

EUROPEAN COMMISSION EUROSTAT

Directorate F: Social statistics Unit F-3: Labour market and lifelong learning

# Continuing Vocational Training Survey (CVTS) 2015 CVTS (CVTS 5) scientific-use files – anonymisation methods

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<sup>&</sup>lt;sup>1</sup> NACE 5 codes added in annex 2.

### **Background information**

The Continuing Vocational Training Survey (CVTS) is one of the surveys identified in <u>Commission Regulation No 1000/2007</u> amending <u>Commission Regulation (EC) No 831/2002</u> as being eligible for microdata access for scientific purposes.

Commission Regulation (EC) No 831/2002 was repealed in June 2013 by <u>Commission</u> <u>Regulation (EU) No 557/2013</u> on access to confidential data for scientific purposes. CVTS remains eligible for being available for scientific purposes under the new legal framework.

Commission Regulation (EU) No 557/2013 considers two types of confidential data for scientific purposes:

- Secure-use files (non-anonymised data available so far only in Eurostat safe centre)
- Scientific-use files (anonymised data transmitted to researchers on electronic devices)

Article 7(3) of Commission Regulation (EU) No 557/2013 states that: "in cooperation with national statistical authorities, the Commission (Eurostat) shall prepare datasets for research use which target the different types of confidential data for scientific purposes. When preparing a dataset for research use, the Commission (Eurostat) and the national statistical authorities shall take into account the risk and the impact of unlawful disclosure of confidential data."

This document describes the anonymisation methods for the CVTS 5 (reference year 2015) scientific-use files agreed with national statistical authorities which provided the CVTS data.

The CVTS 5 scientific-use files (SUF) are released subject to the agreement of national statistical authorities on the research project submitted by the eligible researcher<sup>2</sup>.

CVTS 5 in the form of secure-use files is not available.

#### **Basic principles for the anonymisation criteria**

Although some protection is derived from the fact that CVTS 5 is a sample survey, there is a need for further safeguards in compiling scientific-use files, which enable scientists to access data outside the "safe centres" of official statistics. The methods described below attach particular importance to coarsening those categorical variables that a potential data intruder might use as overlaps with confidential CVTS 5 data.

The anonymisation method consists in a differentiation of the criteria described in annex 1 according to the number of persons employed. A differentiation should indeed be made between enterprises with a high disclosure risk (large enterprises) and enterprises with a low disclosure risk. A threshold of 1000 persons employed is used to define large enterprises on a common basis for all countries<sup>3</sup>.

#### Two types of datasets

The criteria 1, 2, 3 and 4 below are common to all countries who agreed to deliver anonymised data to researchers (heading "I. Standard dataset"). An additional dataset might be included for countries allowing for more details. This is described under heading "II. Optional dataset B".

<sup>&</sup>lt;sup>2</sup> See the procedure <u>http://ec.europa.eu/eurostat/web/microdata/overview</u>.

<sup>&</sup>lt;sup>3</sup> Please note that the definition of large enterprises chosen for CVTS 5 anonymisation differs from the general definition of large enterprises in business statistics (<u>http://ec.europa.eu/eurostat/statistics-</u>explained/index.php/Glossary:Enterprise\_size).

### I. STANDARD DATASET

The following four principles are applied to define the standard anonymised dataset for each participating country. This allows providing all data on a set of common but restricted anonymisation criteria.

- **1.** The costs variables are anonymised in the following way for all enterprises<sup>4</sup>:
  - The variables C7sub (direct CVT course costs), B5a (contributions) and B5b (receipts) are replaced by a set of five new variables each. The new variables are expressed in relation to
    - total training costs (C7tot+PAC)
    - persons employed (A2tot)
    - participants (CVT courses) (C1tot)
    - training hours (CVT courses) (C3tot)
    - total labour costs (A5)

Example for C7sub: C7subtot (C7sub as a percentage of total training costs), C7subemp (C7sub per person employed), C7subpar (C7sub per participant), C7subhour (C7sub per training hour) and C7sublab (C7sub as a percentage of total labour costs).

- Five new variables are created to reflect the labour costs of participants ('personnel absence cost' PAC=C3tot\*A5/A4), i.e. PACtot (PAC as a percentage of total training costs), PACemp (PAC per person employed), PACpar (PAC per participant), PAChour (PAC per training hour) and PAClab (PAC as a percentage of total labour costs).
- C7tot is replaced with a new total (C7tot+PAC = total training costs) and for this new total four new variables are created as described in annex 1 (C7totemp per person employed, C7totpar per participant, C7tothour per training hour and C7totlab as a percentage of total labour costs).
- The components of C7sub (C7a, C7b, C7c, C7d) are provided in percentages of C7sub and of total training costs (C7tot+PAC).

**2. For all enterprises,** some variables are removed from the dataset, or modified. This concerns the following variables:

- All ID-variables are removed, except COUNTRY, REFYEAR, WEIGHT and a new modified ENTERPR as sequential number.

**3.** For large enterprises (1000 and more persons employed), the following anonymisation criteria would apply:

- NACE 5 is used (see annex 2).
- The value of A2tot is not given but replaced by a unique value (=1000).
- The values for the following variables are modified as described in annex 1:
  - A2m, A2f, A4, A5
  - C1tot, C2m, C2f
  - C3tot, C3i, C3e

<sup>&</sup>lt;sup>4</sup> To allow for a coherent set of data for small, medium and large enterprises even though some of these variables could be derived by researchers (according to the availability of e.g. the total number of persons employed).

**4. For small and medium enterprises** (10-999 persons employed), the criteria as described in '3' above are relaxed as follows.

- NACE 5 is used (see annex 2).
- The variable A2tot is kept as total number<sup>5</sup>.
- The following variables are kept as absolute values:
  - A2m, A2f, A4, A5
  - C1tot, C2m, C2f
  - C3tot, C3i, C3e

### **II. OPTIONAL DATASET B**

The following dataset can be made available for certain countries where national rules allow for more details (see table 1). This set allows providing additional data using wider anonymisation criteria.

For the optional dataset B, the point of departure is given by the 20 economic sectors of the NACE 20 classification used for drawing the sample for the survey. If on the basis of expansion factors some economic sectors are revealed as particularly vulnerable in a given country, they have to be pooled together with other economic sectors within sections. The exceptions are notified in table 1 below.

#### **OPTIONAL DATASET B FOR SMALL AND MEDIUM ENTERPRISES (10-999 PERSONS EMPLOYED)**

- The cost variables are treated as in the standard dataset.
- NACE 20 (see annex 2) is used, or other grouping applicable at national level but more detailed than NACE 5 as explained above.
- The variable A2tot is kept as total number<sup>4</sup>.
- The following variables are kept as absolute values:
  - A2m, A2f, A4, A5
  - C1tot, C2m, C2f
  - C3tot, C3i, C3e

<sup>&</sup>lt;sup>5</sup> All variables representing shares of A2tot in annex 1 are kept in the file to allow for a unique structure in all anonymised datasets (standard dataset, optional dataset B).

Country	Standard dataset	Optional dataset B
BE	Y	N
BG	Y	N
CZ	Y	Y
DK	Y	Y
DE	Y	Y*
EE	Y	Y
IE	N	N
EL	N	N
ES	Y	Y
FR	Y	Y
HR	N	N
IT	Y	Y
CY	Y	N
LV	Y	N
LT	Y	N

Country	Standard dataset	Optional dataset B
LU	Y	N
HU	Y	N
MT	Y*	N
NL**	N	N
AT	N	N
PL	Y	N
PT	Y	N
RO	Y	N
SI	Y*	N
SK	Y	N
FI	Y	Y
SE	Y*	N
UK	Y	N
NO	Y	N
MK	N	N

\* Special criteria, see country specific remarks below.

\*\* Access to the Dutch microdata is provided via the "Dutch remote access": <u>http://www.cbs.nl/en-GB/menu/informatie/beleid/zelf-onderzoeken/default.htm</u>

### **REMARKS FOR RESEARCHERS**

NACE groups: NACE 5 and NACE 20 are described in annex 2.

For all variables, values like "9 999 999 998" (not applicable) and "9 999 999 999" (no answer) are kept.

It is reminded that in some countries, enterprises with no CVT courses might have costs (B5a, CVT contributions).

#### COUNTRY SPECIFIC REMARKS

- Germany: 18 NACE groups of 20 as follows:
  - (1 B + 5 C19-C23)
  - 2 C10-C12
  - 3 C13-C15
  - 4 C17-C18
  - 6 C24-C25
  - 7 C26-C28+C33
  - 8 C29-C30
  - 9 C16+C31-C32
  - 10 D-E
  - 11 F
  - 12 G45
  - 13 G46
  - 14 G47
  - 15 H
  - 16 I

- 17 J
- (18 K64-K65 + 19 K66)
- -20 L+M+N+R+S
- **Germany**: B5a and B5b are set to 0 as they cannot be disseminated. B5a and B5b are of minor importance.
- **Malta**: For the standard dataset, A2tot up to 999 is not given as original data. A2tot is grouped into 3 size groups as follows: 10-49 (code = 1), 50-249 (code = 2) and 250+ (code = 3). All quantitative variables are given as percentages and ratios only.
- Slovenia: For the standard dataset, A2tot up to 999 is not given as original data. A2tot is grouped into 4 size groups as follows: 10-19 (code = 1), 20-49 (code = 2), 50-249 (code = 3), 250+ (code = 4). All quantitative variables are given as percentages and ratios only.
- Sweden: For the standard dataset, A2tot up to 999 is not given as original data. A2tot is grouped into 5 size groups as follows: 10-19 (code = 1), 20-49 (code = 2), 50-249 (code = 3), 250-499 (code = 4) and 500+ (code = 5). All quantitative variables are given as percentages and ratios only.

# Annex 1: Variable list and codes for CVTS 5 anonymised datasets

Variable	Variable	Variable description	Treatment	Specification/Description
name	Group			
COUNTRY	ID	Country code		Country specific coding, e.g. for Germany = DE
ENTERPR	ID	Enterprise ID	Replace with a	Lower bound = 1
			sequential	Upper bound = 999996
			number	
REFYEAR	ID	Reference year		2015
WEIGHT	ID	Weight – decimal operator "."		>= 1
NACE_SP	ID	Sampling plan economic activity	Delete	
		category		
SIZE_SP	ID	Sampling plan size group	Delete	
NSTRA_SP	ID	Sampling plan – number of	Delete	
		enterprises in the stratum defined by		
		NACE_SP and SIZE_SP, i.e. the		
		population		
N_SP	ID	Sampling plan - number of sampled	Delete	
		enterprises from the sample-frame in		
		the stratum defined by NACE_SP		
		and SIZE_SP		
SUB_SP	ID	Sub-sample indicator, shows if	Delete	
		enterprise belongs to sub-sample		
N_RESPST	ID	Number of responding enterprises in	Delete	
		the stratum defined by NACE_SP		
		and SIZE_SP		
N_EMPREG	ID	Number of persons employed	Delete	
DEODONIOE	15	according to the register		
RESPONSE	ID	Response indicator	D.L.	only enterprises with response = 1
PROC	ID	Data collection mode	Delete	
IDLANGUA	ID	Language of data collection	Delete	
IDREGION	ID	Region identification NUTS - level 1	Delete	
EXTRA1	ID	Extra variable 1	Delete	
EXTRA2	ID	Extra variable 2	Delete	
EXTRA3	ID	Extra variable 3	Delete	

## 1. Variables collected from all enterprises: sample characteristics

### 2. Variables collected from all enterprises: background data

Variable name	Variable Group	Variable description	Treatment	Specification/Description
A1	Core	Actual NACE code	NACE 5 or	NACE 5 for standard dataset
			NACE 20	NACE 20 for optional dataset B
A2tot	Core	Total number of persons employed	Original data	Without changes except for large enterprises
		on 31 December of the reference	up to 999;	(unique code: 1000)
		year	unique code	
			1000 if	
			A2tot≥1000	
A2m		Total number of males employed on	Original data if	999999 = no answer
		31 December of the reference year	A2tot≤999; if	A2mperc = (A2m/A2tot)*100
			A2tot≥1000:	
			Percentage of	
			all persons	
			employed	
A2f		Total number of females employed	Original data if	999999 = no answer
		on 31 December of the reference	A2tot≤999; if	A2fperc = (A2f/A2tot)*100
		year	A2tot≥1000:	
			Percentage of	

Variable name	Variable Group	Variable description	Treatment	Specification/Description
			all persons employed	
A4	Кеу	Total number of hours worked in the reference year by persons employed	Original data if A2tot≤999; if A2tot≥1000: Per person employed	A4ratio = A4/A2tot
A5	Кеу	Total labour costs (direct + indirect) of all persons employed in the reference year	Original data if A2tot≤999; if A2tot≥1000: Per person employed	A5ratio = A5/A2tot

# 3. Variables collected from all enterprises: CVT strategies

Variable name	Variable Group	Variable description	Treatment	Specification/Description
A8	0.000	Specific person or unit within the		0 = no
		enterprise having the responsibility		1 = yes
		for the organisation of CVT		9 = no answer
A9		Assessment of future skill needs of		0 = no
		the enterprise (for the next few years)		1 = yes but not regularly (mainly linked to
				changes in personnel)
				2 = yes, it is part of overall planning process in
				the enterprise
				9 = no answer
(A10)		Reaction to future needs of skills and		
(		competences through:		
A10a		Continuing vocational training of		0 = no
		current staff		1 = yes
				9 = no answer
A10b		Recruitment of new staff with the		0 = no
		suitable qualifications, skills and		1 = yes
		competences		9 = no answer
A10c		Recruitment of new staff combined		0 = no
		with specific training (of the recruited		1 = yes
		staff)		9 = no answer
A10d		Internal reorganisation to better use		0 = no
		existing skills and competences (in		1 = yes
		line with future needs)		9 = no answer
A12flag		Type of skills and competences		1 = at least one and maximum 3 categories from
-		important in the next few years (3		"a" to "l" below
		most important)		2 = do not know (A12o = 1)
				9 = no answer (no answer to any category "a" to
				"o")
		List of skills (3 most important =		
		maximum of three yes-responses		
		allowed, but only one if A12o)		
A12a		General IT skills		0 = no
				1 = yes
A12b		IT professional skills		0 = no
				1 = yes
A12c		Management skills		0 = no
				1 = yes
A12d		Team working skills		0 = no
				1 = yes
A12e		Customer handling skills		0 = no
				1 = yes

Variable name	Variable Group	Variable description	Treatment	Specification/Description
A12f		Problem solving skills		0 = no 1 = yes
A12g		Office administration skills		0 = no 1 = yes
A12h		Foreign language skills		0 = no 1 = yes
A12i		Technical, practical or job-specific skills		0 = no 1 = yes
A12j		Oral or written communication skills		0 = no 1 = yes
A12k		Numeracy and/or literacy skills		0 = no 1 = yes
A12I		Other skills not listed above		0 = no 1 = yes
A12o		Do not know		0 = no 1 = yes
A13		Planning of CVT in the enterprise usually leads to a written training plan or programme		0 = no 1 = yes 9 = no answer
A14		Annual training budget, which usually includes provision for CVT		0 = no 1 = yes 9 = no answer
A15		National, sectoral or other agreements between the social partners, which usually cover the provision of CVT		0 = no 1 = yes 8 = not applicable (no written agreements between social partners in the country) 9 = no answer
A16a		Staff representatives/committees usually involved in the management process of CVT		0 = no 1 = yes 8 = not applicable (no staff representatives/committees) 9 = no answer
(A16b)		Aspects covered by staff representatives/committees		
A16ba		Objective setting of training		0 = no 1 = yes 8 = not applicable (A16a≠1) 9 = no answer
A16bb		Establishing criteria for the selection of participants or specific target groups		0 = no 1 = yes 8 = not applicable (A16a≠1) 9 = no answer
A16bc		Form/type of training (e.g. internal/external courses; other forms such as guided-on-the-job training)		0 = no 1 = yes 8 = not applicable (A16a≠1) 9 = no answer
A16bd		Content of training		$0 = no$ $1 = yes$ $8 = not applicable (A16a \neq 1)$ $9 = no answer$
A16be		Budget for training		0 = no 1 = yes 8 = not applicable (A16a≠1) 9 = no answer
A16bf		Selection of external training providers		0 = no 1 = yes 8 = not applicable (A16a≠1) 9 = no answer
A16bg		Evaluation/assessment of training		0 = no

Variable name	Variable Group	Variable description	Treatment	Specification/Description
		outcomes		1 = yes 8 = not applicable (A16a≠1) 9 = no answer

# 4. Variables collected from all enterprises: CVT characteristics

Variable name	Variable Group	Variable description	Treatment	Specification/Description
(B1)	•	Provision of internal or external CVT		
,		courses in the reference year		
B1a	Core	Provision of internal CVT courses		0 = no
				1 = yes
B1b	Core	Provision of external CVT courses		0 = no
				1 = yes
(B2)		Provision of other forms of CVT in the reference year		
B2aflag	Core	Provision of guided-on-the-job		0 = no
g		training		1 = yes
B2a		Participants in guided-on-the job		1 = less than 10% of all persons employed
		training		2 = from 10% to less than 50% of all persons
				employed
				3 = 50% or more of all persons employed
				8 = not applicable (B2aflag=0)
				9 = no answer
Dobflog	Core	Dravision of ich rotation, avabanges		0 = no
B2bflag	COLE	Provision of job rotation, exchanges, secondments or study visits		
				1 = yes
B2b		Participants in job-rotation,		1 = less than  10%  of all persons employed
		exchanges, secondments or study		2 = from 10% to less than 50% of all persons
		visits		employed
				3 = 50% or more of all persons employed
				8 = not applicable (B2bflag=0)
				9 = no answer
B2cflag	Core	Participation in conferences,		0 = no
		workshops, trade fairs or lectures		1 = yes
B2c		Participants in conferences,		1 = less than 10% of all persons employed
		workshops, trade fairs or lectures		2 = from 10% to less than 50% of all persons
				employed
				3 = 50% or more of all persons employed
				8 = not applicable (B2cflag=0)
				9 = no answer
B2dflag	Core	Participation in learning or quality		0 = no
		circles		1 = yes
B2d		Participants in learning or quality		1 = less than 10% of all persons employed
		circles		2 = from 10% to less than 50% of all persons
				employed
				3 = 50% or more of all persons employed
				8 = not applicable (B2dflag=0)
				9 = no answer
B2eflag	Core	Planned training by self-directed		0 = no
2201149		learning/e-learning		1 = yes
B2e		Participants in self-directed		1 = less than 10% of all persons employed
		learning/e-learning		2 =  from 10% to less than 50% of all persons
		ieanning/e-ieanning		
				employed
				3 = 50% or more of all persons employed
				8 = not applicable (B2eflag=0)
50				9 = no answer
B3a		Provision of CVT courses for persons		0 = no
		employed in the year before the		1 = yes

Variable name	Variable Group	Variable description	Treatment	Specification/Description
		reference year		<ul> <li>8 = not applicable (enterprise did not exist in the previous year)</li> <li>9 = no answer</li> </ul>
B4a		Provision of other forms of CVT for persons employed in the year before the reference year		0 = no 1 = yes 8 = not applicable (enterprise did not exist in the previous year) 9 = no answer
(B5)		CVT contributions and receipts in the reference year		
B5aflag		Existence of CVT contributions		0 = no 1 = yes 9 = no answer
B5a		Amount of CVT contributions	Percentage of total training costs, per person employed, per participant, per training hour, percentage of total labour costs	9999999998 = not applicable 9999999999 = no answer B5atot = (B5a/(C7tot+PAC))*100 B5aemp = B5a/A2tot B5apar = B5a/C1tot B5ahour = B5a/C3tot B5alab = B5a/A5*100
B5bflag		Existence of CVT receipts		0 = no 1 = yes 9 = no answer
B5b		Amount of CVT receipts	Percentage of total training costs, per person employed, per participant, per training hour, percentage of total labour costs	99999999999 = not applicable 99999999999 = no answer B5btot = (B5b/(C7tot+PAC))*100 B5bemp = B5b/A2tot B5bpar = B5b/C1tot B5bhour = B5b/C3tot B5blab = B5b/A5*100
(B6)		Measures from which the enterprise benefited from in the reference year, for the provision of CVT		
B6a		Tax incentives (tax allowances, tax exemptions, tax credits, tax relief, tax deferrals)		0 = no 1 = yes 8 = not applicable (B5bflag≠1) 9 = no answer
B6b		Receipts from training funds (national, regional, sectoral)		0 = no 1 = yes 8 = not applicable (B5bflag≠1) 9 = no answer
B6c		EU subsidies (e.g. European Social Fund)		0 = no 1 = yes 8 = not applicable (B5bflag≠1) 9 = no answer
B6d		Government subsidies		0 = no 1 = yes 8 = not applicable (B5bflag≠1) 9 = no answer
B6e		Other sources (e.g. private foundations, revenue for the use of own training resources by or training provision to external bodies/persons)		0 = no 1 = yes 8 = not applicable (B5bflag≠1) 9 = no answer

# **5.** Variables collected from enterprises which provided CVT courses: CVT participants, hours, subjects and providers

Variable name	Variable Group	Variable description	Treatment	Specification/Description
(C1)		Number of persons employed by the enterprise who participated in one or more CVT courses (internal or external) in the reference year		
C1tot	Кеу	Total number of participants in all CVT courses	Original data if A2tot≤999; if A2tot≥1000: Percentage of all persons employed	999998 = not applicable [(B1a and B1b)=0] C1totperc = (C1tot/A2tot)*100
C2m		Number of CVT course participants – males	Original data if A2tot≤999; if A2tot≥1000: Percentage of male persons employed	999998 = not applicable [(B1a and B1b)=0] 999999 = no answer C2mperc = (C2m/A2m)*100
C2f		Number of CVT course participants – females	Original data if A2tot≤999; if A2tot≥1000: Percentage of female persons employed	999998 = not applicable [(B1a and B1b)=0] 999999 = no answer C2fperc = (C2f/A2f)*100
(C3)		Total paid working time (in hours) spent on all CVT courses broken down by internal or external CVT course, in the reference year		
C3tot	Кеу	Paid working time spent on all CVT courses	Original data if A2tot≤999; if A2tot≥1000: Per person employed and per participant	9999999998 = not applicable [(B1a and B1b)=0] C3totemp = C3tot/A2tot C3totpar = C3tot/C1tot
C3i		Paid working time for internal CVT courses	Original data if A2tot≤999; if A2tot≥1000: Percentage of paid working time on all CVT courses	9999999998 = not applicable (B1a=0) 9999999999 = no answer <mark>C3iperc</mark> = (C3i/C3tot)*100
C3e		Paid working time for external CVT courses	Original data if A2tot≤999; if A2tot≥1000: Percentage of paid working time on all CVT courses	9999999998 = not applicable (B1b=0) 9999999999 = no answer <mark>C3eperc</mark> = (C3e/C3tot)*100
C4		Share of training hours spent on obligatory courses for health and safety at work		0-100 = Health and safety at work 998 = not applicable [(B1a and B1b)=0] 999 = no answer
C5flag		Subjects covered (skills targeted) by CVT courses (3 most important)		1 = at least one and maximum three categories from "a" to "l" below 8 = not applicable [(B1a and B1b)=0] 9 = no answer (no answer to any category "a" to

Variable name	Variable Group	Variable description	Treatment	Specification/Description
				" ")
		List of skills (3 most important = maximum of three yes-responses allowed)		
C5a		General IT skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5b		IT professional skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5c		Management skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5d		Team working skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5e		Customer handling skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5f		Problem solving skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5g		Office administration skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5h		Foreign language skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5i		Technical, practical or job-specific skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5j		Oral or written communication skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5k		Numeracy and/or literacy skills		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C5I		Other skills not listed above		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0]
C6flag		Providers (external CVT courses) (3 most important)		1 = at least one and maximum three categories from "a" to "g" below 8 = not applicable (B1b=0) 9 = no answer (no answer to any category "a" to "g")
		List of providers (3 most important = maximum of three yes-responses allowed)		
C6a		Schools, colleges, universities and other higher education institutions		0 = no 1 = yes 8 = not applicable (B1b=0)
C6b		Public training institutions (financed or guided by the government, e.g. adult education centres)		0 = no 1 = yes 8 = not applicable (B1b=0)
C6c				0 = no 1 = yes 8 = not applicable (B1b=0)
C6d		Private companies of which the main activity is not training (e.g. equipment		0 = no 1 = yes

Variable name	Variable Group	Variable description	Treatment	Specification/Description
		suppliers, parent/associate companies)		8 = not applicable (B1b=0)
C6e		Employers' associations, chambers of commerce, sector bodies		0 = no 1 = yes 8 = not applicable (B1b=0)
C6f		Trade unions		0 = no 1 = yes 8 = not applicable (B1b=0)
C6g		Other training providers		0 = no 1 = yes 8 = not applicable (B1b=0)

# 6. Variables collected from enterprises which provided CVT courses: CVT costs

Variable name	Variable Group	Variable description	Treatment	Specification/Description
(C7)		Costs of (internal and external) CVT courses in the reference year		
C7aflag		Existence of fees or payments for courses		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0] 9 = no answer
C7a	C7a Fees and payr		Percentage of subtotal costs (C7sub) and total training costs (C7tot+PAC)	9999999998 = not applicable (C7aflag≠1) 9999999999 = no answer C7apercC7s = (C7a/C7sub)*100 C7apercC7t = (C7a/(C7tot+PAC))*100
C7bflag		Existence of travel or subsistence payments		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0] 9 = no answer
C7b		Travel or subsistence payments (in euros)	Percentage of subtotal costs (C7sub) and total training costs (C7tot+PAC)	9999999998 = not applicable (C7bflag≠1) 9999999999 = no answer C7bpercC7s = (C7b/C7sub)*100 C7bpercC7t = (C7b/(C7tot+PAC))*100
C7cflag		Existence of labour costs of internal trainers		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0] 9 = no answer
C7c		Labour costs of internal trainers (in euros)	Percentage of subtotal costs (C7sub) and total training costs (C7tot+PAC)	9999999998 = not applicable (C7cflag≠1) 9999999999 = no answer C7cpercC7s = (C7c/C7sub)*100 C7cpercC7t = (C7c/(C7tot+PAC))*100
C7dflag		Existence of costs of training centre, rooms or teaching materials		0 = no 1 = yes 8 = not applicable [(B1a and B1b)=0] 9 = no answer
C7d		Training centre, rooms and teaching materials (in euros)	Percentage of subtotal costs (C7sub) and total training costs (C7tot+PAC)	9999999998 = not applicable (C7dflag≠1) 9999999999 = no answer C7dpercC7s = (C7d/C7sub)*100 C7dpercC7t = (C7d/(C7tot+PAC))*100

Variable name	Variable Group	Variable description	Treatment	Specification/Description
C7sflag		Existence of "Sub-total only"	Delete	
C7sub	Кеу	CVT course costs sub-total (in euros)	Percentage of total training costs, per person employed, per participant, per training hour, percentage of total labour costs	9999999998 = not applicable [(B1a and B1b)=0] C7subtot = (C7sub/(C7tot+PAC))*100 C7subemp = C7sub/A2tot C7subpar = C7sub/C1tot C7subhour = C7sub/C3tot C7sublab = C7sub/A5*100
C7tot	Key	Total cost CVT	Replaced with a new total (total training cost = C7tot+PAC), per person employed, per participant, per training hour, percentage of total labour costs	9999999998 = not applicable [(B1a and B1b and B5aflag and B5bflag)=0] 99999999999 = no answer (only accepted if B1a and B1b=0) C7totemp = (C7tot+PAC)/A2tot C7totpar = (C7tot+PAC)/C1tot C7tothour = (C7tot+PAC)/C3tot C7totlab = (C7tot+PAC)/A5*100
PAC	Кеу	Personal absence cost (in euros) (= labour costs of participants)	Percentage of total training costs, per person employed, per participant, per training hour, percentage of total labour costs	9999999998 = not applicable [(B1a and B1b)=0] PACtot = (PAC/(C7tot+PAC))*100 PACemp = PAC/A2tot PACpar = PAC/C1tot PAChour = PAC/C3tot PAClab = PAC/A5*100

# **7.** Variables collected from enterprises which provided CVT courses or other forms of CVT: CVT quality, outcomes and difficulties

Variable name	Variable Group	Variable description	Treatment	Specification/Description
D2a		Assessment of the outcomes of CVT activities		0 = no, proof of participation is sufficient 1 = yes, for all activities 2 = yes, for some activities 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
(D2b)		Methods of assessment		
D2ba	, , , , , , , , , , , , , , , , , , , ,			0 = no 1 = yes 8 = not applicable (D2a≠1 and D2a≠2) 9 = no answer
D2bb Satisfaction survey amongst participants			0 = no 1 = yes 8 = not applicable (D2a≠1 and D2a≠2) 9 = no answer	
D2bc		Assessment of participants' behaviour or performance in relation to training objectives		0 = no 1 = yes 8 = not applicable (D2a≠1 and D2a≠2)

Variable name	Variable Group	Variable description	Treatment	Specification/Description
				9 = no answer
D2bd		Assessment/measurement of the impact of training on performance of relevant department or the whole enterprise		0 = no 1 = yes 8 = not applicable (D2a≠1 and D2a≠2) 9 = no answer
D2be		Other		0 = no 1 = yes 8 = not applicable (D2a≠1 and D2a≠2) 9 = no answer
(D3)		Factors limiting the provision of CVT activities in the reference year		
D3a		No limiting factors: level of training provided was appropriate to the needs of the enterprise		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3b		Recruitment of individuals with the required qualifications, skills and competences		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3c		Difficulties in assessing training needs in the enterprise		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3d		Lack of suitable offers of CVT courses in the market		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3e		High costs of CVT courses		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3f		Higher focus on IVT provision than on CVT		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3g		Major efforts in CVT made in recent years		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer
D3h		High workload and limited time available for staff to participate in CVT		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer

Variable name	Variable Group	Variable description	Treatment	Specification/Description
D3i		Other reasons		0 = no 1 = yes 8 = not applicable ([(B1a and B1b)=0] and [(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag)=0]) 9 = no answer

# **8.** Variables collected from non-training enterprises: reasons for the non-provision of CVT activities

Variable name	Variable Group	Variable description	Treatment	Specification/Description
(E1)	•	Reasons for not providing CVT activities in the reference year		
E1a		The existing qualifications, skills and competences were appropriate to the current needs of the enterprise		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1b		Recruitment of individuals with the required qualifications, skills and competencies was preferred		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1c		Difficulties in assessing training needs in the enterprise		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1d		Lack of suitable offers of CVT courses in the market		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1e		High costs of CVT courses		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1f		Higher focus on IVT provision than on CVT		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1g		Major efforts in CVT made in recent years		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1h		High workload and no time available for staff to participate in CVT		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1]) 9 = no answer
E1i		Other reasons		0 = no 1 = yes 8 = not applicable ([(B1a or B1b)=1] or [(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag)=1])

Variable name	Variable Group	Variable description	Treatment	Specification/Description
				9 = no answer

# 9. Variables collected from all enterprises: initial vocational training (IVT)

Variable name	Variable Group	Variable description	Treatment	Specification/Description
F1	Core	IVT participants (apprentices) usually		0 = no
		employed in the enterprise		1 = yes
(F2)		Reasons for providing IVT		
F2a		To qualify future employees		0 = no
		according to the needs of the		1 = yes
		enterprise		8 = not applicable (F1=0)
				9 = no answer
F2b		To choose among the best		0 = no
		apprentices for future employment		1 = yes
		after completion of initial vocational		8 = not applicable (F1=0)
		training (apprenticeship)		9 = no answer
F2c		To avoid possible mismatch with		0 = no
		enterprise needs in case of external		1 = yes
		recruitment		8 = not applicable (F1=0)
				9 = no answer
F2d		To make use of the productive		0 = no
		capacities of IVT participants		1 = yes
		(apprentices) already during their		8 = not applicable (F1=0)
		initial vocational training		9 = no answer
F2e		Other reasons		0 = no
				1 = yes
				8 = not applicable (F1=0)
				9 = no answer

### Annex 2: NACE Rev. 2 groups

**NACE 5 classification of enterprises** (also used for CVTS 5 data dissemination on Eurostat website)

	NACE Rev. 2	
1	B, C, D, E	Industry (except construction)
2	F	Construction
3	G, H, I	Wholesale and retail trade, transport, accommodation and food service activities
4	J, K	Information and communication; financial and insurance activities
5	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

### NACE 20 classification of enterprises

1	В
2	C10-C12
3	C13-C15
4	C17-C18
5	C19-C23
6	C24-C25
7	C26-C28+C33
8	C29-C30
9	C16+C31-C32
10	D-E
11	F
12	G45
13	G46
14	G47
15	Н
16	Ι
17	J
18	K64-K65
19	K66
20	L+M+N+R+S

For details on NACE Rev. 2 see http://ec.europa.eu/eurostat/web/nace-rev2/overview