, except insurance and pension funding; insurance, reinsurance and pension funding, except compulsory social security	41.7
K66 Activities auxiliary to financial services and insurance activities	45.9
L+M+N+R+S Real estate activities; professional, scientific and technical activities; administrative and support service activities; arts, entertainment and recreation; other service activities	52.2
<b>Size Class</b>	
10 – 49 persons employed	53.7
50 – 249 persons employed	57.7
250 or more persons employed	59.6
<b>Overall</b>	<b>55.7</b>



#### 15.3.3.2. Item non-response rate

Item non-response in relation to the relevant target population, i.e. depending on the variable all enterprises, training enterprises, CVT course enterprises or non-training enterprises.

CVTS 6 variables with item non-response rates 10% and higher	
Variable (according to the code book, e.g. A10a)	Item non-response rate (%)
A16A	56.2
B5A	17.6
B5B	27.3
C2M	12.6
C2F	16.8
C3I	14.3
C3E	15.5
C4	16.2
C7AFLAG	23.7
C7BFLAG	85.3
C7CFLAG	76.5
C7DFLAG	88.5
D2BB	10.4
D2BD	10.7
D2BE	33.4
D3E	10.2
D3F	10.6
D3I	17.9
E1B	13.9
E1C	18.9
E1D	18.4
E1E	20.3
E1F	19.7
E1G	20.4
E1H	17.5
E1I	15.5
F2C	15.2
F2D	11.5
F2E	20.1

#### 15.3.4. Processing error

All possible measures are taken to avoid processing errors. The use of the CSO electronic Questionnaires (eQ) reduces processing errors as the data is transferred electronically and there is no scanning of postal forms etc.

Where mistakes relating to programming or publishing have occurred, corrective measures taken as well as actions for avoiding them in the future should be reported.





#### **15.3.5. Model assumption error**

Not applicable.

#### **15.3.6.**

Not applicable

## **16. Timeliness and punctuality**

### **16.1. Timeliness**

The deadline for transmission of data to Eurostat is t+18 months after the reference year. At national level data is disseminated an extra 5-10 months after Eurostat transmission.

#### **16.1.1. TP1. Time lag – First results**

There are no provisional results for the survey.

#### **16.1.2. TP2. Time lag – Final results**

T+18 months for Eurostat.

T+23-28 months nationally.

### **16.2. Punctuality.**

The statistics were released in accordance with the dates set out on the CSO Release Calendar. The national release was published on December 2022 – about five months after the data transmission to Eurostat.

#### **16.2.1. TP3. Punctuality – Punctuality - delivery and publication**

0 days.

## **17. Comparability**

### **17.1. Comparability – Geographical**

The introduction of Regulation No 1552/2005 for the implementation of CVTS 3 resulted in the limitation of comparability problems between countries, which was a problem in CVTS 2 (despite the agreed implementation guidelines).

For CVTS 3 to 6 most countries conducted their surveys in line with the regulations.

According to the CVTS legislation, the number of persons employed should refer to the 31.12. of the reference year. However, the annual average is considered the better measure, as quantitative CVT measures (such as costs, hours) refer to the calendar year.

2020: Data for Belgium, Czechia, Greece, Italy, Luxembourg, Austria and Romania refer to the annual average.

Some deviations are reported in an effort to efficiently adapt the regulations at national level (e.g. slight changes in the questionnaire – wording, sequence of questions, etc., use of administrative data for the completion of specific items of the questionnaire).



## 17.2. Comparability over time

The first CVTS was carried out for reference year 1993 among 12 Member States of the European Union. Growing demand for CVT data led to a second CVT survey in 1999. The third iteration of CVTS was conducted for 2005 and was underpinned by a European legal act, Regulation (EC) No 1552/2005 for the first time. Ireland did not participate in the fourth iteration in 2010 but did participate in CVTS 5 and CVTS 6 for 2015 and 2020 respectively.

When comparing the different waves of CVTS, some changes have been made with respect to definitions and the questionnaire. Modifications have actually been made in view of improving the overall quality of CVTS and are not considered to have a serious impact on the comparability between the waves since 2005.

Specific breaks in series are signalled with flags in the tables where results from different waves are presented next to each other.

### 17.2.1. Length of Comparable Time series

A comparison of selected indicators from each CVT survey conducted by the CSO since 1993 is produced. To provide as comparable a basis as possible, enterprises in the education, health and public administration and defence and other service activities are excluded from the comparison. It also excludes enterprises with three to nine employees.

30 years.

## 17.3. Coherence – cross domain

CVTS 6 data has been compared with Structural Business Statistics 2019 data with regard to number of persons employed. The comparison showed an average difference of 2.5% for NACE and size class.

However, full comparability is not possible due to differences in NACE and size classes, and due to the slightly different definition of persons employed used in CVTS.

### 17.3.1. Coherence – Sub annual and annual statistics

Not applicable.

### 17.3.2. Coherence with National Accounts

Not applicable.

## 17.4. Coherence – internal

CVTS results for a given reference year are based on the same microdata and results are calculated using the same estimation methods, therefore the data are internally coherent.

## 18. Cost and Burden

Estimates of Cost and Burden can be obtained from the Response Burden Barometer <https://www.cso.ie/en/statistics/multisectoral/responseburdenbarometer/>

Survey specific information is available via CSO's dissemination database PxStat. <https://data.cso.ie/product/RBB>



## 19. Data Revision

### 19.1. Data Revision Policy

Revisions refer to changes made to published statistical data when the information used in its production has been updated or corrected. This information includes all data used in compiling the statistic e.g. respondent data, administrative data, weights and factors, methodology, classifications, definitions, modifications to survey questionnaires, survey scope and data collection methods.

The data revision policy that CSO statistics adheres to can be found via the following link:

<https://www.cso.ie/en/methods/quality/treatmentofrevisions/>

### 19.2. Data Revision Practice

No revisions to the data are carried out.

#### 19.2.1. Data Revision – Average size

Not applicable.

## 20. Statistical processing

### 20.1. Source Data

The data is based on a survey and is collected through an online questionnaire sent to enterprises in the Irish business economy with 10 or more persons engaged. The collection took place between June and November 2021.

#### 20.1.1. Population and sampling frame

The survey population is all enterprises with 10 or more persons employed in NACE Rev. 2 sectors B-N,R,S active on the CSO's Central Business Register in 2020.

#### 20.1.2. Sampling design

The stratified random sample of enterprises with 10 or more persons employed is taken from the central Business Register in the CSO. From a frame of 22,801 enterprises, 5,700 were selected from NACE sectors B-N,R,S. The business activity classifications are based on the Statistical Classification of Economic Activities in the European Community (NACE Rev 2.1).

The strata used were as follows:

##### **NACE Rev. 2 categories:**

B, C10-C12, C13-C15, C17-C18, C19-C23, C24-C25, C26-C28+C33, C29-C30, C16+C31-C32, D-E, F, G45, G46, G47, H, I, J, K64-K65, K66, L+M+N+R+S

##### **Across the following size classes:**

- 10 - 49 persons employed
- 50 - 249 persons employed
- 250 and more persons employed

#### 20.1.3. Survey size

Approximately 5,700 enterprises.

#### 20.1.4. Survey technique

The survey is issued electronically to selected enterprises active in the Republic of Ireland. An enterprise that has supplied a valid email address will be emailed or if not, the CSO will contact the enterprise to



obtain an appropriate email address to which the survey will be sent. When a survey e-questionnaire is returned to the CSO, the e-questionnaire is scrutinised to catch any errors. If there are errors, the enterprise is contacted to confirm and/or correct the data.

## 20.2. Frequency of data collection

Every five years.

## 20.3. Data Collection

The collection method is by eQuestionnaire.

### 20.3.1. Type of Survey/Process

The collection is based on a sample survey. No administrative data is utilised.

### 20.3.2. Questionnaire (including explanations)

The questionnaire has questions on enterprise strategies in employee training, number of participants, training hours, the types of training undertaken and the costs (both direct and indirect) of training to the enterprise. A sample of the sections used in the questionnaire is as follows:

- A section that asks for **background information on your enterprise** in the survey year.
- **CVT Strategies** asks about the strategies used by your company to assess training needs and competencies and to develop Continuing Vocational Training (CVT) around these (all enterprises). Continuing Vocational Training (CVT) activities relate to training fulfilling the following criteria: - The training must be planned in advance. - The training must be organised or supported with the specific goal of learning. - The training must be financed fully or at least partly by the enterprise. - Persons employed holding an apprenticeship or training contract should not be taken into consideration for CVT but could be relevant candidates for IVT - see Apprenticeships section.
- **CVT Characteristics** asks if your company provided continuing vocational training courses and if so, the types of training provided, and any subsidies received for training (all enterprises). Continuing Vocational Training (CVT) activities relate to training fulfilling the following criteria: - The training must be planned in advance. - The training must be organised or supported with the specific goal of learning. - The training must be financed fully or at least partly by the enterprise. - Persons employed holding an apprenticeship or training contract should not be taken into consideration for CVT but could be relevant candidates for IVT-see Apprenticeships section
- **CVT Courses** asks about Continuing Vocational Training participants as well as the subjects, providers and costs of the Continuing Vocational Training courses (training enterprises).
- **Outcomes and Limiting Factors** asks about the outcomes of the continuing vocational training and any factors which limited the provision of Continuing Vocational Training activities in the survey year (training enterprises).
- **Non-provision of CVT** asks for reasons for the non-provision of Continuing Vocational Training activities in the survey year (non-training enterprises).
- **Apprenticeships** asks about apprenticeships / Initial Vocational Training - IVT. Initial vocational training activities are characterised by the following criteria: (1) The apprenticeship must be a formal education programme (or a component of it). Within the programme learning time alternates between periods of practical training (workplace) and general/theoretical education (educational institution/training centre). (2) The completion of the apprenticeship is mandatory to obtain a qualification or certification for this programme. (3) The duration of the apprenticeship is from 6 months to 6 years. The duration refers to the programme and not only to the work-based component. (4) The apprentices receive remuneration (wage or allowance, in cash or in kind). The training activity or measure is often financed (partly or fully) by the enterprise although this is not a mandatory condition. Apprentices/IVT participants often have a special training contract.



- **Outcomes and Limiting Factors** asks specifically about the ways in which COVID-19 impacted on Continuing Vocational Training in the survey year (all enterprises)

A copy of the most recent survey form can be found on the CSO's Methods page <https://www.cso.ie/en/methods/surveyforms/continuingvocationaltraining/> and also from the CSO's public metadata portal <https://metadata.cso.ie/item/int.example/6701a037-2535-4cdf-a2c7-800eb73370cd/7>

### 20.3.3. Survey Participation

Participation in the survey is compulsory under the Statistics (Continuing Vocational Training Survey) Order 2021 (S.I.No. 89/2021) made under the Statistics Act 1993.

### 20.3.4. Data Capture

Primary data is collected by means of an eQuestionnaire.

## 20.4. Data Validation

Returned forms are scrutinised to catch any errors and/or missing data. If there are errors and/or missing data, the enterprise is contacted to confirm and/or correct the data. Structural Business Statistics data on persons employed is used to validate the data on persons employed.

Several validation procedures are in place for all returned data:

- Range checking is performed on hours worked and labour costs.
- Edit checks are performed to ensure coherency across the survey.
- Checks are performed to ensure all questions are answered, prioritising the core and key variables.

In general response rates were low, the forms incomplete and badly completed, particularly the labour costs and hours worked.

All respondents responded via an eQ, which had validations imbedded:

- CSO Reference Number Barcode field: allowing only CSO recognised EN numbers and survey year included.
- A1 activity of the enterprise: Free text. Review if field is filled. Y output if field filled, N if blank.
- A2 total number of persons employed: Review if non Numeric. Total Check. Message box if total incorrect.
- A3-A4: Review if non Numeric.
- A5 to A7 and A9 to B6: Choice field. More than one filled review (B5 Numeric: review non numeric).
- C1 how many persons employed: Review if non Numeric. Total Check. Message box at verifying stage if total incorrect.
- C2 what was the total paid working: Review if non Numeric. Total Check. Message box at verifying stage if total incorrect.
- C4 What share of training hours: Review if non Numeric. Review if over 100. 100 % check. Message box at verifying stage does not add to 100.
- C6 what were the costs: Choice field: More than one filled review. Numeric field: Review if non Numeric . Total Check. Message box at verifying stage if total incorrect.
- D1 to F1a: Choice field. More than one filled review.
- G How many minutes: Please add any comments.: Review if non Numeric. Free Text. Review if field is filled. Y output if field filled, N if blank.
- eMail: Email check for dot and "@" etc. Standard forms development check



## 20.5. Data Compilation

CSO calculates national estimates and Eurostat calculates European estimates based on CVTS microdata.

As recommended, reweighting was used to treat the problem of unit non response while imputation was used to treat the problems of item non response.

### 20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

Core variables were not imputed for. Responses with missing core variables were treated as non respondents.

Key variables were imputed based on the average experience in each stratum defined by employment and NACE group.

For non-response in the business function modules, total persons engaged was obtained from the business register. Hot-deck donor imputation was then used to derive the percentage of persons engaged for each business function and applied to the total persons engaged.

#### 20.5.1.1. A7. Imputation rate

Key Variables (according to the code book, e.g. A10a)	Imputation rate (%)
A4	6.5
A5	4.5
cltot	5.8
c3tot	7.8
c7sub	12.5

### 20.5.2. Grossing and Weighting

Grossing is performed using SAS software. Grossing factors for the CVTS are calculated using the inverse of the number of valid respondents divided by the relevant population from the Business Register. Grossing is calculated for strata of CVTS NACE groups (see table 15.3.3.1 for groups) and size class. The factors which are calculated are then applied to the survey results to gross up the data to the relevant populations.

## 20.6. Adjustment

Not applicable.

### 20.6.1. Seasonal Adjustment

Not applicable.

## 21. Comment