

**The
3rd Continuing Vocational Training Survey
(CVTS3)**

European Union Manual

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Foreword

Vocational training is a central theme in European life long learning strategies.

Enterprise investment in continuing vocational training, designed to promote human capital resources, is a key dynamic of economic performance, competitiveness, and employment in Europe and reflects the role of enterprises in 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 key to the analysis of

- labour skills supply and demand,
- the forms, fields and volume of training offered and training needs
- the enterprises' own internal provision of vocational training as a function of that provided on the external market
- the training opportunities of disadvantaged groups
- costs of enterprise based vocational training
- as well as the effectiveness of public funding initiatives.

The continuing vocational training survey (CVTS) has been performed on two previous occasions, in 1994 and 1999 under the framework of gentlemen's agreements between countries and ESTAT. This 3rd implementation (CVTS3) is for the first time underpinned by a European regulation (EC) No 1552/2005, adopted by Council and European Parliament in September 2005. The detailed implementing measures were adopted by the SPC at their November 2005 meeting and are foreseen to be published in February 2006.

The development of the CVTS3 survey during 2005 has been supported by all Member States, Norway, Bulgaria, Romania, Trade Unions (ETUC), CEDEFOP, and the Commission (DG EAC, DG EMPL) and facilitated through 2 Working Group and 3 Task Force meetings. A contract sponsored by the Leonardo da Vinci programme, has provided additional analysis of the experiences of CVTS2 with a view to identifying possible areas for improvement.

The development of CVTS3 have been guided by the primary requirements to

- retain compatibility with CVTS2 while correcting for known deficiencies
- reduce the burden of the survey on enterprises compared to previous implementations
- improve the quality of key variables and the dataset as a whole
- extend the survey to cover, for the first time, initial vocational training (IVT)
- reinforce the national quality reporting framework

This EU-Manual represents the conclusion of the preparatory phase of the work on CVTS3 and describes in detail the harmonised survey approach to be adopted in all participating countries.

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1 Introduction

1.1 Historical Background

The first enterprise survey on continuing vocational training (CVTS) was carried out in 1994 in the then 12 Member States of the European Union. The survey (CVTS1) was part of the action programme for the development of continuing vocational training in the European Community (FORCE) based on Council Decision 90/267/EEC of 29 May 1990. The growing policy interest in data on continuing vocational training in enterprises together with the demand for CVT data to cover the 15 Member States led the Commission to promote a second continuing vocational training survey (CVTS2). This second survey, coordinated by the Statistical Office of the European Union (Eurostat), implemented in 2000, and was carried out in all the EU Member States, in Norway and in the then nine candidate countries¹. Results of the survey are widely published in many publications (http://europa.eu.int/comm/education/programmes/leonardo/new/leonardo2/cvts/index_en.html). Data on CVTS1 and CVTS2 can also be found via the Eurostat homepage (<http://epp.eurostat.ec.eu.int/>).

The implementation of both CVTS1 and CVTS2 was based on “gentlemen’s agreements” between Eurostat and the EU Member States. For CVTS3 and beyond Eurostat has proposed a legal basis for the data collection within the European Statistical System, in the form of a European Parliament / Council Regulation (EC) No 1552/2005. The third survey on continuing vocational training (CVTS3) will take place in 2006, with reference year 2005. The objective of the regulation is to create a common statistical standard that permits the production of harmonised data, and thus establishes a common framework, for the production of Community statistics on vocational training in enterprises.

1.2 The Development of CVTS3

Plans for the development of CVTS3 were initiated at the CVTS3 WG meeting of 16th and 17th December 2004. Following extensive discussions, the WG mandated ESTAT to launch a Task Force to develop the survey detail. Specifically the WG identified a number of priority issues for development within prescribed boundary conditions.

In general the WG emphasised that CVTS3 should focus the survey on key policy user needs and the explicit demands of the regulation while reducing the burden on enterprises compared with CVTS2. Analysis of CVTS2 had identified a need for improved data quality, for the data set as a whole, and for some variables in particular. It was emphasised that any changes should guarantee comparability with CVTS2.

Specific issues to be addressed :

- For Initial Vocational Training (IVT) there was a need to establish a workable definition with demarcation from CVT.
- On “Other” forms of vocational training the WG was clear that there should be no extension to collect costs, but that the questions should be reviewed with the possible extension to collect improved measures on participant numbers.
- On costs of CVT courses, there was a need for data quality improvements. A key element of such an improvement should be based upon a consideration of the scope and form of cost information held by enterprises.
- Coherence with individual based surveys such as (AES) was considered essential while the development of a series of VT indicators was considered of secondary importance.
- On the issue of the “qualitative variables” the participating countries strongly supported a structured revision with the objective of the development of an indicator on the “professionalism of enterprises in the pursuit of their training activities”.
- Elaboration of the reasons for “non-training” in enterprises was considered a high priority and these questions should be reinforced.
- Proposed extensions to NACE and enterprise size coverage were not supported for CVTS3 but would be seriously considered for CVTS4. To this end countries were encouraged to perform pilot studies on these issues on a voluntary basis.

Three Task Force meetings were held during 2005 (March/May/July) to work on the priority issues defined by the WG. The meetings were supported by background research papers from the Leonardo da Vinci support contract. The principal outcomes of the work of the TF have been the draft CVTS3 outline questionnaire and the CVTS3 survey guidelines.

At the meeting of the CVTS Working Group on 22nd and 23rd of September 2005 the European outline questionnaire and the survey guidelines were approved.

¹ Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia

1.3 The CVTS3 European Union Manual

This Manual presents the outcome of the preparatory phase of CVTS3, and is comprised of four parts:

The European outline questionnaire for CVTS3

The European outline questionnaire is the unique guide for the development of the national questionnaires. The national questionnaires of all participating countries should follow the outline questionnaire without deviation.

Concepts and definitions for CVTS3

This chapter presents the scope of the CVTS3 survey. It describes the concepts of CVT and IVT and their different forms and presents a framework for identifying and discriminating between CVT and IVT in the context of CVTS3. It contains an invaluable glossary of definitions appropriate to the survey and the questionnaire. It should be the main tool for the elaboration of guidelines, explanations and instructions for enterprises and interviewer, at the national level.

Survey guidelines for CVTS3

This chapter presents the common guidelines to be adopted when performing the survey. Their primary function is to establish comparability of the data collected, across all participating countries, while offering sufficient flexibility at the national level to permit the application of national experience and methods in order to attain high response rates and high data quality.

The informatics framework for CVTS3

The informatics framework sets up the standards to be used in all participating countries for coding, checking and transmission of data to Eurostat.

2 The European Outline Questionnaire

2.1 Introduction

The purpose of this survey is to collect key data on **vocational training** provided by **enterprises (def. 1)** for their **persons employed (def. 8)**. Unless otherwise explicitly stated, all questions presented in this questionnaire relate to the **reference year 2005**.

The European Outline Questionnaire does **not** carry extended definitions of terms related to questions. These extended definitions are to be found in the table of definitions in the European Union Manual (Chapter 3.5). Countries may include the extended definitions with the relevant questions within their national questionnaires as they consider appropriate.

Enterprises should record cost variables in national currency units, however countries must report these cost variables to ESTAT in EURO.

The questionnaire is comprised of 6 sections

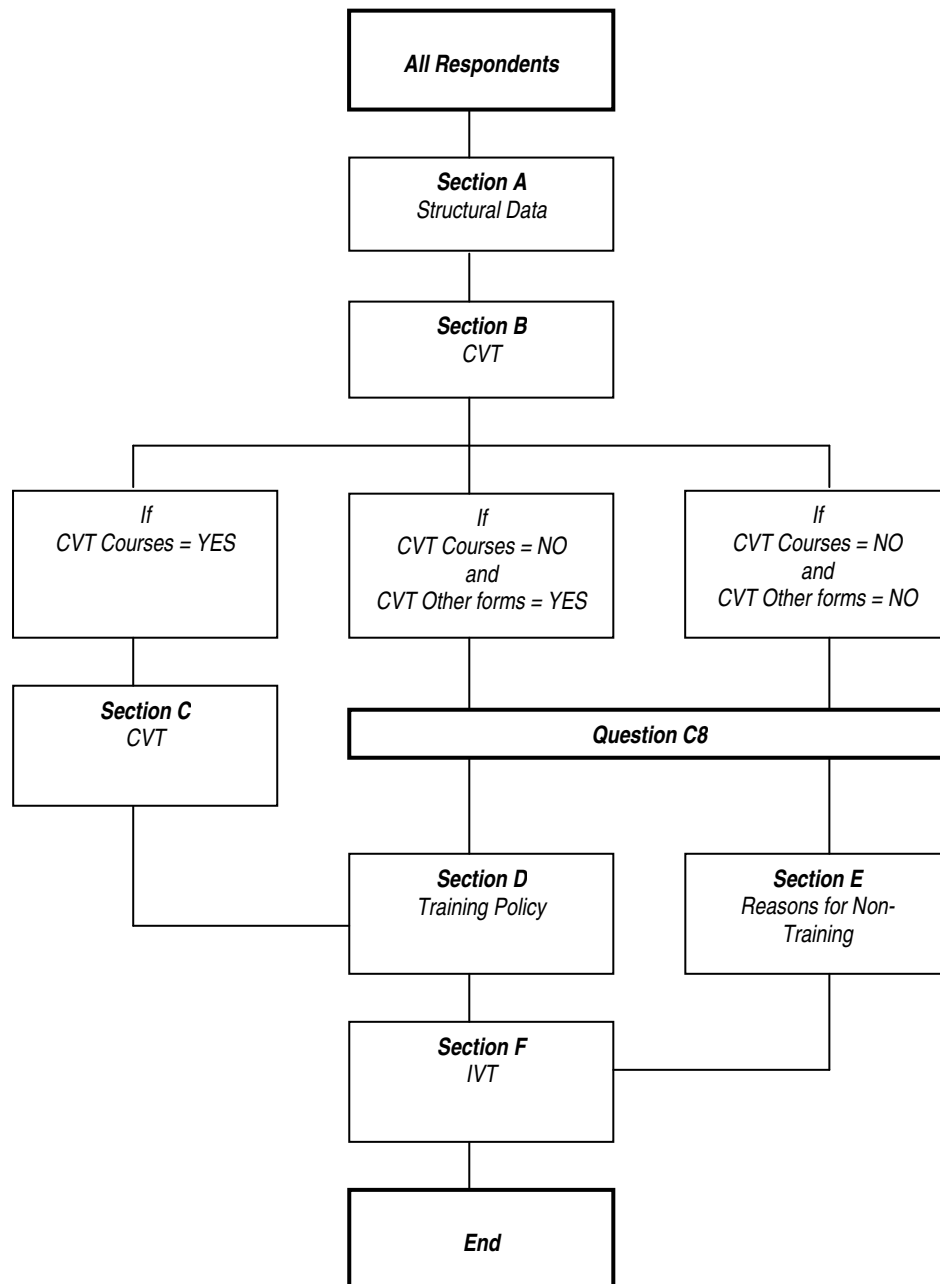
| Section No. and Title | | To be answered by |
|-----------------------|---|--|
| A | Structural data on the enterprise | all enterprises |
| B | Continuing vocational training activities of the enterprise | all enterprises |
| C | Continuing vocational training courses | enterprises providing CVT courses |
| D | Training policy of the enterprise | enterprises providing CVT courses or other forms of CVT |
| E | Reasons for non provision of CVT courses and "other" forms of CVT | enterprises not providing CVT courses nor other forms of CVT |
| F | Initial vocational training | all enterprises |

Countries should assure that, enterprises not offering CVT courses are guided to answer Questions C8.

In a similar way enterprises not having IVT participants should be guided to answer question F3.

The following diagram illustrates the structure of the questionnaire:

2.2 Questionnaire Flow Diagram



2.3 Differentiation of CVT from IVT

The main focus of this survey (**sections A, B, C, D, E**) concerns **continuing vocational training (def. 2)**. (*chapter 3.1*). For these sections persons employed holding an apprenticeship or training contract should **not** be taken into consideration. The survey also addresses the issue **initial vocational training (def. 3)**. (*chapter 3.1*)

The following table offers a framework for countries to establish their definitions of IVT and CVT

| | IVT in enterprises | CVT in enterprises |
|-------------------------------------|--|---|
| Main activity of the persons | Student, apprentice, trainee, ... | Employed by the enterprise |
| Type of contract | Non-qualifying criteria as national laws differ | Essential Element Work contract required |
| Type of learning activity | Essential Element Formal learning | Non-qualifying criteria |
| Work based element | Essential Element Must have a work based element | Non-qualifying criteria |
| School based element | Non-qualifying criteria Even if it does exist in a majority of situations | Non-qualifying criteria |
| Costs for the enterprise | Non-qualifying criteria | Essential Element CVT is financed wholly or partly by the enterprise |
| Time period of the study | Non-qualifying criteria But consideration of a minimum period may be useful, in order to exclude "casual work placements". In this respect a period of approx. 6 months may be a useful guiding figure to countries. | Non-qualifying criteria |

With this approach the possible overlaps between CVT and IVT proposed for CVTS are resolved **by giving priority to CVT**. For example, a person employed participating to formal education on the company expenses is considered as a "CVT participant" and the cost is a "CVT cost".

2.4 Different Forms of CVT

For the purposes of this survey **Continuing vocational training (def.2)** is separated into 2 forms.

For the purposes of this survey, a distinction is made for **Continuing Vocational Training** between **CVT courses** (def. 5) and **Other Forms of CVT** (def. 6). These are further broken down as detailed below.

| CVT courses | “Other Forms” of CVT |
|---|---|
| <ul style="list-style-type: none">• Internal CVT Courses (def. 14) (principally designed and managed by the enterprise itself)• External CVT Courses (def. 15) (principally designed and managed by a 3rd party organisation) | <ul style="list-style-type: none">• On-the job-training (def. 16)• Planned learning through job-rotation, exchanges, secondments or study visits (def. 17)• Attendance at learning/quality circles (def.18)• Self directed learning (def. 19)• Attendance at conferences, workshops, trade fairs, and lectures (def. 20) |

2.5 The European Outline Questionnaire

A STRUCTURAL DATA ON THE ENTERPRISE

A1

What is the **principal economic activity of the enterprise**?

| | |
|--|----|
| NACE CODE * | A1 |
| Principal economic activity of the enterprise ** | |

* This information can be entered from the business register from which the sample is selected.

** If reliable information is not available, countries should request enterprises to record a description of the principal economic activity which must then be coded to the 4 digit level of NACE by the countries before delivery to ESTAT.

A2

What were the **total number of persons employed** ^(def. 10) by the enterprise?

| Total number of persons employed | | | |
|----------------------------------|---------|-------|---------|
| | Total | Males | Females |
| 31.12.2004 | A2tot04 | | |
| 31.12.2005 | A2tot05 | A2m05 | A2f05 |

A3

What was the distribution of **persons employed** by the enterprise by **age group** on the **31.12.2005**.

| Age Groups | Number of persons employed on 31.12.05 |
|-----------------------|--|
| Under 25 years of age | A3a |
| 25 - 54 year of age | A3b |
| 55 years and older | A3c |

A4

What was the **total number of hours worked** ^(def. 11) by **persons employed** ^(def. 8) for the enterprise?

| | | | |
|---|----|-----|-----|
| Total number of hours worked in the reference year 2005 | A4 | A4m | A4f |
|---|----|-----|-----|

A5

What were the **total labour costs of persons employed** ^(def. 12) by the enterprise?

| | |
|--|----|
| Total labour costs (direct + indirect) of all persons employed | A5 |
|--|----|

A6

In the reference year 2005, did the enterprise introduce any **new or significantly improved** goods, services, or methods of producing or delivering these goods or services?

| | |
|-----|----|
| YES | A6 |
| NO | A6 |

B CONTINUING VOCATIONAL TRAINING ACTIVITIES OF THE ENTERPRISE

This section of the questionnaire addresses **Continuing Vocational Training (CVT)** of persons employed by the enterprise

The qualifying criteria for a CVT are the following :

- *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 at least partly by the enterprise.*

B1

Did **persons employed** by the enterprise participate in either **Internal** (def. 14) or **External** (def. 15) **CVT courses** ?

| CVT Courses | Did persons employed by the enterprise participate in CVT courses during 2005 ? |
|---|---|
| | Yes / No |
| a) Internal CVT courses | B1a |
| These are courses which are principally designed and managed by the enterprise itself. | |
| b) External CVT courses | B1b |
| These are courses which are principally designed and managed by a 3rd party organisation. | |

B2

Did **persons employed** by the enterprise participate in any of the following **other forms of CVT** (def. 6) ?

| | Other Forms of CVT | Did persons employed by the enterprise participate in any of the 5 identified other forms of CVT ? | If yes How many persons employed participated in each of the 5 identified other forms of CVT ? |
|----|---|--|---|
| | | Yes / No | |
| a) | Planned training through on-the job-training (def. 16) | | |
| | <i>Planned periods of training, instruction or practical experience undertaken in the work place using normal tools of work, either at the immediate place of work or in the work situation.</i> | B2aflag | B2a |
| b) | Planned training through job-rotation, exchanges, secondments or study visits (def. 17) | | |
| | <i>Transfers of workers from one job to another, which are not part of a planned developmental programme, should not be included.</i> | B2bflag | B2b |
| c) | Planned training through participation in learning or quality circles (def. 18) | | |
| | <i>Learning circles are groups of persons employed who come together on a regular basis with the primary aim of learning more about the requirements of the work organisation, work procedures and work places. Quality circles are working groups with the objective of solving production and work place problems through discussion.</i> | B2cflag | B2c |
| d) | Planned training by self directed learning (def. 19) | | |
| | <i>Self directed learning occurs when an individual engages in a planned learning initiative where he or she manages the training time and the place at which the learning takes place.</i> | B2dflag | B2d |
| e) | Attendance at conferences, workshops, trade fairs and lectures (def. 20) | | |
| | <i>Attendance at these events is counted as training, only when they are planned in advance and the primary intention of a person employed attending them is training/learning.</i> | B2eflag | B2e |

B3

- a) Did the enterprise provide **CVT Courses** for its **persons employed** in the previous year, 2004?

| | |
|-----------------------|-----|
| YES | B3a |
| NO | B3a |
| Not Applicable | B3a |

- b) Does the enterprise expect to provide **CVT Courses** for its **persons employed** during the year 2006?

| | |
|------------|-----|
| YES | B3b |
| NO | B3b |

B4

- a) Did the enterprise provide **Other Forms of CVT** for its **persons employed** in the previous year, 2004?

| | |
|-----------------------|-----|
| YES | B4a |
| NO | B4a |
| Not Applicable | B4a |

- b) Does the enterprise expect to provide **Other Forms of CVT** for its **persons employed** during the year 2006?

| | |
|------------|-----|
| YES | B4b |
| NO | B4b |

Filter

If persons employed by the enterprise participated in CVT courses during the reference year 2005

[(B1a or B1b) = YES]

then answer

sections C, D and F

*Countries should take care with filter on B1a/B1b
so that costs can be collected for C8 contributions (and receipts) even if there are no CVT participants in the enterprise*

If persons employed by the enterprise did **NOT** participate in CVT courses but did participate in other forms of CVT during the reference year 2005

[(B1a and B1b) = NO]

and

(B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = YES]

then answer

sections D and F and Question C8

If persons employed by the enterprise did NOT participate in CVT courses nor participate in other forms of CVT during the reference year 2005

[(B1a and B1b) = NO]

and

(B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = NO]

then answer

sections E and F and Question C8

C CONTINUING VOCATIONAL TRAINING COURSES (CVT COURSES) in 2005

This section of the questionnaire relates to an enterprise's provision of **CVT courses** for their persons employed.

C1

How many **persons employed** by the enterprise, participated in 1 or more **CVT course** (either **internal** or **external**)?

Each person should be counted **only ONCE**, irrespective of the number of CVT course he or she has participated in.

| | Total | Males | Females |
|---|-------|-------|---------|
| Number of persons employed participating in 1 or more CVT course | C1tot | C1m | C1f |

Note to countries

ESTAT insist on the delivery of reliable and high quality data for these variables.

Countries should implement whichever method they consider appropriate to assure this quality and to ensure that "participant events" are not reported. It is strongly recommended to collect both "participants" and "participants-events" in order to avoid any ambiguity and to be able to make imputations for those who do not answer to the question on "participants".

C2

In this question, please indicate for each **age group** the number of **persons employed** who **participated in 1 or more CVT course**. E.g. the number of under 25 year olds participating in 1 or more CVT course.

| Age Groups | Number of persons employed who participated in 1 or more CVT course |
|-----------------------|---|
| Under 25 years of age | C2a |
| 25 - 54 year of age | C2b |
| 55 years and older | C2c |

C3

What was the **total paid working time** ^(def. 23) (in hours) spent on **ALL CVT courses** broken down by **internal** or **external CVT course**?

| | Total (hours) | INTERNALCVT courses (hours) | EXTERNALCVT courses (hours) |
|--|------------------|-----------------------------------|-----------------------------------|
| Paid working time (in hours) spent on ALL CVT courses | C3tot | C3i | C3e |

C4

What was the **total paid working time** ^(def. 23) (in hours) spent on **ALL CVT courses** broken down by **gender**?

| | Total (hours) | Males (hours) | Females (hours) |
|--|------------------|------------------|--------------------|
| Paid working time (in hours) spent on ALL CVT courses | C4tot | C4m | C4f |

C5

What was the **paid working time** spent on all CVT courses by **field of training**?

If a course does not fit exactly to one class please select the nearest class.

If the enterprise has no detailed records on this issue, please provide estimates.

| | Field of Training | Paid working time spent on all CVT courses (Hours) |
|----------|--|--|
| a | Languages, Foreign (222) and Mother Tongue (223) | C5a |
| b | Sales (341) and Marketing (342) | C5b |
| c | Accounting (344), Finance (343), Management and Administration (345) and Office Work (346) | C5c |
| d | Personal development (090) and Working life (347) | C5d |
| e | Computer science (481) and Computer use (482) | C5e |
| f | Engineering, Manufacturing and Construction (5) | C5f |
| g | Environment protection (850) and Occupational health and safety (862) | C5g |
| h | Personal services (81), Transport services (84), Protection of property and persons (861) and Military (863) | C5h |
| i | Other training subjects | C5i |

C6

What was the **paid working time** spent on **external CVT courses** for the following groups of providers.

If the enterprise has no detailed records on this issue, please provide estimates.

| | Groups of <u>EXTERNAL</u> CVT Course provider | Paid working time spent on <u>EXTERNAL</u> CVT courses (Hours) |
|----------|---|--|
| a | Schools, colleges, universities and other higher education institutions | C6a |
| b | Public training institutions (financed or guided by the government; e.g. adult education centres) | C6b |
| c | Private training companies | C6c |
| d | Private companies whose main activity is not training. (e.g. equipment suppliers, parent/associate companies) | C6d |
| e | Employer's associations, chambers of commerce, sector bodies | C6e |
| f | Trade unions | C6f |
| g | Other training providers | C6g |

C7

What were the costs incurred by the enterprise in relation to its provision of **CVT courses**?

| Costs of CVT courses | Did the enterprise incur costs in this category? Yes / No | Cost |
|---|--|------|
| a) Fees and payments for courses for persons employed (def. 26) | | |
| Payments made to external organisations for the provision of CVT courses and services, including course fees, the cost of assessors and examiners and the cost of external trainers used to support internal courses. | C7aflag | C7a |
| b) Travel and subsistence payments (def. 27) | | |
| Payments made in relation to the travel and subsistence of participants engaged in CVT courses . | C7bflag | C7b |
| c) Labour costs of internal trainers for CVT courses(def. 28) | | |
| Labour costs of staff of own training centre and other staff exclusively or partly involved in designing and managing CVT courses . | C7cflag | C7c |
| d) Costs for training centre, training premises or specific training rooms of the enterprise , in which CVT courses take place and costs for teaching materials for CVT courses. (def. 29) | | |
| Annual depreciation for rooms and equipment, running costs for training centre or other premises and costs of materials bought specifically for CVT courses. | C7dflag | C7d |

In the exceptional case that an enterprise cannot or is unable to establish a costs breakdown using the above framework they may enter a total costs figure below

Countries should ensure that this is the exception rather than the general rule and should ensure the quality of the total

It could well be used as an option for a revisit where there is an initial non-response to this question

| | | |
|---------------------------|---------|-------|
| e) Sub Total Costs | C7sflag | C7sub |
|---------------------------|---------|-------|

C8

In this question, we would like to know whether the enterprise contributed to collective or other funds, or received payments from such funds or other sources of grants/subsidies in the context of its CVT activities.

| | | Yes / No | amount |
|---|--------------------------------------|----------|--------|
| a | CVT Contributions (def. 30) | C8aflag | C8a |
| b | CVT Receipts (def. 31) | C8bflag | C8b |

C9

Were there **persons employed** in the enterprise belonging to the following **groups**?

If yes

Did the enterprise provide **specific CVT courses** for these groups?

| | Groups | Did the enterprise have persons employed in these groups ? | If yes Did the enterprise provide specific CVT courses for these groups ? |
|----------|--|--|---|
| | | Yes / No | Yes / No |
| a | Migrants (def. 31) or Ethnic minorities (def. 32) | C9a1 | C9a2 |
| b | Persons with a disability | C9b1 | C9b2 |
| c | Persons employed without formal qualifications or with a low level of qualification | C9c1 | C9c2 |
| d | Persons at risk of losing their job or of redundancy | C9d1 | C9d2 |

C10

Were there **persons employed** in the enterprise holding the following specific contract types?

If yes

Did the enterprise provide CVT courses geared to these specific contract type holders?

| | Contract Types | Did the enterprise have persons employed holding the following employment contract types? | If yes Did the enterprise provide CVT courses geared to persons employed holding the following employment contract types? |
|----------|---|---|---|
| | | Yes / No | Yes / No |
| a | Persons with a part-time working contract (def. 34) | C10a1 | C10a2 |
| b | Persons with a fixed-term working contract (def. 35) | C10b1 | C10b2 |

D TRAINING POLICY OF THE ENTERPRISE

D1

Did the enterprise run a **training centre** or run a **shared training centre** with other enterprises or organisations, with the necessary equipment to provide CVT for its persons employed?

| | tick |
|---|------|
| YES – own training centre | D1 |
| YES – shared training centre | D1 |
| YES – Both own and shared training centre | D1 |
| NO | D1 |

| | | Yes | No |
|----|--|-----|----|
| D2 | Was there a specific person or unit within the enterprise having the responsibility for the organisation of CVT ? | D2 | D2 |

| | | always | often | occasionally | never |
|----|---|--------|-------|--------------|-------|
| D3 | How frequently did the enterprise <u>make use</u> of an external advisory service to obtain information or advice on CVT? | D3 | D3 | D3 | D3 |
| D4 | How frequently did the enterprise implement formal procedures ^(def. 38) with the objective of evaluating the future skills needs of the ENTERPRISE ? | D4 | D4 | D4 | D4 |
| D5 | How frequently did the enterprise conduct structured interviews ^(def. 39) with its persons employed with the objective of establishing the specific training needs of its PERSONS EMPLOYED ? | D5 | D5 | D5 | D5 |

| | | Yes | No |
|----|--|-----|----|
| D6 | Did the planning of CVT in the enterprise lead to a written training plan or programme ? | D6 | D6 |
| D7 | Did your enterprise have an annual training budget, which included provision for CVT ? | D7 | D7 |

| | | always | often | occasionally | never |
|------------|---|--------|-------|--------------|-------|
| D8 | At the end of a training event, did the enterprise measure (e.g. by means of a questionnaire) the participants satisfaction of the training? | D8 | D8 | D8 | D8 |
| D9 | After training did the enterprise assess the participants to establish whether the targeted skills were in fact successfully acquired as a direct result of the training? (Such an assessment might have involved a written or practical test , organised by either the training provider or the enterprise itself.) | D9 | D9 | D9 | D9 |
| D10 | After training, did the enterprise assess the participants' occupational behaviour and / or performance ? (e.g. by observation of the individual by a supervisor on the job, or by means of a questionnaire to the supervisor)? | D10 | D10 | D10 | D10 |
| D11 | After training, did the enterprise measure the impact of training on business performance through the use of indicators? (Typical indicators could be based upon (but not limited to) production time, delivery times, utilisation of equipment, or reduction in waste.) | D11 | D11 | D11 | D11 |

D12

Did any written **national, sectorial** or other **agreements between the social partners** ^(def. 40) explicitly include among its subjects, CVT plans, policies or practises for the enterprise?

| | |
|--------------------|-----|
| YES | D12 |
| NO | D12 |
| Do not Know | D12 |

D13

Did the enterprise have a **formal structure involving employee representatives** ^(def.41) such as a committee or works council?

| | |
|------------|-----|
| YES | D13 |
| NO | D13 |

If yes to D13

Did the **formal structure** play a role in respect of the following elements of the enterprise's CVT management process ?

| | Aspects of the CVT management process | YES | NO |
|----------|--|------------|-----------|
| a | Objective and Priority setting for CVT activities | D13a | D13a |
| b | Establishing the criteria for the selection of the target population who should participate to CVT | D13b | D13b |
| c | The subject matter of the CVT activity | D13c | D13c |
| d | The budgeting process related to CVT | D13d | D13d |
| e | The procedure for the selection of external CVT providers | D13e | D13e |
| f | Evaluation of the training outcomes | D13f | D13f |

D14

Did any of the following **public measures** have an effect upon the enterprise's planning, policy and practices with respect to CVT?

| | Type of Public Measure | YES | NO |
|-----------|--|------------|-----------|
| a* | Publicly-funded advisory service aimed at identifying training needs and/or developing training plans? | D14a | D14a |
| b* | Financial subsidies towards the costs of training persons employed? | D14b | D14b |
| c* | Tax relief on expenditure on training persons employed? | D14c | D14c |
| d* | Procedures to ensure the standards of trainers (e.g. by national registers, assessment etc.)? | D14d | D14d |
| e* | Provision of recognised standards and frameworks for qualification and certification? | D14e | D14e |

** Countries are encouraged to take contact with their relevant ministries to identify the specific national actions aligned with the 5 identified types of public measures and then to present the questions with reference to these specific national programmes. Where a country can be sure that any of the 5 types of public measure do not exist in their country the question relating to that specific type need not be presented in the national questionnaire.*

D15

Did any of the following reasons have an effect upon the scope of the enterprise's CVT activities?

| | (Please tick the 3 most important reasons only) | tick |
|----------|---|-------------|
| a | The high costs of CVT courses. | D15a |
| b | The lack of suitable CVT courses in the market. | D15b |
| c | Difficulties in assessing the enterprise's CVT needs. | D15c |
| d | A major training effort realised in a previous year. | D15d |
| e | The high workload and limited available time of persons employed. | D15e |
| f | The current level of training is appropriate to the enterprise's needs. | D15f |
| g | A higher focus on IVT than CVT. | D15g |
| h | Other reasons. | D15h |

E REASONS FOR NON-PROVISION OF CVT COURSES OR OTHER FORMS OF CVT DURING 2005

This section of the questionnaire is to be answered by enterprises that did not provide CVT courses or other forms of CVT for their persons employed during 2005.

E1

What were the **3 most important** reasons why the enterprise did not provide **CVT courses** nor **other forms of CVT** for persons employed during **2005**?

| | (Please tick the 3 most important reasons only) | tick |
|----------|--|-------------|
| a | The existing skills and competences of the persons employed corresponded to the current needs of the enterprise. | E1a |
| b | The preferred strategy of the enterprise was to recruit individuals with the required skills and competences. | E1b |
| c | Difficulties in assessing the enterprise's CVT needs. | E1c |
| d | The lack of suitable CVT courses in the market. | E1d |
| e | The high costs of CVT courses. | E1e |
| f | A higher focus on IVT than CVT. | E1f |
| g | A major training effort realised in a previous year. | E1g |
| h | The high workload and limited available time of persons employed. | E1h |
| i | Other reasons. | E1i |

F QUESTIONS ON INITIAL VOCATIONAL TRAINING

This Section relates to the enterprise's Initial Vocational Training (IVT) activities during the reference year 2005.

| Initial Vocational Training |
|---|
| <p><i>To qualify for IVT the following conditions should be met</i></p> <ul style="list-style-type: none"><i>The main activity of the person should be to study or to train, leading to a formal qualification recognised at the national level.</i><i>The learning activity should be at least partly work based.</i> <p><i>Country specific definition to be inserted based on the proposed framework see chapter 2.3 page 11 of the EU Manual</i></p> |

F1

| | Total | Male | Female |
|--|---------|-------|--------|
| What was the total number of IVT participants in the enterprise during 2005? | F1tot05 | F1m05 | F1f05 |

| Filter |
|--|
| <p>If F1tot05 = 0 then stop</p> <p>But should answer Question F3</p> <p><i>Countries should take care with filter on F1tot05 so that costs can be collected for F3a, IVT contributions, even if there are no IVT participants in the enterprise</i></p> |

F2

What were the **costs incurred** by the enterprise in relation to its provision of **IVT**, broken down by the cost categories indicated below?

| | Costs of IVT | Did the enterprise incur costs in this category? | Costs |
|----|--|--|-------|
| | | Yes / No | |
| a | Labour costs of individuals registered on an IVT activity ^(def. 43) | F2aflag | F2a |
| b | Other costs (including training fees, travel costs, teaching materials, costs of training centres or specific training rooms) | F2bflag | F2b |
| c* | Labour costs of IVT trainers or mentors ^(def. 44) <i>the question is optional at the national level</i> <i>countries are however encouraged to present this question and to collect the variables F2cflag and F2c</i> | F2cflag* | F2c* |

F3

In this question, we would like to know whether the enterprise contributed to collective or other funds, or received payments from such funds or other sources of grants/subsidies, in the context of its **IVT activities**?

| | | Yes / No | amount |
|---|-------------------|----------|--------|
| a | IVT Contributions | F3aflag | F3a |
| b | IVT Receipts | F3bflag | F3b |

End of Questionnaire

3 Concepts and definitions

3.1 Concepts - General Scope of the Continuing Vocational Training Survey (CVTS3)

The primary objective of CVTS3 is to collect data on **continuing vocational training** (CVT) in enterprises, and in particular

- the strategies of enterprises in training their persons employed,
- the training modalities,
- the costs of training
- and the number of participants undertaking.

Taking into consideration the concept of lifelong learning and the aim of assessing how enterprises apply this concept, the Regulation (EC) No 1552/2005 emphasises the importance of covering initial vocational training measures (IVT) of enterprises. It states that “Specific data shall be collected by the Member States with respect to **initial vocational training** in enterprises on:

- Participants in initial training
- Expenditure on initial training

This ambition requires the establishment of a definition for IVT which distinguishes it clearly from CVT, in such a way that the same kind of information can be collected from all participating countries, irrespective of the specific national or regional regulatory environment, particular education and training system or common practices in place. An important quality characteristic of statistics is **relevance**. As far as possible, data produced should be understood correctly by users within their policy context, as well as within a conceptual framework where the statistical information collected can be clearly identified and located.

3.2 Characteristics of Continuing Vocational Training (CVT)

The training activity must be the result of a decision in the enterprise. Typically this decision would be taken by the line-manager of the person employed or by the general management of the enterprise.

The primary objective must be the acquisition of new competencies or the development and improvement of existing competencies. Routine work-adjustment training (i.e. basic familiarisation with the job, organisation or working environment) and routine information transfer should be excluded.

Included are working proprietors, partners working regularly in the enterprise and unpaid family workers, as well as persons who work outside the enterprise but belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams). People absent for a short period (e.g. sick leave, paid leave or special leave), and also those on strike but not absent for an indefinite period are included. Part-time workers, as well as seasonal workers, and home workers on the payroll of the enterprise are included.

If an enterprise does not pay for CVT courses, but does give time off work instead, this is to be considered as enterprise provided CVT.

Excluded are :

- apprentices, trainees etc. with a special training contract.
- those people working in the enterprise who are subcontracted or have a working-contract with another firm (e.g. agency workers).

A training measure or activity should be 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 the financing of training equipment (books, computers, CD-ROMs, etc.). VAT paid by the enterprises should be excluded from the expenses.

There must be an actual activity or event or set of activities or events, which can be identified as a specific and separate period of training, rather than an on-going activity that cannot be distinguished from work. (learning by experience or random learning is to be excluded).

There must be a training mediator (either a person, i.e. a trainer, coach or supervisor, or a piece of equipment used for training, i.e. a computer or other training medium).

Other aspects to be considered in identifying continuing vocational training measures are:

- Training-measures for university graduates, who are financed at least partly by the enterprise, are part of CVT, unless the graduates are engaged on training contracts.
- Work experience by undergraduates in enterprises as part of their degree courses (e.g. sandwich courses) is not CVT nor IVT.

3.3 Characteristics of Initial Vocational Training (IVT)

The **general purpose** of IVT is to educate the apprentices/trainees by means of a **combination of work experience and training**. Apprentices/trainees **can sometimes have the status of persons employed** (e.g. by having a work contract), however their function is not primarily to produce goods and services, but to train or learn. The existence of a **training contract** between the enterprise and the apprentices/trainees is not in itself a qualifying criterion for the distinction between IVT and CVT. In many cases however, such a training contract does exist.

Initial vocational training within enterprises is classified as **formal learning** and will lead to a formal qualification at any level of the ISCED (annex 3). This formal qualification is usually classified in the national ISCED (national ISCED-mapping). It is essential for the training of apprentices/trainees within enterprises that it has **a work-based element**. Initial vocational training are training measures or activities, which the enterprises often (but not always) finance, either partly or wholly.

For IVT the **duration of training** should not in itself be a qualifying criterion. That being said, a time period could be a useful discriminator in some countries to **distinguish between true IVT and short term work placements whose primary objective is not formal training**. In this respect, a period of approx. 6 months may be a useful guiding figure for some countries.

3.4 CVTS3 Framework for IVT and CVT - Summary Table

The table below presents, for CVTS3 purposes, a summary of IVT and CVT on a number of relevant dimensions. It offers a framework for countries to establish their own, CVTS3 specific, definition of IVT and CVT. In the table the possible overlaps between the two concepts of CVT and IVT proposed for CVTS are essentially resolved **by giving priority to CVT**.

| | IVT in enterprises | CVT in enterprises |
|-------------------------------------|---|--|
| Main activity of the persons | Student, apprentice, trainee, ... | Employed by the enterprise |
| Type of contract | Non-qualifying criteria as national laws differ | Essential Element Work contract required |
| Type of learning activity | Essential Element Formal learning | Non-qualifying criteria |
| Work based element | Essential Element Must have a work based element | Non-qualifying criteria |
| School based element | Non-qualifying criteria Even if it does exist in a majority of situations | Non-qualifying criteria |
| Costs for the enterprise | Non-qualifying criteria | Essential Element CVT is financed wholly or partly by the enterprise |
| Time period of the study | Non-qualifying criteria But consideration of a minimum period may be useful, in order to exclude "casual work placements". In this respect a period of approx. 6 months may be a useful guiding figure to countries. | Non-qualifying criteria |

Countries should assess possible borderline and special cases and report their treatment in the national quality report.

The following examples of training **are not covered**, by either IVT or by CVT:

- Training in the enterprise for the benefit of a participant who is not a member of the staff of the company nor registered in the formal education and training system that has a work based component, for instance
- Training of unemployed people at the request of (and nearly always funded by) employment authorities and agencies
- Voluntary stage of a person who wants to be trained
- Short (a few weeks) exposure to work environment, part of a curriculum, but without structured programmes and knowledge and skills acquisition, intention and assessment. As a practical approach, a minimum period of time (e.g. 6 months) might be a useful discerning criterion.
- Internships (e.g. for physicians, ...) and periods of practise after courses and before recognition (e.g. for lawyers, ...) should be understood as **work** and not as CVT or IVT.

3.5 Definitions

| Term | Definition |
|--|---|
| 1 Enterprises | <p>"Council Regulation (EEC) No 696/93 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community"</p> <p>"The enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit."</p> |
| 2 Continuing vocational training (CVT) | Continuing vocational training is a training measures or activity which has as its primary objective, the acquisition of new competencies or the development and improvement of existing ones and which is 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 must not be taken into consideration for CVT. (These could be relevant candidates for IVT - see definition Nr. 3). The training measures or activities must be planned in advance and must be organised or supported with the special goal of learning. Random learning (see definition Nr. 44) and initial vocational training (IVT) are explicitly excluded. |
| 3 Initial vocational training (IVT) | Initial vocational training (IVT) is a work-based training measure or activity for apprentices/trainees. It lead to a formal qualification. The measures are often financed (partly or wholly) by the enterprise although this is not a mandatory condition. Apprentices/trainees often have a special training contract. |
| 4 Continuing vocational training measures and activities: | Continuing vocational training measures and activities includes CVT courses and "Other" forms of CVT. |
| 5 CVT courses | <p>CVT courses are typically clearly separated from the active work place (learning takes place in locations specially assigned for learning, a class room or training centre). They exhibit 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</p> <ul style="list-style-type: none"> • internal CVT courses (def. 14) • external CVT courses (def. 15) |
| 6 "Other" forms of CVT | <p>"Other" forms of continuing vocational training are typically connected to the active work and the active work place, but they can also include attendances at conferences, trade fairs etc. for the purpose of learning. They 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.</p> <p>In the context of CVTS3 the following types of Other forms of CVT are identified:</p> <ul style="list-style-type: none"> • Planned training through on-the job-training (def. 16) • Planned training through job-rotation, exchanges, secondments or study visits (def. 17) • Planned training through participation in learning or quality circles (def. 18) • Planned training through self directed learning (def. 19) • Planned training through attendance at conferences, workshops, trade fairs and lectures (def. 20) |
| 7 Principal economic activity of the enterprise | According to the NACE Rev. 1.1 classification, the principal economic activity of the organisation is the activity that contributes most to the gross value added at factor cost. The NACE code of the enterprise should be taken from the SBR or be coded to the NACE 4-digit level on the basis of information supplied by the enterprises (see annex 1, 12 and 13 for a more detailed description). |

| Term | Definition |
|--|--|
| 8 Persons employed | <ul style="list-style-type: none"> • working proprietors • partners working regularly in the enterprise • unpaid family workers • persons from the enterprise and paid by it who work away from the enterprise (e.g. sales representatives, delivery personnel, repair and maintenance teams) • part-time workers and seasonal workers • people absent for a short period (e.g. sick leave, paid leave or special leave) • those on strike but not absent for an indefinite period <p>It excludes anyone who is working at the enterprise but whose salary is paid by another company, e.g. persons employed by firms under contract or seconded staff. Also not included are persons absent and not being paid during the whole reference period (e.g. for parental leave or long time compulsory military service).</p> |
| 9 Persons employed holding an apprentice or training contract | <p>The person employed holding an apprentice or training contract drawn up between the employer and himself/herself.</p> |
| 10 Total number of persons employed | <p>The total number of persons employed includes all full-time and part-time persons employed. This includes:</p> <ul style="list-style-type: none"> • working proprietors • partners working regularly in the enterprise • unpaid family workers • persons from the enterprise and paid by it who work away from the enterprise (e.g. sales representatives, delivery personnel, repair and maintenance teams) • part-time and seasonal workers • people absent for a short period (e.g. sick leave, paid leave or special leave) • those on strike but not absent for an indefinite period <p>It excludes anyone who is working at the enterprise but whose salary is paid by another company, e.g. persons employed by firms under contract or seconded staff. Also not included are persons absent and not being paid during the whole reference period (e.g. for parental leave or long time compulsory military service).</p> |
| 11 Total number of hours worked | <p>The total number of hours worked refers to the total number of hours actually worked by all persons employed, excluding persons employed holding an apprentice or training contract. It includes time worked during normal periods of work (in the enterprise or telecommuting), time worked in addition to normal periods of work and generally paid at a higher rate (overtime), time spent at the place of work standing by or during which no work is done (but for which payment is made) and time corresponding to short rest periods, including tea and coffee breaks. It excludes time spent on paid leave, paid public holidays, paid sick leave, paid meal breaks.</p> |
| 12 Total labour costs of persons employed | <p>Total labour costs of persons employed (excluding persons employed holding an apprentice or training contract) is defined as the sum of the direct and indirect labour costs. The estimate of total labour costs represents all expenditure borne by employers in order to employ workers. It should include</p> <ul style="list-style-type: none"> • direct labour costs, <ul style="list-style-type: none"> ○ direct pay, ○ other bonuses and gratuities, ○ payments for days not worked, ○ benefits in kind, • and indirect labour costs, <ul style="list-style-type: none"> ○ statutory social security contributions and family allowances, ○ non-statutory payments, ○ other social expenditure, ○ vocational training costs (gross), ○ taxes, less subsidies on labour. |

| Term | Definition |
|---|---|
| 13 New or significantly improved goods, services or methods of producing or delivering these goods or services | A new or significantly improved good or service is one whose characteristics or intended usage differs significantly from those of previously produced products or has been significantly enhanced or upgraded. A significantly new method of production or delivery of goods and services should represent a significant difference from those of previously utilised. |
| 14 Internal CVT courses | Internal CVT courses are principally designed and managed by the enterprise itself. (It is important that the responsibility for the content of the course lies within the enterprise. Courses are for example designed and managed by the internal training department of the enterprise, however the course can physically take place either within or outside the enterprise i.e. the geographic location relative to the enterprise is not the important issue) |
| 15 External CVT courses | External CVT courses are principally designed and managed by organisations which are not part of the enterprise itself (e.g. 3rd party organisations). (These courses are designed and managed by a training organisation which is not part of the enterprise or by a training organisation which belongs to the parent company of the enterprise. It is important that the responsibility for the content of the course lies outside the enterprise; the course is then selected, ordered and purchased by the enterprise. The course can physically take place either within or outside the enterprise i.e. the geographic location relative to the enterprise is not the important issue) |
| 16 On-the job-training | On-the job-training is characterised by planned periods of training, instruction or practical experience in the work place using the normal tools of work, either at the immediate place of work or in the work situation. |
| 17 Job-rotation, exchanges, secondments or study visits | Job-rotation within the enterprise and exchanges with other enterprises are "other" forms of CVT only if these measures are planned in advance with the primary intention of developing the skills of the workers involved. Transfers of workers from one job to another which are not part of a planned developmental programme should be excluded. |
| 18 Learning or quality circles | <p>Learning circles are groups of persons employed who come together on a regular basis with the primary aim of learning more about the requirements of the work organisation, work procedures and work places.</p> <p>Quality circles are working groups, having the objective of solving production and work place based problems, through discussion. They are counted as "other" forms of CVT only if the primary aim of the persons employed attending them, is learning.</p> |
| 19 Self directed learning | Self directed learning occurs when an individual engages in a planned learning initiative where he or she manages the training time and the place at which the training takes place. Self directed learning means planned individual learning activities using one or more learning media. Learning can take place in private, public or job-related settings. Self directed learning might be arranged using open and distance learning methods, video/audio tapes, correspondence, computer based methods (including internet) or by means of a Learning Resources Centre. It has to be part of a planned initiative. Simply surfing the internet in an unstructured way should be excluded. Self directed learning in connection with CVT courses should not be included here. |
| 20 Attendance at conferences, workshops, trade fairs and lectures | Attendance at conferences, workshops, trade fairs and lectures are considered as training actions, only when they are planned in advance and where the primary intention of an person employed attending them is training/learning. |

| Term | Definition |
|---|---|
| 21 Total number of participants | A participant 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 an person employed has attended two externally managed courses and one internally managed course, he or she should be counted as one participant. |
| 22 Participant events | Participant events are the number of times participants participated in CVT courses. E.g. if a person employed has attended two externally managed courses and one internally managed course, this will be counted as three participant events. Typically, the number of participants will be lower than the number of participant events for an enterprise. |
| 23 Paid working-time (in hours) spent on CVT courses | Paid working time (in hours) spent on CVT courses is the total time that all participants have spent in total in CVT courses during 2005. Where courses fell only partly within 2005, only the time spent during 2005 should be included. The number of hours spent in CVT courses should cover only the actual training time and only the time spent in persons employed paid working time should be included (i.e. any time where participants are training when they would normally be working or in time being paid for by the enterprise). It should exclude any periods of normal working between training and any time spent travelling to the course. For example, if a training course lasts for one week, only the time spent actually in the training course or working on training material should be included. If a person attends a course, one day a week, for several weeks, the one-day a week should be included and summated, but the days spent working between the training days should be excluded. |
| 24 Field of training | <p>The fields of training are (see annex 4 for a more detailed description):</p> <ul style="list-style-type: none"> • Languages (foreign and mother tongue) • Sales and marketing • Accounting and finance; Management and administration (including human resource management and quality management); Office work • Personal skills/development; Working life (including company knowledge and introductory courses) • Computer science and computer use • Engineering, manufacturing and construction (Production techniques including e.g. operations and maintenance of automated systems, quality control and development of new materials and products) • Environment protection and occupational health and safety • Personal services; Transport services; Protection of property and persons; Military • Other training subjects |
| 25 External CVT courses providers | <p>Provider of external training courses means the person or organisation, which delivers the training (see annex 5 for a more detailed description):</p> <ul style="list-style-type: none"> • Schools, colleges, universities and other higher education institutions • Public training institutions (financed or guided by the government; e.g. adult education centres) • Private training companies • Private companies whose main activity is not training (e.g. equipment suppliers; parent/associate companies) • Employer's associations, chambers of commerce, sector bodies • Trade unions • Other training providers |
| 26 Fees and payments | These are the costs of external courses, made to external organisations for the provision of CVT courses and services. They include course fees, the cost of assessors and examiners and the cost of external trainers used to support internal courses. VAT should be excluded from the expenses (see annex 6 for a more detailed description). |

| Term | Definition |
|---|--|
| 27 Travel and subsistence payments | These are costs made to participants for travelling to training courses and the payments or subsistence allowances. VAT should be excluded from the expenses (see annex 6 for a more detailed description). |
| 28 Labour costs of internal trainers for CVT courses | These are the direct and indirect labour costs of staff of a training centres and other staff exclusively or partly involved in providing, designing and managing CVT courses (see annex 6 for a more detailed description). If those trainers are only partly involved in CVT courses, only the time spent on CVT courses should be taken into account. If total labour costs of internal trainers for CVT courses are not available from enterprise records, then the labour costs may be estimated by using data on the total number of internal trainers for CVT courses and average remuneration plus indirect labour costs (see annex 6 for a more detailed description). |
| 29 Costs for training centre, training premises or specific training rooms of the enterprise, in which CVT courses take place Costs for teaching materials for CVT courses | These costs include the costs of running the training rooms and annual depreciation for these rooms and equipment. It also includes the costs of materials bought specifically to support the provision of CVT courses. VAT should be excluded from the expenses (see annex 6 for a more detailed description). |
| 30 Contributions | The costs of contributions made by the enterprise to collective funding arrangements through Government and intermediary organisations. (see annex 6 for a more detailed description). |
| 31 Receipts | The receipts from collective funding arrangements, subsidies and financial assistance from Government and other sources. (see annex 6 for a more detailed description). |
| 32 Migrants | A migrant is a person who moves to a country other than that of his or her usual residence for a period of at least three months except in cases where the movement to that country is for purposes of recreation, holiday, visits to friends or relatives, business, medical treatment or religious pilgrimage. |
| 33 Ethnic minority | An ethnic minority is a group of people who identify themselves as a group, or are so identified by others, on the basis of a boundary that distinguishes them from other groups. This boundary may take any of a number of forms – racial, cultural, linguistic, economic, religious, political – and may be more or less porous. |
| 34 Persons employed with a part-time working contract | According to the ILO/European Framework Agreement on part-time work, concluded in 1997 among the European social partners, the term “part-time worker” refers to “an person employed whose normal hours of work, calculated on a weekly basis or on average over a period of employment of up to one year, are less than the normal hours of work of a comparable full-time worker.” |
| 35 Persons employed with a fixed-term working contract | A fixed-term contract is an employment-contract lasting for a specified finite period (e.g. 12 months). |
| 36 Training centre | A training centre is a training unit with training personnel, training premises and training equipment. The training centre can be located within or out with the enterprise or it can be shared with other enterprises. The ownership of the training centre is not the important issue, as some enterprises may run a training centre jointly with other enterprises, although they do not in fact own it. |
| 37 External advisory service | An external advisory service for training can be provided by public institutions (ministries, universities, training advisory councils, employment agencies), by semi-public-organisations (such as chambers of industry and commerce, trade unions) or private organisations (such as enterprises, training consultants, management consultancies). |

| Term | Definition |
|--|---|
| 38 Formal procedures with the objective of evaluating the future skills needs of the enterprise | Formal procedures are procedures established and recorded in written form in an enterprise's manual of procedures or processes. |
| 39 Structured interviews | Structured interviews are a regular (typically annual) communication between an enterprise management and its persons employed. An individual and a superior discuss the past work experiences of the person employed. Often both sides agree on goals for the future and evaluate the past goal achievement of the person employed. Problems and difficulties at the work place are analysed and possibilities for improvement of the working conditions are sought. The collaboration between the superior and the person employed is also discussed. The main aims of these interviews are the guidance of the person careers, the screening of individual employment situations, possible training needs and suitable training offers. |
| 40 Agreements between the social partners | The social partners are representative organisations of the employers and the persons employed (employer associations and trade unions). The social partners negotiate on a regular basis at the national and sector level and conclude collective agreements (collective bargaining). Collective agreements normally regulate wages and working conditions. Collective agreements can also regulate vocational training provisions, such as national or sector training funds, employability measures, vocational training measures for older persons employed. Agreements between the employer and works councils at the enterprise level are excluded from this definition. |
| 41 Formal structure involving employee representatives | Formal structures involving employee representatives are often committees or works councils. They are "shop-floor" organisations representing workers, which function as local/firm-level complements to national labour negotiations. Works councils exist in a variety of related forms in a number of European countries. A special form of works councils are the European works councils. On 22 September 1994, the European Council of Ministers decided on a Directive (94/45/EC) on the establishment of a European Works Council or similar procedure for the purposes of informing and consulting persons employed in companies which operate at EU level (amended by Council Directive 97/74/EC of 15 December 1997). The directive applies to companies with at least 1.000 persons employed within the EU and at least 150 persons employed in each of at least two Member States. |
| 42 Labour costs of individuals registered on an IVT activity | Labour costs of individuals registered on an IVT activity consist of the direct remuneration and indirect labour costs. If total labour costs of individuals registered on an IVT activity are not available from the enterprise records, then the labour costs may be estimated by using data on the total number of individuals registered on an IVT activity and average remuneration plus indirect labour costs (see annex 6 for a more detailed description). The labour costs for all persons that participated in IVT during the year 2005 must be provided. |
| 43 Labour costs of IVT trainers or mentors | These costs are the direct and indirect labour costs of IVT trainers or mentors. If those trainers or mentors are only partly involved in IVT training, only the proportion of their time spent on IVT training should be taken into account. If total labour costs of IVT trainers or mentors are not available from the enterprise records, then the labour costs may be estimated by using data on the total number of IVT trainers and mentors and average remuneration plus indirect labour costs (see annex 6 for a more detailed description). |

| Term | Definition |
|------------------------------------|---|
| 44 IVT trainers and mentors | <p>IVT trainers and mentors are persons employed of the enterprises and fully or partly involved in the initial vocational training activities of the enterprises (especially for on-the-job-training). It should include:</p> <ul style="list-style-type: none"> internal trainers and staff of training centres directors and other top managers concerned with training policy instructors and training managers or officers clerical/administrative and other personnel supporting these activities |
| 45 Random learning | <p>Random learning can occur in everyday life. It is not an activity which is intentionally planned in advance and is not bound to special or specific places (e.g. classes) or to mediators (e.g. teachers). Random learning can be considered as a natural learning mechanism. Learners may often not be aware that they have learnt something.</p> |

4 Survey guidelines for CVTS3

4.1 Background

The specification of the methods to be used in CVTS3 has been designed to:

- ensure that data are collected in a consistent manner across all participating countries and to a prescribed minimum quality standard, as stated in the EU-regulation;
- ensure that the sampling design is in accordance with statistical theory;
- be sufficiently flexible to cope with the different systems for data collection in different participating countries and in different enterprise forms (e.g. multiples/sole establishments, large/small firms, trainers/non-trainers);

To meet these aims, the following Survey Guidelines have been established. These are to be respected by each participating country.

4.2 Data Collection

4.2.1 Reference period

The reference period of the CVTS3 survey will be the calendar year 2005.

4.2.2 National sampling plan

The national sampling plan is to be communicated to ESTAT. The national sampling plan shall contain the following elements:

- Description of the sampling frame,
- Sample selection (sample size, sample structure, sampling method, estimated response rate),
- Data collection issues (including deviations from the outline questionnaire, data collection methods, fieldwork),
- Treatment of non-response,
- Data processing and modalities of data transmission.

The national sampling plan must give a complete picture of CVTS3 in the country. All **deviations** from the common agreed survey approach and survey guidelines must be clearly stated in the national sampling plan and be agreed in advance with Eurostat. Further practical aspects and further details on the implementation and performance of the survey, as well on the treatment of non-response and data processing have to be described in the quality reports to be submitted to Eurostat according to a timetable agreed with countries.

4.2.3 Questionnaire

The European outline questionnaire shall be used as the basis for the survey. National questionnaires should be drawn up using this European outline questionnaire and customised to the particular data collection methods to be used – see chapter 4.2.4 below.

Any deviations from the common questionnaire must be noted in the national quality report.

However, it is important that the sequence of questions as set out in the outline questionnaire should be followed in all cases. This is necessary to ensure that the data are as comparable as possible because the ordering of questions may influence the answers provided.

It is accepted that, where a country will provide the data needed from other sources, the relevant questions will not be asked. It may also be necessary, in exceptional cases, to deviate from the agreed sequence of questions during face-to-face interviews. If countries change the order of response alternatives or sub-items, the corresponding order in the micro-data set (data record) must NOT be changed.

Countries shall comply in **all cases**, with the standard data record format for the non-imputed and imputed datasets, to be sent to Eurostat.

The translation of the questionnaire to the national language must be performed with the utmost care, making sure that the concepts and definitions to be used for CVTS3 are not distorted through translation. This is a key issue in relation to the objective of establishing comparable results from CVTS3 across countries.

In questions where it may assist the enterprise to give national examples, whether in the questionnaire or through instructions to interviewers, e.g. training providers, it will be important, also, for these to be consistent with the appropriate classification and definitions.

4.2.4 Different data collection approaches

In its choice of data collection methodology each country shall consider the approach which best meets its needs in obtaining a sufficiently high response rate, to assure the required minimum quality standard, within the available funding for the survey.

The precise data collection approach will be determined nationally. However, it is expected that national instruments will be tested if not through piloting by other means (e.g. measurement laboratory) and that some follow-up within enterprises will be made to check that the data provided conforms to the definitions and conforms to the prescribed quality standard.

Different data collection methods and recommendations for their respective implementations are discussed below.

Face-to-face interviews

In CVTS2 it was the expectation that face-to-face data collection would produce better data than other methods, especially for the quantitative questions, such as those on costs. A general pre-requisite, however, is the availability of a reliable organisation to perform the fieldwork and interviewers, who are experienced in interviewing enterprises and where possible, familiar with training issues. Face-to-face interviews have the advantage of guaranteeing high response rates and permit a flexibility in interviewing different persons within the enterprise in respect of different parts of the questionnaire. Good field control and documentation are additional advantages of face-to-face interviews. The use of computer-assisted methods during face-to-face interviews is advantageous for automatic filtering and data checking during the interview.

Telephone interviews

In general the telephone is useful for establishing advance contact the respondent in advance, motivating the respondents and reminding the enterprises to fill in the questionnaire. From CVTS2 it has proven to be both suitable for the interviewers and successful in terms of obtaining enterprise co-operation, and hence satisfactory response rates. Telephone interviewing as a data collection method, like other methods, is characterised by a mixture of advantages and disadvantages. Telephone interviews present higher response rate compared to postal methods. However, some kinds of information are hard to collect in a pure telephone interview, especially those requiring the respondent to look up records or to discuss questions with colleagues. Such problems could be addressed by sending the questionnaire in advance, either electronically or by post. Though raising costs of the survey, this measure is likely to be justified by the increased quality in the data. If telephone interviews are conducted for CVTS3 the recommendation is to implement a computer-assisted approach (CATI) to enable the advantages of automatic filtering and immediate data checking routines.

Postal questionnaire

The results of CVTS2 confirmed once again that a “pure” postal questionnaire generates lower unit response rates than other data collection methods. Concerning the coverage of complicated quantitative data such as participants in training, hours, fields of training or costs, self-administered questionnaires seem to generate better data quality. For this kind of information the respondents often have to look up the accounting systems, or exchange views with other colleagues. Self-administration of the interview makes time management more convenient and may therefore lead to better answers. But quality gains on the one side have to be balanced with the potential quality risks on the other side: filter questions are more prone to error in self-administered questionnaires. In addition checking of the data can only be performed ex post and may necessitate re-contacts with the enterprises. The latter may severely influence the costs of the method, moving it from a cheap method to at least a medium expensive one. There is often a lack of field control in mail surveys and unit response is likely to be low. If mail surveys are chosen as the method of data collection for CVTS3 the **strong recommendation is to use a service centre for the respondents**. This centre should be available by phone and by email to answer queries from enterprises. To raise unit response rates, it is probably useful to make preliminary telephone contact. Multiple contacts and reminders should also be envisaged and factored into the budget. In addition countries are encouraged to use incentives, such as sector reports presenting interesting CVTS data for special branches of industry, to motivate enterprises participation.

Web based questionnaire

Compared to paper questionnaires, a web instrument has several advantages. First, it enables the routing of questions and modules according to different choices that enterprises make during the flow of the questionnaire. It also enables immediate checking of the internal consistency of given answers by summing up figures or comparing figures from different questions concerning the same piece of information. Another advantage is the decreased effort in data entry and data editing, which reduces mistakes in this phase of the processing which therefore contributes to higher reliability.

Compared to a computer assisted telephone or face-to-face interview a web questionnaire

- gives the respondent the freedom to fill in the questionnaire at any convenient moment
- gives the possibility to read additional information (definitions and explanatory text) at his/her own pace when needed
- gives the possibility to return to earlier questions in the questionnaire for ascertaining previous entries or making corrections.

However, not all enterprises may respond positively to web based questionnaires and they may suffer from the problem of possible low response rates because of a lack of direct personal contact from an interviewer. Furthermore, the expected technical standards in the enterprises have to be taken into account.

4.2.5 Recommendations for the organisation of the field work

The survey organisation responsible for data collection at national level should be carefully chosen based upon the following criteria (if that organisation is not the statistical office itself):

- good reputation
- experienced interviewers, preferably permanent and full-time
- interviewers are paid for the working time (the danger otherwise that they will not be careful with the quality of the responses)
- organisation takes good care of interviewers' continuous training and arranges special training for the survey
- organisation has well established procedures for all survey operations, including guiding, monitoring and reporting field work operations.
- In the ideal case interviewers would have prior experience in the performance of enterprise surveys. However, it should be clear that these professional interviewers will in most cases not be experts on training matters. An optional role for interviewers in an enterprise survey is to use them in contacting, motivating and persuading respondents.
- The number of contact attempts an interviewer is allowed to undertake to the enterprise must not be limited.
- Every participating country should form a survey special help-desk to handle respondents' and interviewers' questions and problems.

4.3 Sampling

4.3.1 Definition of the population

The population of interest for the CVTS3 is the enterprises within each participating country with 10 or more persons employed belonging to the NACE categories C, D (15-16, 17-19, 21-22, 23-26, 27-28, 29-33, 34-35, 20+36+37), E, F, G (50, 51, 52), H, I (60-63, 64), J (65-66, 67), K+O (see annex 1).

Optionally separate strata with enterprises of less than 10 persons employed belonging to the NACE-categories above and also enterprises belonging to other NACE categories may be included in pilots.

An enterprise is defined by the legal text of the Council Regulation (EEC) No 696/93 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community:

"The enterprise is the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit."

4.3.2 Sampling frame

The sampling frame is the device that delimits, identifies and allows access to the enterprises in the population. Ideally, there exists a register or list of all enterprises in the population of interest.

The Statistical Business Register (SBR) described in the Council Regulation (EEC) No. 2186/93 of 22 July 1993, will be the main source for the sampling frame in Member States.

The sampling frame must be of good quality and contain up-to-date information. This means that:

- a) The number of enterprises not represented in the frame must be small.
- b) It must, to a sufficiently large extent, be possible to identify enterprises in the frame that do not belong to the population before the sample is taken. If this cannot be done, enterprises of no interest for the survey will be included in the sample and this could result in biased estimates.
- c) Variables that are used to identify strata (NACE and size) must to a very large extent have correct values. Otherwise precision in the estimates will be lower as needed.

For each unit in the frame it must be possible to decide whether it belongs to the population or not. A rule for this must clearly be stated. The frame quality should be clearly stated, especially a), in the national sampling plan.

Countries should contact persons responsible for the SBR or the corresponding register to be used, in order to assess clearly the frame quality. In case the quality of an existing register is too poor, e.g. not covering all enterprises of interest, important variables are missing or error prone, not up-to-date etc., it is necessary to improve it, otherwise the survey coverage will be incomplete and inadequately defined.

4.3.3 Sampling units

Case 1: The sampling frame consists of a register or list of enterprises; then sampling units and the observational units are the same.

Case 2: In some countries there is no useful register of enterprises but there is a useful register of local units. Then a sample of local units may be used to get in touch with the enterprise to which the sampled local unit is associated. The estimation procedure then has to take this into account since enterprises with many local units will have a larger probability to be included in the sample than enterprises with fewer local units. However, when using this approach one cannot be sure to present reliable estimates for enterprises in all intended NACE categories or all size classes.

4.3.4 Frame problems

Over- and under-coverage

No doubt all countries will have problems with over-coverage, i.e. there are enterprises in the sample that no longer are in business or for other reasons do not belong to the target population. There is probably also a problem with under-coverage, i.e. enterprises that do belong to the target population but which have no chance to be included in the sample because they are not in the sampling frame. To reduce both problems it is recommended that the sampling frame be updated as close as possible to the end of the reference period.

What to do in the case of over- and under-coverage? If one accepts three simple assumptions, a simple procedure to adjust for over- and under-coverage by weighting may be applied.

These assumptions are made for each stratum:

- The first assumption is that the over-coverage rate among the respondents is the same as that among the non-respondents.
- The second assumption is that the number of enterprises in the over-coverage in the frame is the same as the number of under-coverage enterprises, this means that the size of the population is not changing during the survey period.
- The third assumption is that the mean value of any variable of interest is the same in the part of the sample that belongs to the target population as in the under-coverage part.

These three assumptions can of course be questioned but they are simple and lead to a simple procedure. If we are willing to accept these assumptions then the number of responding enterprises in stratum h , m_h shall not contain the number of over-coverage enterprises. Note that N_h shall not be reduced for the number of discovered over-coverage. For example if there are 100 enterprises in the response set, of which 10 do not belong to the target population, then $m_h=90$ should be used in the weighting procedure in that strata.

“Stratum switchers”

In practice it is not uncommon that some enterprises turn out to have changed stratum at the time for data collection. The enterprise might have grown or changed NACE-group. It is important to note that it is the stratum identity at the sampling occasion that counts, i.e. if an enterprise is sampled in NACE group E and size class 10-49 and it turns out that it has 62 persons employed, then N_h / m_h comes from stratum (E, 10-49). However, if the SBR has been updated and the enterprise belongs to the true size class in the updated register then it is probably a good idea to use the updated information as additional information in the construction of the final weights.

For example the updated division indexed by g may cross the original division into strata indexed by h and each responding enterprise is classified into the classes hg . The totals N_h are known from the sample procedure and the totals N_g and possibly tx_g are known from the updated register. Note that the known totals should contain data from enterprises that are members of the target population only.

The use of additional information may have the twofold effect on the estimates that the bias is decreased and the precision is increased when the information is correlated with the variable(s) of interest. Otherwise it will probably have a small or no impact on the estimates.

Split or merged enterprises

An enterprise in the sampling frame might have been split into two or more different units. Conversely, it may also happen that two or more enterprises in the sampling frame have merged into a new single unit. This is not just a weighting problem although weighting may be used as one solution to at least a part of it. It is only possible to give general advice on how to handle some typical situations. The suggestions are highly dependent on the available information on the enterprises.

a) Split enterprises

The following suggestion may be used when the split occurs during the reference period (2005). When an enterprise is split into two or more separate units the “mother” enterprise has to be treated from the frame as a cluster of “daughter” enterprises. The “daughters” may belong to different NACE categories and/or different size classes. Countries should try to collect the data for each “daughter” and include it in the final data set as separate enterprises with the same identity and weight as the “mother”.

When the split occurs after 2005 it should be treated as a measurement problem.

b) Merged enterprises

In the case of merged enterprises the problem should be handled in different ways depending on whether the merge occurs before year 2006 or not. First, assume that it occurs before year 2006. When two or more frame enterprises merge into one single unit it means that this unit is included in the sample if at least one of its (eligible) frame enterprises is included. The increased inclusion probability should be adjusted.

When the merger occurred after 2005 it should be treated as a measurement problem. The collected data for the frame enterprise does not yield the “true” values and has to be corrected, for example by splitting the values that were obtained from the merged enterprise, i.e. imputation.

4.3.5 Stratification and allocation of the sample

The sample shall be stratified by NACE and size category according to the following minimum specification:

- 20 NACE rev1.1 categories [C, D(15-16, 17-19, 21-22, 23-26, 27-28, 29-33, 34-35, 20+36-37), E, F, G(50,51,52), H, I(60-63, 64), J(65-66, 67), K+O]
- 3 enterprise size categories, according to their number of persons employed: (10-49)(50-249)(250 and more)

A sample size shall be calculated to assure a **maximum** half-length of the 95% confidence interval of 0.2 for the estimated parameters, which are a proportion of "training enterprises" (after allowance for the non-response rate in the sample) for each of the 60 stratified elements identified above.

The following formula may be used in determining the sample size:

$$n_h = 1/[c^2 \cdot te_h + 1/N_h] / r_h$$

Where:

n_h = the number of sampling units in the stratum cell, h

r_h = the anticipated response rate in the stratum cell, h

c = maximum length of half the confidence interval

te_h = the anticipated proportion of training enterprises in the stratum cell, h

N_h = the total number of enterprises (training and non-training) in the stratum cell, h

The derivation of the formula, which is used for calculating sample sizes in each stratum is presented below. In CVTS, we are mainly interested in estimating proportions, for example the proportion of training enterprises offering external courses, p_h .

$$C = 2\sqrt{p_h(1-p_h)\left(\frac{1}{n_h r_h} - \frac{1}{N_h}\right)}$$

$$\frac{C^2}{2^2} = p_h(1-p_h)\left(\frac{1}{n_h r_h} - \frac{1}{N_h}\right)$$

Assume that $p_h = 0,5$

$$\Rightarrow C^2 = \frac{1}{n_h r_h} - \frac{1}{N_h}$$

$$\frac{1}{n_h r_h} = C^2 + \frac{1}{N_h}$$

$$n_h r_h = 1 / \left(C^2 + \frac{1}{N_h} \right)$$

$$n_h = 1 / \left(C^2 + \frac{1}{N_h} \right) / r_h$$

Allocate the sample sizes in such a way that the expected number of training enterprises will be roughly the same in each stratum.

$$n_h = 1 / \left(C^2 * te_h + \frac{1}{N_h} \right) / r_h$$

Sample sizes should be calculated for a maximum **C-value of 0.2** on the basis of a **20 x 3 (NACE x size) matrix**.

Expansion of these NACE and size classes for the purpose of analysis is possible. However, it is important to note that when one expands the "base" 20 x 3 strata (NACE x size) by splitting them into the agreed categories for analysis, those must be identified before drawing the sample. The number of sampled enterprises in the expanded categories must sum up at least to the agreed number in each "base" stratum. The recommended way to divide an "old" cell in the 20 x 3 matrix, where it already has been calculated to select n enterprises from a total of N enterprises, is to divide this cell into, say, G parts, each part containing N_g enterprises, according to the 30 x 6 matrix and select $n \times N_g / N$ in part g , that is a proportional sample selection.

The overall sample of enterprises must be designed in a way that leads to results that are representative for the national economy and for each size and sector of enterprise included in the survey. This means that, within each size/activity cell used for sample stratification, a random sample should be drawn covering enterprises irrespective of whether and how much training they provide. It will also be necessary to ensure that there are sufficient responses from enterprises providing CVT to obtain enough detail for cross-classifications by person employed characteristics and subject and provider of CVT.

If the sample procedures described here are not used, countries must justify their diverging choices of sampling procedures. Samples not fulfilling the criteria above could be deemed insufficient. Particular attention is to be given to the expected non-response rates within each cell when calculating the sample sizes for CVTS3. This may help to ensure that there are enough enterprises in each cell for the estimation process.

4.3.6 Sampling procedure

For each sample stratum,

- the number of sampling units in the frame has to be counted and recorded,
- the pre-defined number of sampling units has to be taken by simple random sampling. The number of sampled units must be recorded.

Note that if there are units in the sample that are recognised as not belonging to the population, these units must not be discarded or replaced by another unit. Of course no data is collected for these units but their records should be kept since they may be needed in the estimation and imputation procedures.

4.3.7 Editing and control

Editing and control of incoming data shall be carried out by countries. This includes validity checks for the variables and consistency checks between different variables. Call-backs may be necessary to find out the correct values for an enterprise. As much as possible, countries should use "direct" methods to reduce the missing information or editing errors, seeking additional contacts with respondents with a view to clarifying responses and/or obtaining additional information. Re-contacting enterprises may help to receive high unit and item response rates.

4.3.8 Treatment of non-response

After the data collection phase, when the non-response is a fact, **it is important that all available data about the sampling units (response and non-response) be saved. Countries shall submit to ESTAT the checked dataset before imputation and the checked dataset after imputation.** This information will make it possible to analyse the structure of the non-response and possibly compensate for the assumed effects of the non-response.

There are two types of non-response:

- **Unit non-response** arises when no survey data are collected for a unit (information is missing on all the questionnaire variables)
- **Item non-response** arises when some data are collected for a unit but values of some items are missing (information is missing on at least one, but not all, of the questionnaire variables)

Non-response causes at least two types of problems. Firstly, by reducing the sample size, unit non-response might cause less precise estimates for important indicators regarding different population groups. The second and more essential problem caused by non-response is the introduction of bias. Unit non-response can lead to over- or under-representation of some groups in the population. If these groups have different training patterns compared with other groups in the population, the estimates based on the respondents in the sample will be biased and therefore not representative for the entire population.

It is well known that the bias tends to increase with the rate of non-response. If the non-response rate in the survey is high, one has significant reason to worry about its effects on the survey estimates. If there is no evidence, which shows the opposite, it can be assumed that the estimates are biased. It is very difficult to estimate the impact of non-response on the

estimates. Non-response rates are useful for describing response patterns in the survey, but will not give sufficient information to analyse the effects of non-response on bias in the survey estimates.

Another matter is that non-response may lead to extended costs. High non-response rates will increase the administrative burden, postage fees, and so on.

(Re-) weighting and imputation

It is important to have **sufficient resources to establish re-contacts with the enterprises in order to reduce the unit and item non-response rates as much as possible**. However, in practice some amount of non-response certainly arises. It is then necessary to consider how to treat the non-response at the estimation stage of the survey. Estimation typically involves the construction of a point estimator (and weights) and an associated variance estimator. The principal methods used to correct for bias due to non-response and to make efficient use of data are imputation and re-weighting. It is recommended in CVTS3 that re-weighting is used to treat the problem of unit non-response, while imputation is used to treat problems of item non-response.

Re-weighting entails changing the weights of the respondents, compared to the weights that would have been used if no non-response had occurred. Since observations are lost by unit non-response, re-weighting will imply increased weights for most of the responding enterprises. Imputation entails replacing missing values by a fabricated value. **Note that replacement ("imputation") for unit non-response is not allowed.**

Variance estimation in the presence of imputation is a complex statistical problem, which means that more advanced formulas for estimating the variance according to statistical theory should be used. If the variance is estimated in the same way as when imputation has not been used, it will be underestimated, which means that the length of the confidence intervals are too short. Non-response brings additional variance over and above the sampling variance.

Imputation in respect of item non-response

It is to be expected that the initial response from some enterprises will yield data, which are incomplete with respect to some variables (item non-response). When this occurs, it is important that countries should first try to encourage enterprises to provide these missing data by re-contacting enterprises (especially for important quantitative variables) to see if estimates can be provided and, if necessary, to assist them in doing this. If an estimate cannot be provided, another approach is to use reliable data for the enterprise from other sources, which are compatible with the concepts and definitions adopted for the CVTS3.

If some data are still missing, after all other efforts have been made, then these data may be imputed; i.e. estimated using other information available. The purpose of imputation is to provide a sample and, hence, population estimate of a given variable which are better than that which would be obtained by simply distributing the "not known" or "not available" totals in a table according to the positive responses in that table. This is because imputation, normally, will take into account more information than is available in a single table. Imputation may reduce bias arising from the item non-response.

The basic principle assumed for imputation is that, as far as possible, countries should try to make use of all the information collected when interpreting the data. The imputation methods used may have an impact on the distribution of data. In general, the greater the degree and impact of imputation, the more care needs to be taken in using the data.

Core variables, for which no missing value shall be accepted nor imputation permitted, are detailed in the table below. If there is still item non-response in several of these variables after **re-contact** with the enterprise, it should be a clear indication that the record should be converted to a unit non-respondent and taken into account for the adjustment of the weight. Exceptions to this rule may be accepted. Such cases shall be fully justified and detailed in the quality report.

| | |
|--|---|
| A1 | Actual NACE-code of the enterprise |
| A2tot05 | Total number of persons employed 31-12-2005 |
| B1a | Internal CVT courses |
| B1b | External CVT courses |
| B2aflag, B2bflag, B2cflag, B2dflag, B2eflag | "Other" forms of CVT |
| F1tot05 | Total number of IVT participants |

For **key variables** listed in the following table every effort should be made to avoid "no missing". Imputation is however permitted.

| | |
|----------------|---|
| A2tot04 | Total number of persons employed 31-12-2004 |
| A4 | Total number of hours worked in the reference year 2005 by persons employed |
| A5 | Total labour costs (direct + indirect) of all persons employed in the reference year 2005 |
| C1tot | Total CVT course participants |
| C3tot | Paid working time (in hours) spent on all CVT courses |
| C4tot | Paid working time (in hours) spent on all CVT courses |
| C7sub | CVT costs sub-total |
| C7tot | Total costs CVT |
| PAC | Personal absence costs |
| F2tot | Total IVT costs |

Imputation for item non response shall not be made without first considering the impact of imputation when analysing data.

Imputation for item non-response shall be recommended within the following general limits (Member state experts should at all times **apply their professional judgement in the application of these rules**)

1. When a **record** contains less than **50 % of variables** presented then this record shall normally be considered as a unit non response.
2. For a single NACE / size cell imputations shall not be allowed if **more than 50%** of the **responding enterprises** have missing data for **more than 25 %** of the quantitative variables.
3. For a single NACE / size cell imputations are not allowed on a **quantitative variable** if the proportion of responding enterprises for that particular variable is **less than 50 %**.
4. For a single NACE / size cell imputations are not allowed on a **qualitative variable** if the proportion of responding enterprises for that particular variable is **less than 80 %**.

Imputations for which other sources can be used as **an alternative source** of information shall only be allowed if the quality of these data can be guaranteed and the data are sufficiently recent.

These rules above imply that imputations should not be made when the variable to be imputed is missing from too many enterprises. It is possible to imagine complex rules for determining what percentage of item response is required before imputation can be allowed. In this case the imputation can be carried out if the item response rate for the variable to be imputed concerning responding enterprises within a stratum is 50% or more except when there is reason to believe that there is a strong association between the probability of responding and the required answer. In this latter situation an item response rate of 70% should be required. If after aggregation the item response rate within a stratum is still less than 50% (or 70% as applicable) the actual responses for this item should be converted to missing values in the whole data set supplied to Eurostat.

All countries, therefore, should impute missing values according to the rules set out in the paper but should, afterwards, inform Eurostat, via the quality report of their actions and argumentation.

Types of imputation

Two types of data are collected in CVTS3, quantitative data and qualitative data, for which different imputation procedures are required. It would be ideal if missing values for both types of data could be imputed so that enterprise records sent to Eurostat would be complete with respect to all variables. However, it is not possible to base the imputation of qualitative variables on a model, which uses a combination of other information in the enterprise record. This means that there exists some doubts whether imputation of qualitative variables would give better quality in the estimates than simply distributing the “not known” or “not available” totals in a table. There are therefore doubts if imputation of qualitative variables will improve the quality of the estimates. **If countries should decide to impute qualitative variables, the item non-response rate should not exceed 20%.** Otherwise it is better that the item non-responses for the qualitative variables are shown in the tables under the category “not known”. It is also recommended that qualitative variables, which have been imputed, will not be used for further breakdown of enterprises within a NACE-group or size-class when the results are presented.

Whatever method is used, it is an essential requirement, following the imputation of missing data, that the enterprise record should be internally consistent. It is important, therefore, that the imputation procedures are used in such a way that this internal consistency is preserved and verified using the Data Checking Tool. It is also important that the original data records (before imputation) are kept (and are to be sent to Eurostat) and that a detailed description of the imputation procedure used is contained in the quality reports.

Countries should at all times use their professional judgement. If they depart from the outlined framework, they must justify their reasons and their procedures in the quality report.

4.4 Timetable and Data Transmission to Eurostat

The survey shall be carried out in close cooperation with the European Commission. Countries shall take all measures necessary to avoid delays in carrying out the survey and so affect the availability, quality and timeliness of the data.

The **preparation of the survey** should normally start during 2005 to ensure a launch date for the survey as early as possible in 2006.

Field work should normally begin in early 2006. The phase of data collection as well as of the treatment of initial non-response, data validation and cleaning in contact with enterprises should be completed towards the end of 2006.

Further **data processing** would normally then take place towards the end of 2006.

All countries shall submit to ESTAT, an interim progress report by the 31st December 2006.

Data shall be transmitted to Eurostat in electronic form by means of a secure data transmission software application (STADIUM / EDAMIS) to be made available by Eurostat. Countries shall transmit **two checked data sets** to Eurostat:

- The data set **prior to imputation** with preliminary quality checks performed
- The fully checked data set **after imputation**.

ESTAT will accept transfer of these data files from January 2007.

Upon receipt, ESTAT will perform its own quality and continuity analyses on the data sets before acceptance or rejection of the dataset. In all cases and particularly in the event of rejection of the data files, countries will be provided with a detailed error report. In all cases countries must take all necessary measures to ensure acceptance by ESTAT of their dataset by the 30th June 2007. No extension of this deadline will be permitted.

Upon acceptance and in any event before 31st July 2007 countries will present to ESTAT for their approval..

- a full national CVTS3 project report,
- a series of control tables from their approved and locked dataset, (presented in paper and electronic form)

Upon positive acceptance of the control tables ESTAT will issue a signed **Data Acceptance Certificate** to each country.

By 30th September 2007 all countries will present to ESTAT a national quality report to the format prescribed in the CVTS Commission regulation.

By this same date, 30th September 2007, all countries performing additional pilot studies shall submit their individual pilot study reports.

4.5 National Quality Reports

The national quality reports shall conform to the detail presented in the Annex 5 of the CVTS3 Commission regulation. (Annex.16).

The quality report should inform the users on factors of vital importance for a correct interpretation of the statistics. Each process during the development of statistics such as collection of data, editing, treatment of non-response and estimation shall be described in detail. This information should include the concepts and methodology used in collecting and processing the data and other characteristics of the data that may affect their quality and use or interpretation. The users should be able to evaluate if the objects, variables, statistical measures and reference periods correspond with his/her interests and if they can rely on the statistics from an overall point of view. The users can then analyse the survey results from their own particular objectives. All deviations from the common approach on CVTS3 shall be reported in detail.

5 The informatics framework for CVTS3

5.1 Logical Data Checks

Annexes 8, 9 and 10 of this manual set out lists of checking rules, which will be implemented in the ESTAT Checking tool.

3 basic levels of checking are foreseen

- **data entry checks** – simple coherency check between a variable entry and the possible allowed entries. It will detect missing values and incompleteness of the file.
- **record level checks** - arithmetic and logical checks to test the consistency between variables for a single enterprise record.
- **file level checks** – checks of the country file as a whole which will include some reasonableness checks including country dependent reasonableness checks and suggestions for cleaning of data and totals.

The country operator will be able to run the 3 checking programme levels independently. The output from the checking programme will be an error report, most probably sorted by enterprise record.

5.2 Data Checking Tool

ESTAT will prepare a checking tool which will be distributed to countries towards the middle of 2006. The objective of the checking tool will be to realise a high quality error free data set. The tool will not be a data entry tool. The format and platform for the tool are yet to be defined.

The tool shall be used by all the countries for checking their data sets before transmission to Eurostat. In addition Eurostat will use the tool to verify the quality and consistency of delivered national data sets.

The checking tool will implement the data entry, record level and file level checking rules defined in annexes 8, 9 and 10. It may contain additional checks should a need become evident in order to guarantee the quality of the CVTS3 data set. The tool will take a modular designed, allowing the 3 levels of checking to be performed independently and sequentially. The tool will output an error report, most probably sorted by enterprise record. The checking tool will not implement any automatic cleaning of data.

ANNEXES

Annex 1 : NACE categories used in CVTS3 based on NACE Rev. 1.1 (2002)

NACE 20: Categories for **sample size** calculations

NACE 30: Categories for sample stratification and analysis

| NACE 20 | NACE 30 | Section/ Sub- section | Division/ Group | Name |
|----------------|----------------|--------------------------------------|----------------------------|---|
| 01 | 01 | CA+CB | 10-14 | Subsection CA: Mining and quarrying of energy producing materials Subsection CB: Mining and quarrying, except of energy producing materials |
| 02 | 02 | DA | 15-16 | Subsection DA: Manufacture of food products, beverages and tobacco |
| 03 | 03 | DB+DC | 17-19 | Subsection DB: Manufacture of textiles and textile products Subsection DC: Manufacture of leather and leather products |
| 09 | 04 | DD+DN | 20, 36-37 | Subsection DD: Manufacture of wood and wood products Subsection DN: Manufacturing n.e.c. |
| 04 | 05 | DE | 21 | 21: Manufacture of pulp, paper and paper products |
| | 06 | DE | 22 | 22: Publishing, printing and reproduction of recorded media |
| 05 | 07 | DF+DG | 23-24 | Subsection DF: Manufacture of coke, refined petroleum products and nuclear fuel Subsection DG: Manufacture of chemicals, chemical products and man-made fibres |
| | 08 | DH+DI | 25-26 | Subsection DH: Manufacture of rubber and plastic products Subsection DI: Manufacture of other non-metallic mineral products |
| 06 | 09 | DJ | 27-28 | Subsection DJ: Manufacture of basic metals and fabricated metal products |
| 07 | 10 | DK | 29 | Subsection DK: Manufacture of machinery and equipment n.e.c. |
| | 11 | DL | 30-33 | Subsection DL: Manufacture of electrical and optical equipment |
| 08 | 12 | DM | 34-35 | Subsection DM: Manufacture of transport equipment |
| 10 | 13 | E | 40-41 | Section E: Electricity, gas and water supply |
| 11 | 14 | F | 45 | Section F: Construction |
| 12 | 15 | G | 50 | 50: Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel |
| 13 | 16 | G | 51 | 51: Wholesale trade and commission trade, except of motor vehicles and motorcycles |
| 14 | 17 | G | 52 | 52: Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods |
| 15 | 18 | H | 55 | Section H: Hotels and restaurants |
| 16 | 19 | I | 60-63 | 60: Land transport; transport via pipelines |
| | | | | 61: Water transport |
| | | | | 62: Air transport |
| | | | | 63: Supporting and auxiliary transport activities; activities of travel agencies |
| 17 | 20 | I | 64 | 64: Post and telecommunications |
| 18 | 21 | J | 65 | 65: Financial intermediation, except insurance and pension funding |
| | 22 | J | 66 | 66: Insurance and pension funding, except compulsory social security |
| 19 | 23 | J | 67 | 67: Activities auxiliary to financial intermediation |

| NACE 20 | NACE 30 | Section/ Sub- section | Division/ Group | Name |
|---------|---------|-----------------------------|--------------------|---|
| 20 | 24 | K | 70-71, 73 | 70: Real estate activities 71: Renting of machinery and equipment without operator and of personal and household goods 73: Research and development |
| | 25 | K | 72 | 72: Computer and related activities |
| | 26 | K | 74.1 | 74.1: Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings |
| | 27 | K | 74.2-74.4 | 74.2: Architectural and engineering activities and related technical consultancy 74.3: Technical testing and analysis 74.4: Advertising |
| | 28 | K | 74.5-74.8 | 74.5: Labour recruitment and provision of personnel 74.6: Investigation and security activities 74.7: Industrial cleaning 74.8: Miscellaneous business activities n.e.c. |
| | 29 | O | 92 | 92: Recreational, cultural and sporting activities |
| | 30 | O | 90-91, 93 | 90: Sewage and refuse disposal, sanitation and similar activities 91: Activities of membership organizations n.e.c. 93: Other service activities |

Annex 2 : Size classification of enterprises

1) Size classification of enterprises for sample size calculations:

10 - 49

50 - 249

250 and more persons employed

2) Size classification of enterprises for sample stratification and analysis:

10 - 19

20 - 49

50 - 249

250 - 499

500 - 999

1000 and more persons employed

Annex 3 : International Standard Classification of Education ISCED 1997

ISCED 0 - PRE-PRIMARY EDUCATION

Programs at level 0, (pre-primary) defined as the initial stage of organised instruction are designed primarily to introduce very young children to a school-type environment, i.e. to provide a bridge between the home and a school based atmosphere. Upon completion of these programs, children continue their education at level 1 (primary education).

ISCED 1 - PRIMARY EDUCATION OR FIRST STAGE OF BASIC EDUCATION

Programmes at level 1 are normally designed on a unit or project basis to give students a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, art and music. In some cases religious instruction is featured. The core at this level consists of education provided for children, the customary or legal age of entrance being not younger than five years or older than seven years. This level covers, in principle, six years of full-time schooling.

ISCED 2 - LOWER SECONDARY EDUCATION OR SECOND STAGE OF BASIC EDUCATION

The contents of education at this stage are typically designed to complete the provision of basic education which began at ISCED level 1. In many, if not most countries, the educational aim is to lay the foundation for lifelong learning and human development. The programmes at this level are usually on a more subject oriented pattern using more specialised teachers and more often several teachers conducting classes in their field of specialisation. The full implementation of basic skills occurs at this level. The end of this level often coincides with the end of compulsory schooling where it exists.

ISCED 3 - (UPPER) SECONDARY EDUCATION

This level of education typically begins at the end of full-time compulsory education for those countries that have a system of compulsory education. More specialisation may be observed at this level than at ISCED level 2 and often teachers need to be more qualified or specialised than for ISCED level 2. The entrance age to this level is typically 15 to 16 years. The educational programmes included at this level typically require the completion of some 9 years of full-time education (since the beginning of level 1) for admission or a combination of education and vocational or technical experience.

ISCED 3A: Programmes designed to provide direct access to ISCED 5A;
ISCED 3B: Programmes designed to provide direct access to ISCED 5B;
ISCED 3C: Programmes not designed to lead to ISCED 5A or 5B.

ISCED 4 - POST-SECONDARY NON TERTIARY EDUCATION

ISCED 4 captures programmes that straddle the boundary between upper secondary and post-secondary education from an international point of view, even though they might clearly be considered as upper secondary or post-secondary programmes in a national context. These programmes can, considering their content, not be regarded as tertiary programmes. They are often not significantly more advanced than programmes at ISCED 3 but they serve to broaden the knowledge of participants who have already completed a programme at level 3. Typical examples are programmes designed to prepare students for studies at level 5 who, although having completed ISCED level 3, did not follow a curriculum which would allow entry to level 5, i.e. pre-degree foundation courses or short vocational programmes. Second cycle programmes can be included as well.

ISCED 4A: See text for ISCED 3
ISCED 4B: See text for ISCED 3
ISCED 4C: See text for ISCED 3

LEVEL 5 - FIRST STAGE OF TERTIARY EDUCATION (NOT LEADING DIRECTLY TO AN ADVANCED RESEARCH QUALIFICATION)

This level consists of tertiary programmes having an educational content more advanced than those offered at levels 3 and 4. Entry to these programmes normally requires the successful completion of ISCED level 3A or 3B or a similar qualification at ISCED level 4A. They do not lead to the award of an advanced research qualification (ISCED 6). These programmes must have a cumulative duration of at least two years.

ISCED 5A: Programmes that are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements.
ISCED 5B: Programmes that are practically oriented/ occupationally specific and are mainly designed for participants to acquire the practical skills and know-how needed for employment in a particular occupation or trade or class of occupations or trades, the successful completion of which usually provides the participants with a labour-market relevant qualification

ISCED 6 - SECOND STAGE OF TERTIARY EDUCATION (LEADING TO AN ADVANCED RESEARCH QUALIFICATION)

This level is reserved for tertiary programmes which lead to the award of an advanced research qualification. The programmes are therefore devoted to advanced study and original research and not based on course-work only. They typically require the submission of a thesis or dissertation of publishable quality, which is the product of original research and represents a significant contribution to knowledge. They prepare graduates for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government, industry, etc.

Annex 4 : Fields of training²

Fields of training is a classification (CEDEFOP/Eurostat: Fields of Training. Manual. January 1999) used internationally for the first time in the VET³ data collection 1998. The classification of fields of training contains 9 broad fields (one digit level), 25 fields of education (two digit level) and about 65 fields of training (three digit level).

The classification was used in CVTS2, and will be used again in CVTS3. In order to reduce the burden for enterprises it was decided to combine some of the categories of the fields of training. A comparison with CVTS1 and CVTS2 is still possible.

The following categories of fields will be used in CVTS3:

| | Field of training | Field codes |
|----------|---|--------------------|
| A | Foreign Languages | 222 |
| | Mother tongue | 223 |
| B | Sales | 341 |
| | Marketing | 342 |
| C | Accounting | 343 |
| | Finance | 344 |
| | Management and Administration (including human resource management and quality management) | 345 |
| | Office Work | 346 |
| D | Personal skills / development | 090 |
| | Working life (including company knowledge and introductory courses) | 347 |
| E | Computer science | 481 |
| | Computer use | 482 |
| F | Engineering, Manufacturing and Construction (Production techniques including e.g. operations and maintenance of automated systems, quality control and development of new materials and products) | 5 |
| G | Environment protection | 850 |
| | Occupational health and safety | 862 |
| H | Personal services: e.g. including hotel, restaurant and catering; travel, tourism and leisure | 81 |
| | Transport services | 84 |
| | Protection of property and persons | 861 |
| | Military | 863 |
| I | Other training subjects | - |

² In the questionnaire it is only possible to have a short description of each field category. The Fields of Training Manual, which has been printed by CEDEFOP/Eurostat in English, French and German, gives a detailed description of the content of each field code. Looking up the field codes above in the manual is the best way to find out exactly what each of the field categories used in CVTS3 contains.

³ VET = Vocational Education and Training

Annex 5 : Training providers

This basic classification was used in CVTS2. In order to reduce the burden for enterprises some categories of the training providers have been combined for CVTS3. A comparison with CVTS1 and CVTS2 is still possible.

Providers of external training courses for CVTS3 are:

| | Training providers | Description |
|----------|--|--|
| A | Schools, colleges, universities and other higher education institutions | This includes public and private (lower and upper) secondary schools, tertiary non-university institutions and polytechnics, universities and other higher education institutions. |
| B | Public training institutions (financed or guided by the government; e.g. adult education centres) | This includes public adult education and training institutions (under public authority, government dependent, providing training as core business), that provide training for adult job-seekers and/or persons employed (including open learning centres, and training centres related to the employment service). |
| C | Private training companies | This includes private for profit providers that provide training as a core business (e.g. training companies and consultancy agencies). |
| D | Private companies whose main activity is not training (e.g. equipment suppliers; parent/associate companies) | Equipment suppliers include private enterprises that provide training as an additional service to their core business. Parent/associate companies exist as a training provider when the enterprise which is the reporting unit in the survey is linked financially to other enterprises, e.g. a subsidiary of a larger enterprise, and an enterprise in the group (usually, but not always, the parent enterprise) provides training for the persons employed of other enterprises in the group. |
| E | Employer's associations, chambers of commerce, sector bodies | This includes chambers of commerce, industry, trade or agriculture, sectoral or branch organisations and employers' organisations/associations. |
| F | Unions | This includes trade unions and professional or occupational employee organisations (or associations). |
| G | Other training providers | --- |

Annex 6 : Costs of CVT courses and IVT

This section has been designed to gather information on the subdivision of costs for enterprises of providing CVT courses for their persons employed and of providing initial vocational training.

Enterprises should be asked to present extract figures on training-costs from the enterprise records (accounts, data files, minutes etc.). In the case that an enterprise cannot or is unable to establish a costs breakdown using the framework mentioned below, they may enter a total costs figure. Countries should ensure that this is the **exception** rather than the general rule and should ensure the quality of the total.

Costs of external and internal CVT courses

The following gives details of which costs should be included under each heading.

| | Cost Category | Description |
|----------|---|---|
| A | Fees and payments for courses for persons employed | These are costs made to external organisations for the provision of CVT courses and services. VAT paid by the employer should be excluded from all expenses. It refers to the total amount paid in fees for external courses or for external trainers or instructors (including those providing internal CVT). It should also include payments made to external consultants, assessors or examiners for course-related activities. Any payments made by employers for courses that have been undertaken in persons employed' own time should be included. Fees for training courses undertaken by apprentices or trainees should be excluded. |
| B | Travel and subsistence payments | This refers to actual payments made to cover the travel and subsistence costs of persons employed participating in CVT courses. VAT paid by the employer should be excluded from the expenses. It should also include any additional payments made for time spent travelling to courses. |
| C | Labour costs of internal trainers for CVT courses | <p>These costs are the labour costs of the staff of an enterprises own training centre and other staff exclusively or partly involved in providing, designing and managing CVT courses within the enterprise. It should include:</p> <ul style="list-style-type: none"> - internal trainers and staff of training centres - directors and other top managers concerned with training policy - instructors and training managers or officers - clerical/administrative and other personnel supporting these activities <p>Anyone dealing solely with apprenticeship training and anyone who is not a member of the normal workforce of the enterprise should be excluded. For staff engaged full-time in course related activities, the figures quoted should be the total annual labour costs of all those identified. For staff engaged only partly (for some part of their working hours) in CVT course-related activities, it should be a proportion of their labour costs, reflecting the proportion of time they spent in CVT course-related activities.</p> |
| D | Costs for training centre, training premises or specific training rooms of the enterprise, in which CVT courses take place and Costs for teaching materials of CVT courses | <p>These costs include the costs of running the rooms and annual depreciation for rooms and equipment. VAT paid by the employer should be excluded from all expenses. This should include the cost of running a training centre (excluding staff labour costs) or any other premises used for CVT courses. If the costs are not available from the enterprise records, then the costs may be estimated by using data on other rooms or premises of comparable size and with comparable equipment.</p> <p>This refers to costs of materials bought specifically for CVT courses. This can be equipment like a beamer, an overhead projector, flipcharts, CD-ROMs, paper, pencils, etc. VAT paid by the employer should be excluded from all expenses.</p> |

Costs of initial vocational training

The following gives details of which costs should be included under each heading.

| | Cost Category | Description |
|----------|--|---|
| A | Labour costs of individuals registered on an IVT activity | Labour costs of individuals registered on an IVT activity consists of direct remuneration and indirect labour costs for them. If total labour costs of individuals registered on an IVT activity are not available from the enterprise records, then the labour costs may be estimated by using data on the total number of individuals registered on an IVT activity and average remuneration plus indirect labour costs. The labour costs for all persons that did IVT during the year 2005 have to be provided. This cost item will not be added to the IVT costs total. |
| B | Other costs | These costs include all other costs which incurred in the context of IVT activities. It addresses training fees, travel costs, costs for teaching materials, costs of training centres or specific training rooms. VAT paid by the employer should be excluded from all expenses. |
| C | Labour costs of IVT trainers or mentors | NB This item is optional at the national level Labour costs of IVT trainers or mentors consist of direct and indirect labour costs for them. If those trainers or mentors are only partly involved in IVT training, only the time spent on IVT training should be taken into account. If total labour costs of IVT trainers or mentors are not available from the enterprise records, then the labour costs may be estimated by using data on the total number of IVT trainers and mentors and average remuneration plus indirect labour costs. |

Contributions for CVT and IVT

The issues of CVT and IVT are handled separately in questions C8a and F3a.

Enterprises should assure that no double accounting of these amounts is presented in the cases where enterprise makes a single combined contribution for CVT and IVT. Where these combined contributions are the case, enterprises are requested to **estimate** a split between CVT and IVT and to present the result in questions C8a and F3a. Where this split is not possible then the total amount should be entered under question C8a and zero entered in F3a.

The section is intended to give the costs of contributions to collective funding arrangements, through government and intermediary organisations, i.e. levies and subscriptions for CVT courses and IVT activities, to enable an estimate of the total costs to employers for CVT courses and IVT activities. Examples of funds could be regional, sector or national funds. In the national questionnaires specific examples of the schemes or types of action leading to contributions should be added.

It is important that countries ensure, that contributions for CVT activities and / or IVT activities can be collected even if there are no participants to CVT courses and / or IVT participants in an enterprise.

Receipts from collective funds and from sources of revenue for CVT and IVT

The issues of CVT and IVT are handled separately in C8b and F3b.

The issue of combined receipts for CVT and IVT should be treated in a similar manner as that proposed above for CVT and IVT contributions. If no split is possible then the total receipt should be entered in C8b and zero entered in F3b.

The section is intended to give the receipts from different collective funding arrangements, subsidies and financial assistance through Government and other sources and receipts from sources of revenue for CVT courses and IVT activities to enable an estimate of the total costs to employers for CVT courses and IVT activities.

Examples for receipts are:

- Receipts from regional/sector funds
- Receipts from national Funds
- Subsidies from EU sources
- Government subsidies
- Government rebates on expenditures
- Tax concessions on the expenditures (tax relief)
- External financial assistance from non-government sources, such as private foundations
- Royalty payments from external bodies and persons for the use of training resources developed by the enterprise
- Payments the enterprise received for CVT courses provided to external bodies and persons

Countries shall ensure, that receipts for CVT activities and / or IVT activities can be collected even in the case where, within the enterprise, there were no CVT course participants and / or IVT participants.

Annex 7 : Codebook

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|------------------------|----|------|----|---|--------|--|
| COUNTRY | 2 | Char | ID | Country code | | <u>No missing - Unique by Country</u> |
| See EU Manual annex 11 | | | | | | |
| ENTERPR | 6 | Num | ID | Enterprise ID | | <u>No missing - Unique by case</u> |
| | | | | | 0 | lower bound value |
| | | | | | 999996 | upper bound value |
| WEIGHT | 10 | Num | ID | Two decimal positions - use "." as decimal separator | | <u>No Missing</u> |
| | | | | | >=1 | |
| | | | | | 999999 | **No Answer |
| NACE_SP | 4 | Num | ID | Sampling plan NACE - category economic activity | | <u>No missing</u> |
| | | | | | 2001 | NACE20-01 |
| | | | | | 3001 | NACE30-01 |
| SIZE_SP | 1 | Num | ID | Sampling plan size group | | <u>No missing</u> |
| | | | | | 0 | 5 - 9 employees (only some countries) |
| | | | | | 1 | 10 - 49 employees (Size3) |
| | | | | | 2 | 50 - 249 employees (size3) |
| | | | | | 3 | 250 and over employees (size3) |
| | | | | | 4 | 10 - 19 employees (size6) |
| | | | | | 5 | 20 - 49 employees (size6) |
| | | | | | 6 | 50 - 249 employees (size6) |
| | | | | | 7 | 250 - 499 employees (size6) |
| | | | | | 8 | 500 - 999 employees (size6) |
| | | | | | 9 | 1000 and over employees (size6) |
| NSTRA_SP | 5 | Num | ID | Sampling plan - Number of enterprises in the stratum defined by NACE_SP and SIZE_SP, i.e. the population | | <u>No missing</u> |
| | | | | | 1 | lower bound value |
| | | | | | 99996 | upper bound |
| N_SP | 5 | Num | ID | Sampling plan - Number of sampled enterprises from the sample-frame in the stratum defined by NACE_SP and SIZE_SP | | <u>No missing</u> |
| | | | | | 1 | lower bound value |
| | | | | | 99996 | upper bound |
| SUB_SP | 1 | Num | ID | Sub-sample indicator, shows if enterprise belongs to sub-sample | | <u>No missing</u> |
| | | | | | 0 | not in sub-sample |
| | | | | | 1 | in sub-sample |
| N_RESPST | 5 | Num | ID | Number of responding enterprises in the stratum defined by NACE_SP and SIZE_SP, i.e. the population | | <u>No missing</u> |
| | | | | | 1 | lower bound value |
| | | | | | 99996 | upper bound value |
| N_EMPREG | 6 | Num | ID | Number of persons employed according to the register | | |
| | | | | | 05 | Lower Bound (only some countries) |
| | | | | | 10 | lower bound |
| | | | | | 999996 | upper bound |
| | | | | | 999999 | no answer |

| VARIABLE | | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|----|------|------|----|---|---------------|--|
| RESPONSE | 1 | Num | ID | | Response indicator | | <u>No missing</u> |
| | | | | | | 1 | respondent |
| | | | | | | 2 | non-response (use in country) |
| | | | | | | 3 | over coverage (inclusion of non-population units)(|
| PROC | 2 | Num | ID | | Record data collection method | | <u>No missing</u> |
| | | | | | | 10 | Postal Non-electronic version |
| | | | | | | 11 | Postal electronic version |
| | | | | | | 20 | Face-to-Face non electronic version |
| | | | | | | 21 | Face-to-Face electronic version |
| | | | | | | 30 | Telephone non electronic version |
| | | | | | | 31 | Telephone electronic version |
| | | | | | | 40 | Use of internet |
| | | | | | | 50 | Mixed mode data collection |
| | | | | | | | See annex 11 |
| IDREGION | 3 | Char | ID | | Region identification NUTS - level 1 | | <u>No missing</u> NUTS - level 1 |
| EXTRA1 | 10 | Num | ID | | Extra variable 1 | | Use own country based system |
| EXTRA2 | 10 | Num | ID | | Extra variable 2 | | Use own country based system |
| EXTRA3 | 10 | Num | ID | | Extra variable 3 | | Use own country based system |
| A1 | 4 | Num | Core | QL | Actual NACE CODE | See EU Manual | <u>Core variable - No missing - No Imputation</u> 4 Digit NACE rev 1.1 code |
| A2tot04 | 6 | Num | Key | QT | Total number of persons employed 31-12-2004 | | <u>Key variable - No missing</u> 0 Lower Bound 999996 Upper Bound 999998 Not Applicable - enterprise did not exist in 2004 999999 **No Answer |
| A2tot05 | 6 | Num | Core | QT | Total number of persons employed 31-12-2005 | | <u>Core Variable - No missing - No Imputation</u> 05 5-9 persons employed (only some countries) 10 Lower Bound 999996 Upper Bound |
| A2m05 | 6 | Num | | QT | Total number of males employed 31-12-2005 | | 0 Lower Bound 999996 Upper Bound 999999 No Answer |
| A2f05 | 6 | Num | | QT | Total number of females employed 31-12-2005 | | 0 Lower Bound 999996 Upper Bound 999999 No Answer |

| VARIABLE | | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|----|-----|------|--|--|---|---|
| A3a | 6 | Num | QT | Persons employed - Under 25 years of age | 0 | Lower Bound | |
| | | | | | 999996 | Upper Bound | |
| | | | | | 999999 | No Answer | |
| A3b | 6 | Num | QT | Persons employed - 25 to 54 year of age | 0 | Lower Bound | |
| | | | | | 999996 | Upper Bound | |
| | | | | | 999999 | No Answer | |
| A3c | 6 | Num | QT | Persons employed - 55 years and older | 0 | Lower Bound | |
| | | | | | 999996 | Upper Bound | |
| | | | | | 999999 | No Answer | |
| A4 | 12 | Num | Key | QT | Total number of hours worked in the reference year 2005 by persons employed | <u>Key variable - No missing - in Hours</u> | |
| | | | | | | 1 | Lower Bound |
| | | | | | | 999999999996 | Upper Bound |
| A4m | 12 | Num | | QT | Total number of hours worked in the reference year 2005 by male persons employed | **No Answer | |
| | | | | | | | <u>in Hours</u> |
| | | | | | | 0 | Lower Bound |
| A4f | 12 | Num | | QT | Total number of hours worked in the reference year 2005 by female persons employed | 999999999996 | Upper Bound |
| | | | | | | 999999999999 | No Answer |
| | | | | | | | <u>in Hours</u> |
| A5 | 12 | Num | Key | QT | Total labour costs (direct + indirect) of all persons employed in the ref year 2005 | 0 | Lower Bound |
| | | | | | | 999999999996 | Upper Bound |
| | | | | | | 999999999999 | No Answer |
| A6 | 1 | Num | | QL | SIGNIFICANTLY new technologically improved products or services or methods of producing or delivering products and services during the reference year. | <u>Key variable - No missing - in Euro</u> | |
| | | | | | | 1 | Lower Bound |
| | | | | | | 999999999996 | Upper Bound |
| B1a | 1 | Num | Core | QL | Internal CVT courses | **No Answer | |
| | | | | | | 0 | No |
| | | | | | | 1 | Yes |
| B1b | 1 | Num | Core | QL | External CVT courses | 9 | No Answer |
| | | | | | | | <u>Core Variable - No missing - No Imputation</u> |
| | | | | | | 0 | No |
| B2aflag | 1 | Num | Core | QL | Flag - on-the-job training | 1 | Yes |
| | | | | | | | <u>Core Variable - No missing - No Imputation</u> |
| | | | | | | 0 | No |
| | | | | | | 1 | Yes |
| | | | | | | | |
| VARIABLE | | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |

| | | | | | |
|----------------|---|-----|---------|--|---|
| B2a | 6 | Num | QT | Participants in other form of CVT - On-the job training | 0 Lower Bound 999996 Upper Bound 999998 Not Applicable 999999 No Answer |
| B2bflag | 1 | Num | Core QL | Flag - job rotation | <u>Core Variable - No missing - No Imputation</u> 0 No 1 Yes |
| B2b | 6 | Num | QT | Participants in other form of CVT - Job-rotation, exchanges, secondments or study visits | 0 Lower Bound 999996 Upper Bound 999998 Not Applicable 999999 No Answer |
| B2cflag | 1 | Num | Core QL | Flag - Learning and quality circles | <u>Core Variable - No missing - No Imputation</u> 0 No 1 Yes |
| B2c | 6 | Num | QT | Participants in other form of CVT - Learning or quality circles | 0 Lower Bound 999996 Upper Bound 999998 Not Applicable 999999 No Answer |
| B2dflag | 1 | Num | Core QL | Flag - self directed learning | <u>Core Variable - No missing - No Imputation</u> 0 No 1 Yes |
| B2d | 6 | Num | QT | Participants in other form of CVT - Self directed learning | 0 Lower Bound 999996 Upper Bound 999998 Not Applicable 999999 No Answer |
| B2eflag | 1 | Num | Core QL | Flag - attendance at conferences etc | <u>Core Variable - No missing - No Imputation</u> 0 No 1 Yes |
| B2e | 6 | Num | QT | Participants in other form of CVT - Attendance at conferences, etc. | 0 Lower Bound 999996 Upper Bound 999998 Not Applicable 999999 No Answer |
| B3a | 1 | Num | QL | CVT courses for persons employed in the previous year 2004 | 0 No 1 Yes 8 Not Applicable - enterprise did not exist in 2004 9 No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|--------|---|---------------------------------|---|
| B3b | 1 | Num | QL | Expect to provide CVT courses for persons employed during the next year 2006 | 0 1 9 | No Yes No Answer |
| B4a | 1 | Num | QL | Other forms of CVT for persons employed in the previous year 2004 | 0 1 8 9 | No Yes Not Applicable - Enterprise did not exist in 2004 No Answer |
| B4b | 1 | Num | QL | Expect to provide other forms of CVT for persons employed during the next year 2006 | 0 1 9 | No Yes No Answer |
| C1tot | 6 | Num | Key QT | Total CVT course participants | 1 999996 999998 999999 | <u>Key Variable - No missing</u> Lower Bound Upper Bound Not Applicable **No Answer |
| C1m | 6 | Num | QT | CVT course participants - Male | 0 999996 999998 999999 | Lower Bound Upper Bound Not Applicable No Answer |
| C1f | 6 | Num | QT | CVT course participants - Female | 0 999996 999998 999999 | Lower Bound Upper Bound Not Applicable No Answer |
| C2a | 6 | Num | QT | CVT participants - Under 25 years of age | 0 999996 999998 999999 | Lower Bound Upper Bound Not Applicable No Answer |
| C2b | 6 | Num | QT | CVT participants - 25 to 54 year of age | 0 999996 999998 999999 | Lower Bound Upper Bound Not Applicable No Answer |
| C2c | 6 | Num | QT | CVT participants - 55 years and older | 0 999996 999998 999999 | Lower Bound Upper Bound Not Applicable No Answer |

| VARIABLE | VARIABLE DESCRIPTION | | | | | VALUE | DESCRIPTION |
|--------------|----------------------|-----|-----|----|--|------------|--|
| C3tot | 10 | Num | Key | QT | Paid working time (in hours) spent on all CVT courses | | <u>Key Variable - No Missing - In Hours</u> |
| | | | | | | 1 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | **No Answer |
| C3i | 10 | Num | | QT | Paid working time (in hours) for internal CVT courses | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |
| C3e | 10 | Num | | QT | Paid working time (in hours) for external CVT courses | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |
| C4tot | 10 | Num | Key | QT | Paid working time (in hours) spent on all CVT courses | | <u>Key variable - No Missing - In Hours</u> |
| | | | | | | 1 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | **No Answer |
| C4m | 10 | Num | | QT | Paid working time (in hours) in CVT courses - Male | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |
| C4f | 10 | Num | | QT | Paid working time (in hours) in CVT courses - Female | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |
| C5a | 10 | Num | | QT | Paid working time in hours - Languages, Foreign (222) and Mother Tongue (223) | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |
| C5b | 10 | Num | | QT | Paid working time in hours - Sales (341) and Marketing (342) | | <u>In Hours</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|----|-----|----|---|------------|-----------------|
| C5c | 10 | Num | QT | Paid working time in hours - Accounting (344) and Finance (343), Management and Administration (345) and Office work(346) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5d | 10 | Num | QT | Paid working time in hours - Personal skills/development (090) , Working life (347) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5e | 10 | Num | QT | Paid working time in hours - Computer science (481) and Computer use (482) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5f | 10 | Num | QT | Paid working time in hours - Engineering, Manufacturing and Construction (5) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5g | 10 | Num | QT | Paid working time in hours - Environment protection (850) and Occupational health and safety (862) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5h | 10 | Num | QT | Paid working time in hours - Personal services (81), Transport services (84), Protection of property and persons (861) and Military (863) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C5i | 10 | Num | QT | Paid working time in hours - Other training subjects | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6a | 10 | Num | QT | Paid working time (in hours) - Schools, colleges, universities and other higher education institutions | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6b | 10 | Num | QT | Paid working time (in hours) - Public training institutions (financed or guided by the government; e.g. adult education centre) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|----|-----|----|--|------------|-----------------|
| C6c | 10 | Num | QT | Paid working time in (hours) - Private training companies | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6d | 10 | Num | QT | Paid working time (in hours) - Private companies whose main activity is not training, (equipment suppliers , Parent / Associate companies) | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6e | 10 | Num | QT | Paid working time (in hours) - Employer's associations, chambers of commerce, sector bodies | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6f | 10 | Num | QT | Paid working time (in hours) - Trade unions | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C6g | 10 | Num | QT | Paid working time (in hours) - Other training providers | | <u>In Hours</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C7aflag | 1 | Num | QL | Flag - fees | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C7a | 10 | Num | QT | CVT course costs - Fees and payments for courses for employees | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C7bflag | 1 | Num | QL | Flag - travel costs | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C7b | 10 | Num | QT | CVT course costs - Travel and subsistence payments | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------------|----|-----|--------|--|------------|---|
| C7cflag | 1 | Num | QL | Flag - Labour costs trainers | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C7c | 10 | Num | QT | CVT course costs - Labour costs of internal trainers | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C7dflag | 1 | Num | QL | Flag - Training centre and teaching materials etc | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C7d | 10 | Num | QT | CVT course costs - Training centre, or rooms and teaching materials for CVT courses | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| C7sflag | 1 | Num | QL | "Sub-total only" flag | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C7sub | 10 | Num | Key QT | CVT costs sub-total | | <u>Key Variable - No Missing - In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | **No Answer |
| PAC | 10 | Num | Key QT | Personal absence cost - to be calculated (PAC=C3tot*A5/A4) | | <u>Key Variable - No Missing - In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | **No Answer |
| C8aflag | 1 | Num | QL | Flag - CVT contributions | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C8a | 10 | Num | QT | Contributions CVT | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------------|----|-----|--------|---|-------------|---|
| C8bflag | 1 | Num | QL | Flag - CVT receipts | | |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| C8b | 10 | Num | QT | Receipts CVT | 9 | No Answer |
| | | | | | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 9999999996 | Upper Bound |
| C7tot | 10 | Num | Key QT | Total cost CVT - to be calculated (C7sub + C8a - C8b) | 9999999998 | Not Applicable |
| | | | | | 9999999999 | No Answer |
| | | | | | | <u>Key Variable - No Missing - In Euro</u> |
| | | | | | 9999999996 | Upper Bound |
| C9a1 | 1 | Num | QL | Migrants and ethnic minorities - employed | -9999999996 | Lower Bound |
| | | | | | 9999999998 | Not Applicable |
| | | | | | 9999999999 | **No Answer |
| | | | | | | |
| C9a2 | 1 | Num | QL | Migrants and ethnic minorities - specific courses | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C9b1 | 1 | Num | QL | Persons with a disability - employed | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C9b2 | 1 | Num | QL | Persons with a disability - specific courses | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C9c1 | 1 | Num | QL | Persons without formal qualifications - employed | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C9c2 | 1 | Num | QL | Persons without formal qualifications - specific courses | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|----|---|-------|---|
| C9d1 | 1 | Num | QL | Persons at risk of loosing job / redundancy - employed | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C9d2 | 1 | Num | QL | Persons at risk of loosing job / redundancy - specific courses | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C10a1 | 1 | Num | QL | Part - time contract persons - employed | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C10a2 | 1 | Num | QL | CVT courses geared to part-time contract holders | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C10b1 | 1 | Num | QL | Fixed term contract persons - employed | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| C10b2 | 1 | Num | QL | CVT courses geared to fixed term contract holders | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D1 | 1 | Num | QL | Own or shared training centre | 0 | No |
| | | | | | 1 | Yes - Own training centre |
| | | | | | 2 | Yes - Shared training centre |
| | | | | | 3 | Yes - Both own and shared training centre |
| D2 | 1 | Num | QL | Person or unit within your enterprise with responsibility for the organisation of CVT | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| | | | | | 0 | No |
| | | | | | 1 | Yes |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|----|---|-------|----------------|
| D3 | 1 | Num | QL | Enterprise makes use of an external advisory service | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D4 | 1 | Num | QL | Enterprise implements regular formal procedures with the objective of evaluating the future skills needs of the enterprise | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D5 | 1 | Num | QL | Conduct structured interviews with its employees with the objective of establishing the specific training needs of persons employed | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D6 | 1 | Num | QL | Planning of CVT in the enterprise lead to a written training plan or programme | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D7 | 1 | Num | QL | Annual training budget, which includes provision for CVT | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D8 | 1 | Num | QL | Measure the satisfaction of the persons trained after the training | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D9 | 1 | Num | QL | After the training assess the trainees to establish whether the targeted skills were in fact successfully acquired | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|----|---|-------|----------------|
| D10 | 1 | Num | QL | Enterprise assesses the participants' occupational behaviour and change in performance following the training | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D11 | 1 | Num | QL | Measures the impact of training on business performance through the use of indicators | 0 | Never |
| | | | | | 1 | Occasionally |
| | | | | | 2 | Often |
| | | | | | 3 | Always |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D12 | 1 | Num | QL | National, sectorial or other agreements between the social partners, which influenced the CVT plans, policies and practices | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 2 | Do Not Know |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D13 | 1 | Num | QL | Existence of a formal structure | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D13a | 1 | Num | QL | Role of formal structure - Objective and priority setting for CVT activities | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D13b | 1 | Num | QL | Role of formal structure - Establishing the criteria for the selection of the target population who should participate to CVT | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D13c | 1 | Num | QL | Role of formal structure - The subject matter of the CVT activity | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| D13d | 1 | Num | QL | Role of formal structure - The budgeting process related to CVT | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|----|---|-----------------------|--|
| D13e | 1 | Num | QL | Role of formal structure - The procedure for the selection external CVT providers | 0 1 8 9 | No Yes Not Applicable No Answer |
| D13f | 1 | Num | QL | Role of formal structure - Evaluation of training outcomes | 0 1 8 9 | No Yes Not Applicable No Answer |
| D14a | 1 | Num | QL | Publicly funded advisory service aimed at identifying training needs and/or developing training plans | 0 1 7 8 9 | No Yes Item skipped in National questionnaire Not Applicable No Answer |
| D14b | 1 | Num | QL | Financial subsidies towards the costs of training persons employed | 0 1 7 8 9 | No Yes Item skipped in National questionnaire Not Applicable No Answer |
| D14c | 1 | Num | QL | Tax relief on expenditure on training persons employed | 0 1 7 8 9 | No Yes Item skipped in National questionnaire Not Applicable No Answer |
| D14d | 1 | Num | QL | Procedures to ensure the standards of trainers (e.g.. by national registers, assessment etc.) | 0 1 7 8 9 | No Yes Item skipped in National questionnaire Not Applicable No Answer |
| D14e | 1 | Num | QL | Provision of recognised standards and frameworks for qualifications and certification | 0 1 7 8 9 | No Yes Item skipped in National questionnaire Not Applicable No Answer |
| D15a | 1 | Num | QL | The high costs of CVT courses | 0 1 8 9 | <u>max 3 - no ranking</u> Not Ticked Ticked Not Applicable No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|----|--|-------|--|
| D15b | 1 | Num | QL | The lack of suitable CVT courses in the market | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15c | 1 | Num | QL | Difficulties in assessing the enterprise's CVT needs | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15d | 1 | Num | QL | A major training effort was realised in a previous year | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15e | 1 | Num | QL | The high workload and the limited available time of persons employed | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15f | 1 | Num | QL | The current level of training is appropriate to the enterprises needs | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15g | 1 | Num | QL | A higher focus on IVT than CVT | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| D15h | 1 | Num | QL | Other reasons | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1a | 1 | Num | QL | The existing skills and competences corresponded to the current needs of the enterprise | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1b | 1 | Num | QL | The enterprise's preferred strategy was to recruit individuals with the required skills and competencies | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|---|-----|---------|---|-------|--|
| E1c | 1 | Num | QL | The enterprise had difficulties in assessing its needs concerning CVT. | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1d | 1 | Num | QL | The lack of suitable CVT courses in the market | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1e | 1 | Num | QL | The costs of CVT courses were too high for the enterprise. | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1f | 1 | Num | QL | The enterprise preferred to focus on IVT rather than CVT | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1g | 1 | Num | QL | An investment in CVT was made in a previous year and did not require to be repeated in 2005 | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1h | 1 | Num | QL | The persons employed had no available time to participation in CVT | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| E1i | 1 | Num | QL | Other reasons | | <u>max 3 - no ranking</u> 0 Not Ticked 1 Ticked 8 Not Applicable 9 No Answer |
| F1tot05 | 6 | Num | Core QT | Total number of IVT participants in the enterprise during 2005 | | <u>Core Variable - No Missing - No Imputation</u> 0 Lower Bound 999996 Upper Bound |
| F1m05 | 6 | Num | QT | Total number of male IVT participants in the enterprise during 2005 | | 0 Lower Bound 999996 Upper Bound 999999 No Answer |

| VARIABLE | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------|----|-----|----|---|-----------|--|
| F1f05 | 6 | Num | QT | Total number of female IVT participants in the enterprise during 2005 | 0 | Lower Bound |
| | | | | | 999996 | Upper Bound |
| | | | | | 999999 | No Answer |
| | | | | | | |
| F2aflag | 1 | Num | QL | Flag - IVT individual labour costs | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| F2a | 10 | Num | QT | IVT Costs - Labour costs of individuals registered on an IVT activity | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 999999996 | Upper Bound |
| | | | | | 999999998 | Not Applicable |
| F2bflag | 1 | Num | QL | Flag - IVT other costs | 999999999 | No Answer |
| | | | | | 0 | No |
| | | | | | 1 | Yes |
| | | | | | 8 | Not Applicable |
| F2b | 10 | Num | QT | IVT Costs - Other costs - training fees, travel costs, teaching materials, costs of training centres etc. | 9 | No Answer |
| | | | | | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 999999996 | Upper Bound |
| F2cflag | 1 | Num | QL | Flag - IVT trainer or mentor labour costs | 999999998 | Not Applicable |
| | | | | | 999999999 | No Answer |
| | | | | | | <u>Optional Variable</u> |
| | | | | | 0 | No |
| F2c | 10 | Num | QT | IVT Costs - Labour costs of IVT trainers or mentors | 1 | Yes |
| | | | | | 7 | Item skipped in National questionnaire |
| | | | | | 8 | Not Applicable |
| | | | | | 9 | No Answer |
| F3aflag | 1 | Num | QL | Flag IVT contributions | | <u>Optional Variable - In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 999999996 | Upper Bound |
| | | | | | 999999997 | Item skipped in National questionnaire |
| F3a | 10 | Num | QT | Contributions IVT | 999999998 | Not Applicable |
| | | | | | 999999999 | No Answer |
| | | | | | | <u>In Euro</u> |
| | | | | | 0 | Lower Bound |
| | | | | | 999999996 | Upper Bound |
| | | | | | 999999998 | Not Applicable |
| | | | | | 999999999 | No Answer |

| VARIABLE | | | | | VARIABLE DESCRIPTION | VALUE | DESCRIPTION |
|----------------|----|-----|-----|----|--|-------------|---|
| F3bflag | 1 | Num | QL | | Flag IVT receipts | 0 | No |
| | | | | | | 1 | Yes |
| | | | | | | 8 | Not Applicable |
| | | | | | | 9 | No Answer |
| F3b | 10 | Num | QT | | Receipts IVT | | <u>In Euro</u> |
| | | | | | | 0 | Lower Bound |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | 9999999998 | Not Applicable |
| F2tot | 10 | Num | Key | QT | Total IVT Costs (F2b + F3a - F3b) | 9999999999 | No Answer |
| | | | | | | | <u>Key Variable - No Missing - In Euro</u> |
| | | | | | | 9999999996 | Upper Bound |
| | | | | | | -9999999996 | Lower Bound |
| | | | | | | 9999999998 | Not Applicable |
| | | | | | | 9999999999 | **No Answer |

***No Answer = valid answer for NON-Imputed data set ONLY*

Annex 8 : Checking rules - Data entry checks

| Data Entry Check No | Variable Name | | | | Possible Values |
|---------------------|---------------|---|----|------|---|
| DE 1 | COUNTRY | | 2 | Char | See EU Manual for valid list of codes (annex 11) |
| DE 2 | ENTERPR | | 6 | Num | In the range 0 to 999996 |
| DE 3 | WEIGHT | | 10 | Num | In the range 1 to 999999 |
| DE 4 | NACE_SP | | 4 | Num | In the range 2001 to 2020 or In the range 3001 to 3030 |
| DE 5 | SIZE_SP | | 1 | Num | In the range 0 to 9 |
| DE 6 | NSTRA_SP | | 5 | Num | In the range 1 to 99996 |
| DE 7 | N_SP | | 5 | Num | In the range 1 to 99996 |
| DE 8 | SUB_SP | | 1 | Num | 0 or 1 |
| DE 9 | N_RESPST | | 5 | Num | In the range 1 to 99996 |
| DE 10 | N_EMPREG | | 6 | Num | In the range 10 to 999996 or 999999 or exceptionally in the range 5 to 999996 |
| DE 11 | RESPONSE | | 1 | Num | 1, 2 or 3 |
| DE 12 | PROC | | 2 | Num | 10, 11, 20, 21, 30, 31, 40, 50 |
| DE 13 | IDLANGUA | | 2 | Char | See EU Manual for valid list of codes (annex 11) |
| DE 14 | IDREGION | | 3 | Char | No check |
| DE 15 | EXTRA1 | | 10 | Num | No check |
| DE 16 | EXTRA2 | | 10 | Num | No check |
| DE 17 | EXTRA3 | | 10 | Num | No check |
| DE 18 | A1 | C | 4 | Num | See EU Manual (annex 12) |
| DE 19 | A2tot04 | K | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 20 | A2tot05 | C | 6 | Num | In the range 10 to 999996 or exceptionally in the range 5 to 999996 |
| DE 21 | A2m05 | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE 22 | A2f05 | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE 23 | A3a | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE 24 | A3b | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE 25 | A3c | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE 26 | A4 | K | 12 | Num | In the range 1 to 99999999996 or 99999999999 |
| DE 27 | A4m | | 12 | Num | In the range 0 to 99999999996 or 99999999999 |
| DE 28 | A4f | | 12 | Num | In the range 0 to 99999999996 or 99999999999 |
| DE 29 | A5 | K | 12 | Num | In the range 1 to 99999999996 or 99999999999 |
| DE 30 | A6 | | 1 | Num | 0, 1 or 9 |
| DE 31 | B1a | C | 1 | Num | 0 or 1 |
| DE 32 | B1b | C | 1 | Num | 0 or 1 |
| DE 33 | B2aflag | C | 1 | Num | 0 or 1 |
| DE 34 | B2a | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 35 | B2bflag | C | 1 | Num | 0 or 1 |
| DE 36 | B2b | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 37 | B2cflag | C | 1 | Num | 0 or 1 |
| DE 38 | B2c | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 39 | B2dflag | C | 1 | Num | 0 or 1 |
| DE 40 | B2d | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 41 | B2eflag | C | 1 | Num | 0 or 1 |
| DE 42 | B2e | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 43 | B3a | | 1 | Num | 0, 1, 8 or 9 |
| DE 44 | B3b | | 1 | Num | 0, 1, or 9 |
| DE 45 | B4a | | 1 | Num | 0, 1, 8 or 9 |
| DE 46 | B4b | | 1 | Num | 0, 1, or 9 |
| DE 47 | C1tot | K | 6 | Num | In the range 1 to 999996 or 999998 or 999999 |
| DE 48 | C1m | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 49 | C1f | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 50 | C2a | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 51 | C2b | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 52 | C2c | | 6 | Num | In the range 0 to 999996 or 999998 or 999999 |
| DE 53 | C3tot | K | 10 | Num | In the range 1 to 9999999996 or 9999999998 or 9999999999 |
| DE 54 | C3i | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 55 | C3e | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 56 | C4tot | | 10 | Num | In the range 1 to 9999999996 or 9999999998 or 9999999999 |
| DE 57 | C4m | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 58 | C4f | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 59 | C5a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 60 | C5b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 61 | C5c | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 62 | C5d | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 63 | C5e | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 64 | C5f | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 65 | C5g | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE 66 | C5h | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |

| Data Entry Check No | | Variable Name | | | | Possible Values |
|---------------------|-----|---------------|---|----|-----|--|
| DE | 67 | C5i | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 68 | C6a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 69 | C6b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 70 | C6c | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 71 | C6d | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 72 | C6e | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 73 | C6f | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 74 | C6g | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 75 | C7aflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 76 | C7a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 77 | C7bflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 78 | C7b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 79 | C7cflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 80 | C7c | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 81 | C7dflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 82 | C7d | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 83 | C7sflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 84 | C7sub | K | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 85 | PAC | K | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 86 | C8aflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 87 | C8a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 88 | C8bflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 89 | C8b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 90 | C7tot | K | 10 | Num | In the range -9999999996 to 9999999996 or 9999999998 or 9999999999 |
| DE | 91 | C9a1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 92 | C9a2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 93 | C9b1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 94 | C9b2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 95 | C9c1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 96 | C9c2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 97 | C9d1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 98 | C9d2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 99 | C10a1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 100 | C10a2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 101 | C10b1 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 102 | C10b2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 103 | D1 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 104 | D2 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 105 | D3 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 106 | D4 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 107 | D5 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 108 | D6 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 109 | D7 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 110 | D8 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 111 | D9 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 112 | D10 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 113 | D11 | | 1 | Num | 0, 1, 2, 3, 8 or 9 |
| DE | 114 | D12 | | 1 | Num | 0, 1, 2, 8 or 9 |
| DE | 115 | D13 | | 1 | Num | 0, 1, 8 or 9 |
| DE | 116 | D13a | | 1 | Num | 0, 1, 8 or 9 |
| DE | 117 | D13b | | 1 | Num | 0, 1, 8 or 9 |
| DE | 118 | D13c | | 1 | Num | 0, 1, 8 or 9 |
| DE | 119 | D13d | | 1 | Num | 0, 1, 8 or 9 |
| DE | 120 | D13e | | 1 | Num | 0, 1, 8 or 9 |
| DE | 121 | D13f | | 1 | Num | 0, 1, 8 or 9 |
| DE | 122 | D14a | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 123 | D14b | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 124 | D14c | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 125 | D14d | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 126 | D14e | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 127 | D15a | | 1 | Num | 0, 1, 8 or 9 |
| DE | 128 | D15b | | 1 | Num | 0, 1, 8 or 9 |
| DE | 129 | D15c | | 1 | Num | 0, 1, 8 or 9 |
| DE | 130 | D15d | | 1 | Num | 0, 1, 8 or 9 |
| DE | 131 | D15e | | 1 | Num | 0, 1, 8 or 9 |
| DE | 132 | D15f | | 1 | Num | 0, 1, 8 or 9 |
| DE | 133 | D15g | | 1 | Num | 0, 1, 8 or 9 |
| DE | 134 | D15h | | 1 | Num | 0, 1, 8 or 9 |
| DE | 135 | E1a | | 1 | Num | 0, 1, 8 or 9 |
| DE | 136 | E1b | | 1 | Num | 0, 1, 8 or 9 |

| Data Entry Check No | | Variable Name | | | | Possible Values |
|---------------------|-----|---------------|---|----|-----|--|
| DE | 137 | E1c | | 1 | Num | 0, 1, 8 or 9 |
| DE | 138 | E1d | | 1 | Num | 0, 1, 8 or 9 |
| DE | 139 | E1e | | 1 | Num | 0, 1, 8 or 9 |
| DE | 140 | E1f | | 1 | Num | 0, 1, 8 or 9 |
| DE | 141 | E1g | | 1 | Num | 0, 1, 8 or 9 |
| DE | 142 | E1h | | 1 | Num | 0, 1, 8 or 9 |
| DE | 143 | E1i | | 1 | Num | 0, 1, 8 or 9 |
| DE | 144 | F1tot05 | C | 6 | Num | In the range 0 to 999996 |
| DE | 145 | F1m05 | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE | 146 | F1f05 | | 6 | Num | In the range 0 to 999996 or 999999 |
| DE | 147 | F2aflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 148 | F2a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 149 | F2bflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 150 | F2b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 151 | F2cflag | | 1 | Num | 0, 1, 7, 8 or 9 |
| DE | 152 | F2c | | 10 | Num | In the range 0 to 9999999996 or 9999999997 or 9999999998 or 9999999999 |
| DE | 153 | F3aflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 154 | F3a | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 155 | F3bflag | | 1 | Num | 0, 1, 8 or 9 |
| DE | 156 | F3b | | 10 | Num | In the range 0 to 9999999996 or 9999999998 or 9999999999 |
| DE | 157 | F2tot | K | 10 | Num | In the range -9999999996 to 9999999996 or 9999999998 or 9999999999 |

Annex 9 : Checking rules - Record level checks

| Record level check no | Variable name | Level | Record level check |
|-----------------------|---------------|--------------------------------|---|
| RL 1 | COUNTRY | Mandatory | check for "no missing" |
| RL 2 | ENTERPR | Mandatory | check for "no missing" |
| RL 3 | WEIGHT | Mandatory | check for "no missing" |
| RL 4 | NACE_SP | Mandatory | check for "no missing" |
| RL 5 | SIZE_SP | Mandatory | check for "no missing" |
| RL 6 | NSTRA_SP | Mandatory | check for "no missing" |
| RL 7 | N_SP | Mandatory | check for "no missing" |
| RL 8 | N_SP | Mandatory | $N_SP \leq NSTRA_SP$ |
| RL 9 | SUB_SP | Mandatory | check for "no missing" |
| RL 10 | N_RESPST | Mandatory | check for "no missing" |
| RL 11 | N_RESPST | Mandatory | $N_RESPST \leq N_SP$ |
| RL 12 | RESPONSE | Mandatory | check for "no missing" |
| RL 13 | PROC | Mandatory | check for "no missing" |
| RL 14 | IDREGION | Mandatory | check for "no missing" |
| RL 15 | A1 | Mandatory | check for "no missing" |
| RL 16 | A2tot04 | Mandatory | check for "no missing" |
| RL 17 | A2tot04 | Warning | check against N_EMPREG |
| RL 18 | A2tot05 | Mandatory | check for "no missing" |
| RL 19 | A2tot05 | Warning | check against N_EMPREG |
| RL 20 | A2tot05 | Mandatory | If A2m05 and A2f05 in range 0 to 999996 then $A2tot05 = A2m05 + A2f05$ |
| RL 21 | A2m05 | Warning | check against N_EMPREG |
| RL 22 | A2m05 | Mandatory | If A2m05 in range 0 to 999996 then $A2m05 \leq A2tot05$ |
| RL 23 | A2f05 | Warning | check against N_EMPREG |
| RL 24 | A2f05 | Mandatory | If A2f05 in range 0 to 999996 then $A2f05 \leq A2tot05$ |
| RL 25 | A3a | Warning | Compare A3a with N_EMPREG |
| RL 26 | A3a | Mandatory | If A3a and A3b and A3c in range 0 to 999996 then $A3a + A3b + A3c = A2tot05$ |
| RL 27 | A3a | Mandatory | If A3a in range 0 to 999996 then $A3a \leq A2tot05$ |
| RL 28 | A3b | Warning | Compare A3b with N_EMPREG |
| RL 29 | A3b | Mandatory | If A3b in range 0 to 999996 then $A3b \leq A2tot05$ |
| RL 30 | A3c | Warning | Compare A3c with N_EMPREG |
| RL 31 | A3c | Mandatory | If A3c in range 0 to 999996 then $A3c \leq A2tot05$ |
| RL 32 | A4 | Mandatory | check for "no missing" |
| RL 33 | A4 | Mandatory | If A4m and A4f in range 0 to 999999999996 then $A4 = A4m + A4f$ |
| RL 34 | A4m | Mandatory | If A4m in range 0 to 999999999996 then $A4m \leq A4$ |
| RL 35 | A4f | Mandatory | If A4f in range 0 to 999999999996 then $A4f \leq A4$ |
| RL 36 | A5 | Mandatory | check for "no missing" |
| RL 37 | B1a | Mandatory | check for "no missing" |
| RL 38 | B1b | Mandatory | check for "no missing" |
| RL 39 | B2aflag | Mandatory | check for "no missing" |
| RL 40 | B2a | Mandatory | If B2aflag = 0, then B2a = 999998 |
| RL 41 | B2a | Mandatory | If B2aflag = 1, then B2a = within the range 1 to 999996 or 999999 |
| RL 42 | B2bflag | Mandatory | check for "no missing" |
| RL 43 | B2b | Mandatory | If B2bflag = 0, then B2b = 999998 |
| RL 44 | B2b | Mandatory | If B2bflag = 1, then B2b = within the range 1 to 999996 or 999999 |
| RL 45 | B2cflag | Mandatory | check for "no missing" |
| RL 46 | B2c | Mandatory | If B2cflag = 0, then B2c = 999998 |
| RL 47 | B2c | Mandatory | If B2cflag = 1, then B2c = within the range 1 to 999996 or 999999 |
| RL 48 | B2dflag | Mandatory | check for "no missing" |
| RL 49 | B2d | Mandatory | If B2dflag = 0, then B2d = 999998 |
| RL 50 | B2d | Mandatory | If B2dflag = 1, then B2d = within the range 1 to 999996 or 999999 |
| RL 51 | B2eflag | Mandatory | check for "no missing" |
| RL 52 | B2e | Mandatory | If B2eflag = 0, then B2e = 999998 |
| RL 53 | B2e | Mandatory | If B2eflag = 1, then B2e = within the range 1 to 999996 or 999999 |
| RL 54 | B3a | Mandatory | If A2tot04 = 999998 then B3a = 8 |
| RL 55 | B3a | Mandatory | If A2tot04 in range 1 to 999996 then $B3a \neq 8$ |
| RL 56 | B4a | Mandatory | If A2tot04 = 999998 then B4a = 8 |
| RL 57 | B4a | Mandatory | If A2tot04 in range 1 to 999996 then $B4a \neq 8$ |
| RL 58 | C1tot | Mandatory | check for "no missing" |
| RL 59 | C1tot | Warning Year End v. Whole Year | If A3a and A3b and A3c within the range 0 to 999996 then $C1tot \leq A3a + A3b + A3c$ |
| RL 60 | C1tot | Mandatory | If (B1a or B1b) = 1 then C1tot within the range 1 to 999996 or 999999 |
| RL 61 | C1tot | Mandatory | If C1m in range 0 to 999996 then $C1m \leq C1tot$ |
| RL 62 | C1tot | Mandatory | If C1f in range 0 to 999996 then $C1f \leq C1tot$ |
| RL 63 | C1tot | Mandatory | If (B1a and B1b) = 0 then C1tot = 999998 |
| RL 64 | C1tot | Warning Year End v. Whole Year | If C1m and C1f within the range 1 to 999996 then $C1tot \leq A2tot05$ |

| Record level check no | | Variable name | Level | Record level check |
|-----------------------|-----|---------------|--------------------------------|--|
| RL | 65 | C1tot | Mandatory | if C1tot and C1m and C1f within the range 0 to 999996 then C1tot = C1m+C1f |
| RL | 66 | C1tot | Mandatory | if C1tot and C2a and C2b and C2c within range 0 to 999996 then (C2a+C2b+C2c)=C1tot |
| RL | 67 | C1m | Mandatory | if (B1a and B1b) = 0 then C1m = 999998 |
| RL | 68 | C1m | Mandatory | if (B1a or B1b) = 1 then C1m within the range 0 to 999996 or 999999 |
| RL | 69 | C1m | Warning Year End v. Whole Year | if C1m and A2m05 within the range 0 to 999996 then C1m ≤ A2m05 |
| RL | 70 | C1m | Warning Year End v. Whole Year | if C1m in range 0 to 999996 and A2m05=999999 then C1m ≤ A2tot05 |
| RL | 71 | C1f | Mandatory | if (B1a and B1b) = 0 then C1f = 999998 |
| RL | 72 | C1f | Warning Year End v. Whole Year | if C1f and A2f05 within the range 0 to 999996 then C1f ≤ A2f05 |
| RL | 73 | C1f | Mandatory | if (B1a or B1b) = 1 then C1f within the range 0 to 999996 or 999999 |
| RL | 74 | C1f | Warning Year End v. Whole Year | if C1f and A2f05 within the range 0 to 999996 then C1f ≤ A2tot05 |
| RL | 75 | C2a | Mandatory | if (B1a or B1b) = 1 then C2a = 0 to 999996 or 999999 |
| RL | 76 | C2a | Mandatory | if (B1a and B1b) = 0, then C2a = 999998 |
| RL | 77 | C2a | Warning Year End v. Whole Year | if C2a and A3a within the range 0 to 999996 then C2a ≤ A3a |
| RL | 78 | C2a | Mandatory | if C2a in range 0 to 999996 then C2a ≤ C1tot |
| RL | 79 | C2a | Warning Year End v. Whole Year | if A3a = 0 or 999999 and C2a within the range of 0 to 999996 then issue a warning and re-contact the enterprise |
| RL | 80 | C2b | Mandatory | if (B1a or B1b) = 1 then C2b = 0 to 999996 or 999999 |
| RL | 81 | C2b | Mandatory | if (B1a and B1b) = 0, then C2b = 999998 |
| RL | 82 | C2b | Warning Year End v. Whole Year | if C2b and A3b within the range 0 to 999996 then C2b ≤ A3b |
| RL | 83 | C2b | Mandatory | if C2b in range 0 to 999996 then C2b ≤ C1tot |
| RL | 84 | C2b | Warning Year End v. Whole Year | if A3b = 0 or 999999, and C2b within the range 0 to 999996 then issue a warning and re-contact the enterprise |
| RL | 85 | C2c | Mandatory | if (B1a or B1b) = 1 then C2c = 0 to 999996 or 999999 |
| RL | 86 | C2c | Mandatory | if (B1a and B1b) = 0, then C2c = 999998 |
| RL | 87 | C2c | Warning Year End v. Whole Year | if C2c and A3c within the range 0 to 999996 then C2c ≤ A3c |
| RL | 88 | C2c | Mandatory | if C2c in range 0 to 999996 then C2c ≤ C1tot |
| RL | 89 | C2c | Warning Year End v. Whole Year | if A3c = 0 or 999999, and C2c in the range 0 to 999996 then issue a warning and re-contact the enterprise |
| RL | 90 | C3tot | Mandatory | check for "no missing" |
| RL | 91 | C3tot | Mandatory | if (B1a or B1b) = 1 then C3tot within the range 1 to 9999999996 (or 9999999999 for non imputed dataset) |
| RL | 92 | C3tot | Mandatory | if (B1a and B1b) = 0, then C3tot = 9999999998 |
| RL | 93 | C3tot | Mandatory | if C3i within the range 0 to 9999999996 then C3i ≤ C3tot |
| RL | 94 | C3tot | Mandatory | if C3e within the range 0 to 9999999996 then C3e ≤ C3tot |
| RL | 95 | C3tot | Mandatory | if C3i and C3e and C4m and C4f in the range 0 to 9999999996 then C3tot = C4tot |
| RL | 96 | C3tot | Mandatory | if C3i and C3e in the range 0 to 9999999996 then C3tot = (C3e + C3i) |
| RL | 97 | C3tot | Mandatory | if C3tot within the range 1 to 9999999996 then C3tot ≤ A4 |
| RL | 98 | C3i | Mandatory | if (B1a) = 1, then C3i within the range 1 to 9999999996 or 9999999999 |
| RL | 99 | C3i | Mandatory | if (B1a) = 0, then C3i = 9999999998 |
| RL | 100 | C3i | Mandatory | if C3i within the range 1 and 9999999996 then C3i ≤ A4 |
| RL | 101 | C3e | Mandatory | if (B1b) = 1, then C3e within the range 1 to 9999999996 or 9999999999 |
| RL | 102 | C3e | Mandatory | if (B1b) = 0, then C3e = 9999999998 |
| RL | 103 | C3e | Mandatory | if C3e within the range 1 to 9999999996 then C3e ≤ A4 |
| RL | 104 | C4tot | Mandatory | check for "no missing" |
| RL | 105 | C4tot | Mandatory | if (B1a or B1b) = 1, then C4tot within the range 1 to 9999999996 (or 9999999999 for non imputed dataset) |
| RL | 106 | C4tot | Mandatory | if (B1a and B1b) = 0, then C4tot = 9999999998 |
| RL | 107 | C4tot | Mandatory | if C4tot within the range 1 to 9999999996 then C4tot ≤ A4 |
| RL | 108 | C4tot | Mandatory | if C4m and C4f and C4tot within the range 1 to 9999999996 then C4tot = C4m + C4f |
| RL | 109 | C4tot | Mandatory | if C4f within the range 0 to 9999999996 then C4f ≤ C4tot |
| RL | 110 | C4m | Mandatory | if C4m within the range 0 to 9999999996 then C4m ≤ C4tot |
| RL | 111 | C4m | Mandatory | if (B1a or B1b) = 1 then C4m within the range 0 to 9999999996 or 9999999999 |
| RL | 112 | C4m | Mandatory | if (B1a and B1b) = 0 then C4m = 9999999998 |
| RL | 113 | C4m | Mandatory | if C1m within the range 1 to 999996 then C4m in range 1 to 9999999996 or 9999999999 |
| RL | 114 | C4m | Mandatory | if C4m within the range 0 to 999996 then C4m ≤ A4m |
| RL | 115 | C4m | Mandatory | if C4m within the range 0 to 999996 and A4m = 9999999999 then C4m ≤ A4 |
| RL | 116 | C4m | Warning Year End v. Whole Year | if A2m05 = 0 then C4m = 0 |
| RL | 117 | C4m | Warning | if A2m05 or C1m=999999 and C4m within the range 1 to 9999999996 then issue a warning and re-contact the enterprise |
| RL | 118 | C4m | Mandatory | if C1m=0 then C4m=0 |
| RL | 119 | C4f | Mandatory | if (B1a or B1b) = 1 then C4f within the range 0 to 9999999996 or 9999999999 |
| RL | 120 | C4f | Mandatory | if (B1a and B1b) = 0 then C4f = 9999999998 |
| RL | 121 | C4f | Mandatory | if C4f within the range 0 to 999996 then C4f ≤ A4f |
| RL | 122 | C4f | Mandatory | if C4f within the range 0 to 999996 and A4f = 9999999999 then C4f ≤ A4 |

| Record level check no | | Variable name | Level | Record level check |
|-----------------------|-----|---------------|--------------------------------|---|
| RL | 123 | C4f | Mandatory | if C1f within the range 1 to 999996 then C4f in range 1 to 9999999996 or 9999999999 |
| RL | 124 | C4f | Warning | if A2f05 or C1f=999999 and C4f within the range 1 to 9999999996 then issue a warning and re-contact the enterprise |
| RL | 125 | C4f | Warning Year End v. Whole Year | if A2f05 =0 then C4f = 0 |
| RL | 126 | C4f | Mandatory | if C1f=0 then C4f=0 |
| RL | 127 | C5a | Mandatory | if (B1a or B1b) = 1, then C5a within the range of 0 to 9999999996 or 9999999999 |
| RL | 128 | C5a | Mandatory | if (B1a and B1b) = 0 then C5a = 9999999998 |
| RL | 129 | C5a | Mandatory | if C5a in the range of 0 to 9999999996 then $C5a \leq C4tot$ |
| RL | 130 | C5a | Mandatory | if (C5a and C5b and C5c and C5d and C5e and C5f and C5g and C5h and C5i) in the range of 0 to 9999999996 then $(C5a + C5b + C5c + C5d + C5e + C5f + C5g + C5h + C5i) = C4tot$ |
| RL | 131 | C5a | Warning / Suggestion | if C5a = 9999999999 and all other fields (C5b,C5c,C5d,C5e,C5f,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5b+C5c+C5d+C5e+C5f+C5g+C5h+C5i$ then C5a can be calculated as $C4tot - \text{the sum of the values } C5b+C5c+C5d+C5e+C5f+C5g+C5h+C5i$ |
| RL | 132 | C5b | Mandatory | if (B1a or B1b) = 1, then C5b within the range of 0 to 9999999996 or 9999999999 |
| RL | 133 | C5b | Mandatory | if (B1a and B1b) = 0, then C5b = 9999999998 |
| RL | 134 | C5b | Mandatory | if C5b in the range of 0 to 9999999996 then $C5b \leq C4tot$ |
| RL | 135 | C5b | Warning / Suggestion | if C5b = 9999999999 and all other fields (C5a,C5c,C5d,C5e,C5f,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5c+C5d+C5e+C5f+C5g+C5h+C5i$ then C5b can be calculated as $C4tot - \text{the sum of the values } C5a+C5c+C5d+C5e+C5f+C5g+C5h+C5i$ |
| RL | 136 | C5c | Mandatory | if (B1a or B1b) = 1, then C5c within the range of 0 to 9999999996 or 9999999999 |
| RL | 137 | C5c | Mandatory | if (B1a and B1b) = 0, then C5c = 9999999998 |
| RL | 138 | C5c | Mandatory | if C5c in the range of 0 to 9999999996 then $C5c \leq C4tot$ |
| RL | 139 | C5c | Warning / Suggestion | if C5c = 9999999999 and all other fields (C5a,C5b,C5d,C5e,C5f,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5d+C5e+C5f+C5g+C5h+C5i$ then C5c can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5d+C5e+C5f+C5g+C5h+C5i$ |
| RL | 140 | C5d | Mandatory | if (B1a or B1b) = 1, then C5d within the range of 0 to 9999999996 or 9999999999 |
| RL | 141 | C5d | Mandatory | if (B1a and B1b) = 0, then C5d = 9999999998 |
| RL | 142 | C5d | Mandatory | if C5d in the range of 0 to 9999999996 then $C5d \leq C4tot$ |
| RL | 143 | C5d | Warning / Suggestion | if C5d = 9999999999 and all other fields (C5a,C5b,C5c,C5e,C5f,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5e+C5f+C5g+C5h+C5i$ then C5d can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5e+C5f+C5g+C5h+C5i$ |
| RL | 144 | C5e | Mandatory | if (B1a or B1b) = 1, then C5e within the range of 0 to 9999999996 or 9999999999 |
| RL | 145 | C5e | Mandatory | if (B1a and B1b) = 0, then C5e = 9999999998 |
| RL | 146 | C5e | Mandatory | if C5e in the range of 0 to 9999999996 then $C5e \leq C4tot$ |
| RL | 147 | C5e | Warning / Suggestion | if C5e = 9999999999 and all other fields (C5a,C5b,C5c,C5d,C5f,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5d+C5f+C5g+C5h+C5i$ then C5e can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5d+C5f+C5g+C5h+C5i$ |
| RL | 148 | C5f | Mandatory | if (B1a or B1b) = 1, then C5f within the range of 0 to 9999999996 or 9999999999 |
| RL | 149 | C5f | Mandatory | if (B1a and B1b) = 0, then C5f = 9999999998 |
| RL | 150 | C5f | Mandatory | if C5f in the range of 0 to 9999999996 then $C5f \leq C4tot$ |
| RL | 151 | C5f | Warning / Suggestion | if C5f = 9999999999 and all other fields (C5a,C5b,C5c,C5d,C5e,C5g,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5d+C5e+C5g+C5h+C5i$ then C5f can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5d+C5e+C5g+C5h+C5i$ |
| RL | 152 | C5g | Mandatory | if (B1a or B1b) = 1, then C5g within the range of 0 to 9999999996 or 9999999999 |
| RL | 153 | C5g | Mandatory | if (B1a and B1b) = 0, then C5g = 9999999998 |
| RL | 154 | C5g | Mandatory | if C5g in the range of 0 to 9999999996 then $C5g \leq C4tot$ |
| RL | 155 | C5g | Warning / Suggestion | if C5g = 9999999999 and all other fields (C5a,C5b,C5c,C5d,C5e,C5f,C5h,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5d+C5e+C5f+C5h+C5i$ then C5g can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5d+C5e+C5f+C5h+C5i$ |
| RL | 156 | C5h | Mandatory | if (B1a or B1b) = 1, then C5h within the range of 0 to 9999999996 or 9999999999 |
| RL | 157 | C5h | Mandatory | if (B1a and B1b) = 0, then C5h = 9999999998 |
| RL | 158 | C5h | Mandatory | if C5h in the range of 0 to 9999999996 then $C5h \leq C4tot$ |
| RL | 159 | C5h | Warning / Suggestion | if C5h = 9999999999 and all other fields (C5a,C5b,C5c,C5d,C5e,C5f,C5g,C5i) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5d+C5e+C5f+C5g+C5i$ then C5h can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5d+C5e+C5f+C5g+C5i$ |
| RL | 160 | C5i | Mandatory | if (B1a or B1b) = 1, then C5i within the range of 0 to 9999999996 or 9999999999 |
| RL | 161 | C5i | Mandatory | if (B1a and B1b) = 0, then C5i = 9999999998 |
| RL | 162 | C5i | Mandatory | if C5i in the range of 0 to 9999999996 then $C5i \leq C4tot$ |
| RL | 163 | C5i | Warning / Suggestion | if C5i = 9999999999 and all other fields (C5a,C5b,C5c,C5d,C5e,C5f,C5g,C5h) have a value within the range 0 to 9999999996 and $C4tot > \text{sum of } C5a+C5b+C5c+C5d+C5e+C5f+C5g+C5h$ then C5i can be calculated as $C4tot - \text{the sum of the values } C5a+C5b+C5c+C5d+C5e+C5f+C5g+C5h$ |
| RL | 164 | C6a | Mandatory | if B1b = 1, then C6a within the range of 0 to 9999999996 or 9999999999 |

| Record level check no | | Variable name | Level | Record level check |
|-----------------------|-----|---------------|----------------------|--|
| RL | 165 | C6a | Mandatory | if B1b = 0, then C6a = 9999999998 |
| RL | 166 | C6a | Mandatory | if values of (C6a;C6g) all within the range 0 to 9999999996 then sum (C6a;C6g) = C3e |
| RL | 167 | C6a | Warning / Suggestion | If C6a = 9999999999 and all other fields (C6b,C6c,C6d,C6e,C6f,C6g) have a value within the range 0 to 9999999996 and C3e > (C6b+C6c+C6d+C6e+C6f+C6g) then C6a can be calculated as C3e - (C6b+C6c+C6d+C6e+C6f+C6g) |
| RL | 168 | C6a | Mandatory | if C6a within the range of 0 to 9999999996 then C6a ≤ C3e |
| RL | 169 | C6b | Mandatory | if (B1b) = 1, then C6b within the range of 0 to 9999999996 or 9999999999 |
| RL | 170 | C6b | Mandatory | if (B1b) = 0, then C6b = 9999999998 |
| RL | 171 | C6b | Mandatory | if C6b in the range of 0 to 9999999996 then C6b ≤ C3e |
| RL | 172 | C6b | Warning / Suggestion | If C6b = 9999999999 and all other fields (C6a,C6c,C6d,C6e,C6f,C6g) have a value within the range 0 to 9999999996 and C3e > (C6a+C6c+C6d+C6e+C6f+C6g) then C6b can be calculated as C3e - (C6a+C6c+C6d+C6e+C6f+C6g) |
| RL | 173 | C6c | Mandatory | if (B1b) = 1, then C6c within the range of 0 to 9999999996 or 9999999999 |
| RL | 174 | C6c | Mandatory | if (B1b) = 0, then C6c = 9999999998 |
| RL | 175 | C6c | Mandatory | if C6c in the range of 0 to 9999999996 then C6c ≤ C3e |
| RL | 176 | C6c | Warning / Suggestion | If C6c = 9999999999 and all other fields (C6a,C6b,C6d,C6e,C6f,C6g) have a value within the range 0 to 9999999996 and C3e > (C6a+C6b+C6d+C6e+C6f+C6g) then C6c can be calculated as C3e - (C6a+C6b+C6d+C6e+C6f+C6g) |
| RL | 177 | C6d | Mandatory | if (B1b) = 1, then C6d within the range of 0 to 9999999996 or 9999999999 |
| RL | 178 | C6d | Mandatory | if (B1b) = 0, then C6d = 9999999998 |
| RL | 179 | C6d | Mandatory | if C6d in the range of 0 to 9999999996 then C6d ≤ C3e |
| RL | 180 | C6d | Warning / Suggestion | If C6d = 9999999999 and all other fields (C6a,C6b,C6c,C6e,C6f,C6g) have a value within the range 0 to 9999999996 and C3e > (C6a+C6b+C6c+C6e+C6f+C6g) then C6d can be calculated as C3e - (C6a+C6b+C6c+C6e+C6f+C6g) |
| RL | 181 | C6e | Mandatory | if (B1b) = 1, then C6e within the range of 0 to 9999999996 or 9999999999 |
| RL | 182 | C6e | Mandatory | if (B1b) = 0, then C6e = 9999999998 |
| RL | 183 | C6e | Mandatory | if C6e in the range of 0 to 9999999996 then C6e ≤ C3e |
| RL | 184 | C6e | Warning / Suggestion | If C6e = 9999999999 and all other fields (C6a,C6b,C6c,C6d,C6f,C6g) have a value within the range 0 to 9999999996 and C3e > (C6a+C6b+C6c+C6d+C6f+C6g) then C6e can be calculated as C3e - (C6a+C6b+C6c+C6d+C6f+C6g) |
| RL | 185 | C6f | Mandatory | if (B1b) = 1, then C6f within the range of 0 to 9999999996 or 9999999999 |
| RL | 186 | C6f | Mandatory | if (B1b) = 0, then C6f = 9999999998 |
| RL | 187 | C6f | Mandatory | if C6f in the range of 0 to 9999999996 then C6f ≤ C3e |
| RL | 188 | C6f | Warning / Suggestion | If C6f = 9999999999 and all other fields (C6a,C6b,C6c,C6d,C6e,C6g) have a value within the range 0 to 9999999996 and C3e > (C6a+C6b+C6c+C6d+C6e+C6g) then C6f can be calculated as C3e - (C6a+C6b+C6c+C6d+C6e+C6g) |
| RL | 189 | C6g | Mandatory | if (B1b) = 1, then C6g within the range of 0 to 9999999996 or 9999999999 |
| RL | 190 | C6g | Mandatory | if (B1b) = 0, then C6g = 9999999998 |
| RL | 191 | C6g | Mandatory | if C6g in the range of 0 to 9999999996 then C6g ≤ C3e |
| RL | 192 | C6g | Warning / Suggestion | If C6g = 9999999999 and all other fields (C6a,C6b,C6c,C6d,C6e,C6f) have a value within the range 0 to 9999999996 and C3e > (C6a+C6b+C6c+C6d+C6e+C6f) then C6g can be calculated as C3e - (C6a+C6b+C6c+C6d+C6e+C6f) |
| RL | 193 | C7aflag | Mandatory | if (B1a or B1b) = 1, then C7aflag = 0, 1 or 9 |
| RL | 194 | C7aflag | Mandatory | if (B1a and B1b) = 0, then C7aflag = 8 |
| RL | 195 | C7a | Mandatory | if (B1a and B1b) = 0, then C7a = 9999999998 |
| RL | 196 | C7a | Mandatory | if C7aflag = 0 then C7a = 9999999998 |
| RL | 197 | C7a | Mandatory | if C7aflag = 1, then C7a within the range of 1 to 9999999996 (issue specific warning if 9999999999) |
| RL | 198 | C7a | Mandatory | if C7aflag = 8, then C7a = 9999999998 |
| RL | 199 | C7a | Mandatory | if C7aflag = 9, then C7a = 9999999999 |
| RL | 200 | C7bflag | Mandatory | if (B1a or B1b) = 1, then C7bflag = 0, 1 or 9 |
| RL | 201 | C7bflag | Mandatory | if (B1a and B1b) = 0, then C7bflag = 8 |
| RL | 202 | C7b | Mandatory | if (B1a and B1b) = 0, then C7b = 9999999998 |
| RL | 203 | C7b | Mandatory | if C7bflag = 0 then C7b = 9999999998 |
| RL | 204 | C7b | Mandatory | if C7bflag = 1, then C7b within the range 1 to 9999999996 (issue specific warning if 9999999999) |
| RL | 205 | C7b | Mandatory | if C7bflag = 8, then C7b = 9999999998 |
| RL | 206 | C7b | Mandatory | if C7bflag = 9, then C7b = 9999999999 |
| RL | 207 | C7cflag | Mandatory | if (B1a or B1b) = 1, then C7cflag = 0, 1 or 9 |
| RL | 208 | C7cflag | Mandatory | if (B1a and B1b) = 0, then C7cflag = 8 |
| RL | 209 | C7c | Mandatory | if (B1a and B1b) = 0, then C7c = 9999999998 |
| RL | 210 | C7c | Mandatory | if C7cflag = 0 then C7c = 9999999998 |
| RL | 211 | C7c | Mandatory | if C7cflag = 1, then C7c within the range 1 to 9999999996 (issue specific warning if 9999999999) |
| RL | 212 | C7c | Mandatory | if C7cflag = 8, then C7c = 9999999998 |
| RL | 213 | C7c | Mandatory | if C7cflag = 9, then C7c = 9999999999 |

| Record level check no | | Variable name | Level | Record level check |
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| RL | 214 | C7dflag | Mandatory | if (B1a and B1b) = 0, then C7dflag = 8 |
| RL | 215 | C7dflag | Mandatory | if (B1a or B1b) = 1, then C7dflag = 0, 1 or 9 |
| RL | 216 | C7d | Mandatory | if (B1a and B1b) = 0, then C7d = 9999999998 |
| RL | 217 | C7d | Mandatory | if C7dflag = 0 then C7d = 9999999998 |
| RL | 218 | C7d | Mandatory | if C7dflag = 1, then C7d within the range 1 to 9999999996 (issue specific warning if 9999999999) |
| RL | 219 | C7d | Mandatory | if C7dflag = 8, then C7d = 9999999998 |
| RL | 220 | C7d | Mandatory | if C7dflag = 9, then C7d = 9999999999 |
| RL | 221 | C7sflag | Mandatory | if (B1a or B1b) = 1 and (C7aflag=1 or C7bflag=1 or C7cflag=1 or C7dflag=1) then C7sflag = 0 |
| RL | 222 | C7sflag | Mandatory | if (B1a or B1b) = 1 and (C7a or C7b or C7c or C7d) within the range 1 to 9999999996 then C7sflag = 0 |
| RL | 223 | C7sflag | Mandatory | if (B1a and B1b) = 0, then C7sflag = 8 |
| RL | 224 | C7sflag | Mandatory | if (B1a or B1b) = 1 and all C7a,C7b,C7c,C7d = 9999999999 and C7sub within the range 0 to 9999999996 then C7sflag = 1 |
| RL | 225 | C7sflag | Mandatory | if (B1a or B1b) = 1 and all C7a,C7b,C7c,C7d = 9999999999 and C7sub = 9999999999 then C7sflag = 9 |
| RL | 226 | C7sub | Mandatory | check for "no missing" |
| RL | 227 | C7sub | Mandatory / Warning | if C7sflag=1 and (B1a or B1b) = 1 then C7a, C7b, C7c, C7d = 9999999999 |
| RL | 228 | C7sub | Mandatory | if (B1a and B1b) = 0, then C7sub = 9999999998 |
| RL | 229 | C7sub | Mandatory | if C7sflag=0 then C7sub = |
| RL | 230 | C7sub | Mandatory | if C7sflag=0 then each of the values of C7a, C7b, C7c, C7d within the range 0 to 9999999996 should be ≤ C7sub |
| RL | 231 | C7sub | Mandatory | if C7sflag=1 then C7sub should not be equal sum of the values C7a, C7b, C7c, C7d which are within the range 0 to 9999999996 |
| RL | 232 | C7sub | Mandatory | if C7sflag=1 then C7sub = 0 to 9999999996 |
| RL | 233 | PAC | Mandatory | check for "no missing" |
| RL | 234 | PAC | Mandatory | check that if C4tot in range 1 to 9999999996 and A4;A5 in range 1 to 9999999996 then PAC = C4tot*A5/A4 |
| RL | 235 | PAC | Mandatory | if (B1a and B1b) = 1 then PAC in range 1 to 9999999996 or 9999999999 |
| RL | 236 | PAC | Mandatory | if (B1a and B1b) = 0 then PAC = 9999999998 |
| RL | 237 | PAC | Warning | PAC < A5 |
| RL | 238 | C8aflag | Mandatory | if (B1a or B1b) = 1, then C8aflag = 0,1 or 9 |
| RL | 239 | C8aflag | Warning - Exception If No Courses But CVT Contribution Made | if (B1a and B1b) = 0, then C8aflag = 8 "message: is possible C8a>0 if no courses but paying contributions" |
| RL | 240 | C8a | Warning - Exception If No Courses But CVT Contribution Made | if (B1a and B1b) = 0, then C8a = 9999999998 "message: is possible that C8a>0 if no courses offered but paying contributions" e.g. France |
| RL | 241 | C8a | Mandatory | if C8aflag = 0 then C8a = 9999999998 |
| RL | 242 | C8a | Mandatory | if C8aflag = 1 then C8a in the range 1 and 9999999996 (issue specific warning if 9999999999) |
| RL | 243 | C8a | Mandatory | if C8aflag = 8 then C8a = 9999999998 |
| RL | 244 | C8a | Mandatory | if C8aflag = 9 then C8a = 9999999999 |
| RL | 245 | C8bflag | Mandatory | if (B1a or B1b) = 1, then C8bflag = 0,1 or 9 |
| RL | 246 | C8bflag | Mandatory | if (B1a and B1b) = 0, then C8bflag = 8 |
| RL | 247 | C8b | Mandatory | if (B1a and B1b) = 0, then C8b = 9999999998 |
| RL | 248 | C8b | Mandatory | if C8bflag = 1 then C8b in the range 1 and 9999999996 (issue specific warning if 9999999999) |
| RL | 249 | C8b | Mandatory | if C8bflag = 0 then C8b = 9999999998 |
| RL | 250 | C8b | Mandatory | if C8bflag = 8 then C8b = 9999999998 |
| RL | 251 | C8b | Mandatory | if C8bflag = 9 then C8b = 9999999999 |
| RL | 252 | C7tot | Warning - Exception If No Courses But CVT Contribution Made | if (B1a and B1b) = 0, then C7tot = 9999999998 |
| RL | 253 | C7tot | Mandatory | if (B1a or B1b) = 1, then C7tot in range 0 to 9999999996 and 9999999999 |
| RL | 254 | C7tot | Mandatory | check for "no missing" |
| RL | 255 | C7tot | Mandatory | if C7sub within the range 0 to 9999999996 and C8a and C8b within the range 1 to 9999999996 then C7tot = C7sub + C8a - C8b |
| RL | 256 | C9a1 | Mandatory | if (B1a or B1b) = 1, then C9a1 = 0,1 or 9 |
| RL | 257 | C9a1 | Mandatory | if (B1a and B1b) = 0, then C9a1 = 8 |
| RL | 258 | C9a2 | Mandatory | if (B1a and B1b) = 0, then C9a2 = 8 |
| RL | 259 | C9a2 | Mandatory | if C9a1 = 0 or 8, then C9a2 = 8 |
| RL | 260 | C9a2 | Mandatory | if C9a1 = 1, then C9a2 = 0, 1 or 9 |
| RL | 261 | C9a2 | Mandatory - Issue Warning | if C9a1 = 9 and C9a2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 262 | C9b1 | Mandatory | if (B1a or B1b) = 1, then C9b1 = 0,1 or 9 |
| RL | 263 | C9b1 | Mandatory | if (B1a and B1b) = 0, then C9b1 = 8 |
| RL | 264 | C9b2 | Mandatory | if (B1a and B1b) = 0, then C9b2 = 8 |
| RL | 265 | C9b2 | Mandatory | if C9b1 = 1, then C9b2 = 0, 1 or 9 |
| RL | 266 | C9b2 | Mandatory | if C9b1 = 0 or 8, then C9b2 = 8 |

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| RL | 267 | C9b2 | Mandatory - Issue Warning | if C9b1 = 9 and C9b2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 268 | C9c1 | Mandatory | If (B1a and B1b) = 0, then C9c1 = 8 |
| RL | 269 | C9c1 | Mandatory | If (B1a or B1b) = 1, then C9c1 = 0,1 or 9 |
| RL | 270 | C9c2 | Mandatory | If (B1a and B1b) = 0, then C9c2 = 8 |
| RL | 271 | C9c2 | Mandatory | If C9c1 = 0 or 8, then C9c2 = 8 |
| RL | 272 | C9c2 | Mandatory | If C9c1 = 1, then C9c2 = 0, 1 or 9 |
| RL | 273 | C9c2 | Mandatory - Issue Warning | if C9c1 = 9 and C9c2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 274 | C9d1 | Mandatory | If (B1a or B1b) = 1, then C9d1 = 0,1 or 9 |
| RL | 275 | C9d1 | Mandatory | If (B1a and B1b) = 0, then C9d1 = 8 |
| RL | 276 | C9d2 | Mandatory | If (B1a and B1b) = 0, then C9d2 = 8 |
| RL | 277 | C9d2 | Mandatory | If C9d1 = 1, then C9d2 = 0, 1 or 9 |
| RL | 278 | C9d2 | Mandatory | If C9d1 = 0 or 8, then C9d2 = 8 |
| RL | 279 | C9d2 | Mandatory - Issue Warning | if C9d1 = 9 and C9d2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 280 | C10a1 | Mandatory | If (B1a or B1b) = 1, then C10a1 = 0,1 or 9 |
| RL | 281 | C10a1 | Mandatory | If (B1a and B1b) = 0, then C10a1 = 8 |
| RL | 282 | C10a2 | Mandatory | If (B1a and B1b) = 0, then C10a2 = 8 |
| RL | 283 | C10a2 | Mandatory | If C10a1 = 1, then C10a2 = 0,1 or 9 |
| RL | 284 | C10a2 | Mandatory | If C10a1 = 0 or 8, then C10a2 = 8 |
| RL | 285 | C10a2 | Mandatory - Issue Warning | if C10a1 = 9 and C10a2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 286 | C10b1 | Mandatory | If (B1a or B1b) = 1, then C10b1 = 0,1 or 9 |
| RL | 287 | C10b1 | Mandatory | If (B1a and B1b) = 0, then C10b1 = 8 |
| RL | 288 | C10b2 | Mandatory | If (B1a and B1b) = 0, then C10b2 = 8 |
| RL | 289 | C10b2 | Mandatory | If C10b1 = 1, then C10b2 = 0,1 or 9 |
| RL | 290 | C10b2 | Mandatory | If C10b1 = 0 or 8, then C10b2 = 8 |
| RL | 291 | C10b2 | Mandatory - Issue Warning | if C10b1 = 9 and C10b2 = 0 or 1 then issue warning and re-contact enterprise |
| RL | 292 | D1 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D1 = 8 |
| RL | 293 | D1 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D1 = 0, 1, 2, 3, or 9 |
| RL | 294 | D2 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D2 = 8 |
| RL | 295 | D2 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D2 = 0, 1 or 9 |
| RL | 296 | D3 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D3 = 8 |
| RL | 297 | D3 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D3 = 0,1,2,3 or 9 |
| RL | 298 | D4 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D4 = 8 |
| RL | 299 | D4 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D4 = 0, 1,2,3 or 9 |
| RL | 300 | D5 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D5 = 8 |
| RL | 301 | D5 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D5= 0, 1,2,3 or 9 |
| RL | 302 | D6 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D6 = 8 |
| RL | 303 | D6 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D6 = 0, 1 or 9 |
| RL | 304 | D7 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D7 = 8 |
| RL | 305 | D7 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D7 = 0, 1 or 9 |
| RL | 306 | D8 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D8 = 8 |
| RL | 307 | D8 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D8 = 0, 1,2,3 or 9 |
| RL | 308 | D9 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D9 = 8 |
| RL | 309 | D9 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D9 = 0, 1,2,3 or 9 |
| RL | 310 | D10 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D10 = 8 |
| RL | 311 | D10 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D10= 0, 1,2,3 or 9 |
| RL | 312 | D11 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D11 = 8 |
| RL | 313 | D11 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D11 = 0, 1,2,3 or 9 |
| RL | 314 | D12 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D12 = 8 |
| RL | 315 | D12 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D12 = 0, 1,2 or 9 |
| RL | 316 | D13 | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13 = 8 |
| RL | 317 | D13 | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13 = 0, 1 or 9 |
| RL | 318 | D13a | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13a = 8 |
| RL | 319 | D13a | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13a = 0, 1 or 9 |
| RL | 320 | D13a | Mandatory | if D13 = 0 then D13a = 8 |
| RL | 321 | D13b | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13b = 8 |
| RL | 322 | D13b | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13b = 0, 1 or 9 |
| RL | 323 | D13b | Mandatory | if D13 = 0 then D13b = 8 |
| RL | 324 | D13c | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13c = 8 |
| RL | 325 | D13c | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13c = 0, 1 or 9 |
| RL | 326 | D13c | Mandatory | if D13 = 0 then D13c = 8 |
| RL | 327 | D13d | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13d = 8 |
| RL | 328 | D13d | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13d = 0, 1 or 9 |
| RL | 329 | D13d | Mandatory | if D13 = 0 then D13d = 8 |
| RL | 330 | D13e | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13e = 8 |

| Record level check no | | Variable name | Level | Record level check |
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| RL | 331 | D13e | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13e = 0, 1 or 9 |
| RL | 332 | D13e | Mandatory | If D13 = 0 then D13e = 8 |
| RL | 333 | D13e | Warning | If C3e in range 1 to 999999996 then D13e probably cannot be 8 |
| RL | 334 | D13f | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D13f = 8 |
| RL | 335 | D13f | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D13f = 0, 1 or 9 |
| RL | 336 | D13f | Mandatory | If D13 = 0 then D13f = 8 |
| RL | 337 | D14a | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D14a = 8 |
| RL | 338 | D14a | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D14a = 0, 1, 7 or 9 |
| RL | 339 | D14a | Warning | If D14a=1 then D3 probably cannot be equal to 1, 2 or 3 (issue a warning) |
| RL | 340 | D14b | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D14b = 8 |
| RL | 341 | D14b | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D14b = 0, 1, 7 or 9 |
| RL | 342 | D14b | Mandatory | D14b=1 constitutes a receipt therefore C8bflag must be 1 |
| RL | 343 | D14b | Mandatory | D14b=1 constitutes as receipt therefore C8b must be in range 1 to 9999999996 or 9999999999 |
| RL | 344 | D14b | Warning | If C8bflag = 1 then D14b should probably be 1 |
| RL | 345 | D14c | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D14c = 8 |
| RL | 346 | D14c | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D14c = 0, 1, 7 or 9 |
| RL | 347 | D14c | Warning | If C8bflag = 1 then D14c should probably be 1 |
| RL | 348 | D14c | Warning | D14c=1 constitutes a receipt and therefore C8bflag should probably be 1 |
| RL | 349 | D14d | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D14d = 8 |
| RL | 350 | D14d | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D14d = 0, 1, 7 or 9 |
| RL | 351 | D14e | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D14e = 8 |
| RL | 352 | D14e | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D14e = 0, 1, 7 or 9 |
| RL | 353 | D15a to D15h | Mandatory | D15a-D15h : check that a maximum of 3 boxes ticked |
| RL | 354 | D15a | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15a = 8 |
| RL | 355 | D15a | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15a = 0, 1 or 9 |
| RL | 356 | D15b | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15b = 8 |
| RL | 357 | D15b | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15b = 0, 1 or 9 |
| RL | 358 | D15c | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15c = 8 |
| RL | 359 | D15c | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15c = 0, 1 or 9 |
| RL | 360 | D15d | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15d = 8 |
| RL | 361 | D15d | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15d = 0, 1 or 9 |
| RL | 362 | D15e | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15e = 8 |
| RL | 363 | D15e | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15e = 0, 1 or 9 |
| RL | 364 | D15f | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15f = 8 |
| RL | 365 | D15f | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15f = 0, 1 or 9 |
| RL | 366 | D15g | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15g = 8 |
| RL | 367 | D15g | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15g = 0, 1 or 9 |
| RL | 368 | D15h | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then D15h = 8 |
| RL | 369 | D15h | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then D15h = 0, 1 or 9 |
| RL | 370 | E1a-i | Mandatory | E1a-E1i : check that a maximum of 3 boxes ticked |
| RL | 371 | E1a | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1a = 0, 1 or 9 |
| RL | 372 | E1a | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1a = 8 |
| RL | 373 | E1b | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1b = 0, 1 or 9 |
| RL | 374 | E1b | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1b = 8 |
| RL | 375 | E1c | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1c = 0, 1 or 9 |
| RL | 376 | E1c | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1c = 8 |
| RL | 377 | E1d | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1d = 0, 1 or 9 |
| RL | 378 | E1d | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1d = 8 |
| RL | 379 | E1e | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1e = 0, 1 or 9 |
| RL | 380 | E1e | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1e = 8 |
| RL | 381 | E1f | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1f = 0, 1 or 9 |
| RL | 382 | E1f | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1f = 8 |
| RL | 383 | E1g | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1g = 0, 1 or 9 |
| RL | 384 | E1g | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1g = 8 |
| RL | 385 | E1h | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1h = 0, 1 or 9 |
| RL | 386 | E1h | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1h = 8 |
| RL | 387 | E1i | Mandatory | If (B1a and B1b) = 0 and (B2aflag and B2bflag and B2cflag and B2dflag and B2eflag) = 0, then E1i = 0, 1 or 9 |
| RL | 388 | E1i | Mandatory | If (B1a or B1b) = 1 or (B2aflag or B2bflag or B2cflag or B2dflag or B2eflag) = 1, then E1i = 8 |
| RL | 389 | F1tot05 | Mandatory | check for "no missing" |
| RL | 390 | F1tot05 | Mandatory | If F1m05 and F1f05 within the range 0 to 999996 then F1tot05 = F1m05 + F1f05 |

| Record level check no | | Variable name | Level | Record level check |
|-----------------------|-----|---------------|---------------------|---|
| RL | 391 | F1m05 | Mandatory | If F1m05 within the range 0 to 999996, then F1m05 ≤ F1tot05 |
| RL | 392 | F1f05 | Mandatory | If F1f05 within the range 0 to 999996, then F1f05 ≤ F1tot05 |
| RL | 393 | F2aflag | Mandatory | If F1tot05 = 0 then F2aflag = 8 |
| RL | 394 | F2aflag | Mandatory | If F1tot05 within the range of 1 to 999996, then F2aflag = 0, 1 or 9 |
| RL | 395 | F2a | Mandatory | If F2aflag = 0, then F2a = 999999998 |
| RL | 396 | F2a | Mandatory - Warning | If F2aflag = 1, then F2a within the range of 1 to 999999996 (issue specific warning if 999999999) |
| RL | 397 | F2a | Mandatory | If F2aflag = 8, then F2a = 999999998 |
| RL | 398 | F2a | Mandatory | If F2aflag = 9, then F2a = 999999999 |
| RL | 399 | F2bflag | Mandatory | If F1tot05 = 0 then F2bflag = 8 |
| RL | 400 | F2bflag | Mandatory | If F1tot05 within the range of 1 to 999996, then F2bflag = 0, 1 or 9 |
| RL | 401 | F2b | Mandatory | If F2bflag = 0, then F2b = 999999998 |
| RL | 402 | F2b | Mandatory - Warning | If F2bflag = 1, then F2b within the range of 1 to 999999996 (issue specific warning if 999999999) |
| RL | 403 | F2b | Mandatory | If F2bflag = 8, then F2b = 999999998 |
| RL | 404 | F2b | Mandatory | If F2bflag = 9, then F2b = 999999999 |
| RL | 405 | F2cflag | Mandatory | If F1tot05 = 0 then F2cflag = 8 |
| RL | 406 | F2cflag | Mandatory | If F1tot05 within the range of 1 to 999996, then F2cflag = 0, 1, 7 or 9 |
| RL | 407 | F2c | Mandatory | If F2cflag = 0, then F2c = 999999998 |
| RL | 408 | F2c | Mandatory - Warning | If F2cflag = 1, then F2c within the range of 1 to 999999996 (issue specific warning if 999999999) |
| RL | 409 | F2c | Mandatory | If F2cflag = 7, then F2c = 999999997 |
| RL | 410 | F2c | Mandatory | If F2cflag = 8, then F2c = 999999998 |
| RL | 411 | F2c | Mandatory | If F2cflag = 9, then F2c = 999999999 |
| RL | 412 | F3aflag | Warning | If F1tot05 = 0 then F3aflag=8 (exception where no IVT but IVT contribution made) |
| RL | 413 | F3aflag | Mandatory | If F1tot05 in the range 1 to 999999996 then F3aflag = 0,1,9 |
| RL | 414 | F3a | Warning | If F1tot05 = 0 then F3a=999999998 (exception where no IVT but IVT contribution made) |
| RL | 415 | F3a | Mandatory | If F3aflag = 0, then F3a = 0 |
| RL | 416 | F3a | Mandatory | If F3aflag = 1, then F3a In the range 1 and 999999996 or 999999999 |
| RL | 417 | F3a | Mandatory | If F3aflag = 8, then F3a = 999999998 |
| RL | 418 | F3a | Mandatory | If F3aflag = 9, then F3a = 999999999 |
| RL | 419 | F3bflag | Mandatory | If F1tot05 = 0 the F3bflag = 8 |
| RL | 420 | F3bflag | Mandatory | If F1tot05 in the range 1 to 999999996 then F3bflag = 0,1,9 |
| RL | 421 | F3b | Mandatory | If F1tot05 = 0 the F3b = 999999998 |
| RL | 422 | F3b | Mandatory | If F3bflag = 0, then F3b = 999999998 |
| RL | 423 | F3b | Mandatory | If F3bflag = 1, then F3b In the range 1 and 999999996 or 999999999 |
| RL | 424 | F3b | Mandatory | If F3bflag = 8, then F3b = 999999998 |
| RL | 425 | F3b | Mandatory | If F3bflag = 9, then F3b = 999999999 |
| RL | 426 | F2tot | Mandatory | check for "no missing" |
| RL | 427 | F2tot | Mandatory | If F2b;F3a;F3b within the range 1 to 999999996 then F2tot = F2b + F3a - F3b |
| RL | 428 | F2tot | Warning | If F1tot05 =0 then F2tot = 999999998 (exception where no IVT but IVT contribution made) |
| RL | 429 | F2tot | Mandatory | If F1tot05 within the range 1 to 999996 then F2tot in the range 0 to 999999996 or 999999999 |

ESTAT reserves the right to correct errors in these rules should they become evident and to add additional checks should be found to be necessary to guarantee the quality of the CVTS3 data set

Annex 10 : Checking rules - File level checks

| File Level Check No | Variable | Level | File level check | Action |
|---------------------|----------|-----------|--|---|
| FL 1 | COUNTRY | Mandatory | check if unique value for all records | |
| FL 2 | ENTERPR | Mandatory | check that there are no records with the same value for a single country | |
| FL 3 | NSTRA_SP | Mandatory | check if NSTR_SP is the same for each cell of the combination NACE_SP and SIZE_SP | |
| FL 4 | N_SP | Mandatory | check if N_SP is the same for each cell of the combination NACE_SP and SIZE_SP | |
| FL 5 | N_RESPST | Mandatory | check if N_RESPST is the same for each cell of the combination NACE_SP and SIZE_SP | |
| FL 6 | WEIGHT | Mandatory | Weight ≥ 1 | |
| FL 7 | WEIGHT | Mandatory | Sum of weights for a particular combination of NACE_SP and SIZE_SP should equal NSTRA_SP. | |
| FL 8 | A2tot05 | Warning | if A2tot05 in range 10 to 999996 and A2tot04 in range 1 to 999996 then $\text{abs}(A2tot05 - A2tot04) / A2tot04 < 20\%$ | List the top 50 results Countries to confirm correctness of data |
| FL 9 | A4 | Warning | Check A4 against theoretical maximum worked hours in year of $8 \times 220 \times A2tot05$ | List the top and bottom 50 Countries to check results against national norms |
| FL 10 | A5 | Warning | if A5 in range 1 to 99999999996 and A4 in range 1 to 99999999996 then $A5/A4$ (labour cost per hour) < national norm (e.g. 80) | List the top and bottom 50 Countries to check results against national norms |
| FL 11 | A5 | Warning | if A5 in range 1 to 99999999996 and $A5/A2tot05$ (labour cost per employee) < a country specific boundary | List the top and bottom 50 Countries to check results against national norms |
| FL 12 | C3tot | Warning | if C3tot in range 1 to 99999999996 and A4 in range 1 to 99999999996 then $C3tot/A4 < (a \text{ country specific boundary})$ (e.g. 0.75) (CVT hours/ total hours worked) | List the top 50 Countries to check results against national norms |
| FL 13 | C3tot | Warning | if C3tot in range 1 to 99999999996 and A2tot05 in range 1 to 999996 then $C3tot/A2tot05 < (a \text{ country specific boundary})$ (Total CVT hours/ persons employed) | List the top and bottom 50 Countries to check results against national norms |
| FL 14 | C4tot | Warning | if C4tot in range 1 to 99999999996 and C1tot in range 1 to 999996 then $C4tot/C1tot < (a \text{ country specific boundary})$ (e.g. 600) (hours cvt per cvt participant in 2005) | List the top and bottom 50 Countries to check results against national norms |
| FL 15 | C7sub | Warning | If C7sub in the range 1 to 99999999996 and C1tot in the range 1 to 999996 then $C7sub/C1tot < (country \text{ specific boundary})$ (e.g. 3500) (cost per CVT participant) | List the top and bottom 50 Countries to check results against national norms |
| FL 16 | C7sub | Warning | If C7sub and C4tot in the range 1 to 99999999996 then $C7sub/C4tot < (country \text{ specific boundary})$ (e.g. 80) (cost per CVT course hour) | List the top and bottom 50 Countries to check results against national norms |
| FL 17 | C7sub | Warning | If C7sub in the range 1 to 99999999996 and A2tot05 in the range 5 to 999996 then $C7sub/A2tot05 < (country \text{ specific boundary})$ (CVT costs per person employed in enterprise) | List the top and bottom 50 Countries to check results against national norms |
| FL 18 | C7tot | Warning | If C7tot in the range 1 to 99999999996 and C1tot in the range 1 to 999996 then $C7tot/C1tot < (country \text{ specific boundary})$ (total costs per CVT participant) | List the top and bottom 50 Countries to check results against national norms |
| FL 19 | C7tot | Warning | If C7tot and C3tot in range 1 to 99999999996 then $C7tot/C3tot < (country \text{ specific boundary})$ (total costs per CVT course hour) | List the top and bottom 50 Countries to check results against national norms |
| FL 20 | C7tot | Warning | if C7tot in range 1 to 99999999996 and A2tot05 in range 1 to 999996 then $C7tot/A2tot05 < (country \text{ specific boundary})$ (total CVT costs per person employed in enterprise) | List the top and bottom 50 Countries to check results against national norms |
| FL 21 | F1tot05 | Warning | if F1tot05 and A2tot05 in range 1 to 999996 then $F1tot05 / A2tot05 > (country \text{ specific boundary})$ (e.g. 0.5) | List the top 50 Countries to check results against national norms and re-contact enterprise as required |
| FL 22 | F2a | Warning | If F2a in the range 1 to 99999999996 then $F2a < (country \text{ specific boundary})$ | List the top and bottom 50 Countries to check results against national norms |
| FL 23 | F2c | Warning | If F2c in the range 1 to 99999999996 then $F2c < (country \text{ specific boundary})$ | List the top and bottom 50 Countries to check results against national norms |

ESTAT reserves the right to correct errors in these rules should they become evident and to add additional checks should be found to be necessary to guarantee the quality of the CVTS3 data set.

Annex 11 : Country codes (“COUNTRY”) and Language codes (“IDLANGUA”)

| Country | Code |
|----------------|-------------|
| Albania | AL |
| Austria | AT |
| Belgium | BE |
| Bulgaria | BG |
| Croatia | HR |
| Cyprus | CY |
| Czech Republic | CZ |
| Denmark | DK |
| Estonia | EE |
| Finland | FI |
| France | FR |
| Germany | DE |
| Greece | GR |
| Hungary | HU |
| Ireland | IE |
| Italy | IT |
| Latvia | LV |
| Lithuania | LT |
| Luxembourg | LU |
| Malta | MT |
| Netherlands | NL |
| Norway | NO |
| Poland | PL |
| Portugal | PT |
| Romania | RO |
| Slovakia | SK |
| Slovenia | SI |
| Spain | ES |
| Sweden | SE |
| Turkey | TR |
| United Kingdom | UK |

| Language | Code |
|------------------|-------------|
| Albanian | sq |
| Basque | eu |
| Bulgarian | bg |
| Byelorussian | be |
| Catalan | ca |
| Czech | cs |
| Croatian | hr |
| Danish | da |
| Dutch | nl |
| German | de |
| Greek | el |
| English | en |
| Estonian | et |
| Finnish | fi |
| French | fr |
| Frisian | fy |
| Galician | gl |
| Hungarian | hu |
| Irish | ga |
| Italian | it |
| Letzeburgesch | le |
| Lithuanian | lt |
| Latvian, lettish | lv |
| Maltese | mt |
| Norwegian | no |
| Polish | pl |
| Portuguese | pt |
| Romanian | ro |
| Russian | ru |
| Scots gaelic | gd |
| Slovak | sk |
| Slovenian | sl |
| Spanish | es |
| Swedish | sv |
| Turkish | tr |
| Welsh | cy |

The IDLANGUA-variable refers to the language of the questionnaire. For example: the French version of the Belgium questionnaire should have “fr” on the IDLANGUA, the Dutch version of the Belgium questionnaire should have “nl”. So the purpose of the IDLANGUA variable is to distinguish the range the different language-versions of the questionnaire. Two-letter lower-case symbols are used.

The checking program will search and report on variance in answers within the range the different language versions of the questionnaire. However, this variable will not be used in the final reports of Eurostat.

Note: If a language is used which is not in this list, please use the right ISO-code 639.

Annex 12 : NACE-code (“A1”) - categories to be addressed by all countries in CVTS3

Section C Mining and quarrying

Subsection CA Mining and quarrying of energy producing materials

| | |
|------|--|
| 1010 | Mining and agglomeration of hard coal |
| 1020 | Mining and agglomeration of lignite |
| 1030 | Extraction and agglomeration of peat |
| 1110 | Extraction of crude petroleum and natural gas |
| 1120 | Service activities incidental to oil and gas extraction, excluding surveying |
| 1200 | Mining of uranium and thorium ores |

Subsection CB Mining and quarrying, except of energy producing materials

| | |
|------|---|
| 1310 | Mining of iron ores |
| 1320 | Mining of non-ferrous metal ores, except uranium and thorium ores |
| 1411 | Quarrying of ornamental and building stone |
| 1412 | Quarrying of limestone, gypsum and chalk |
| 1413 | Quarrying of slate |
| 1421 | Operation of gravel and sand pits |
| 1422 | Mining of clays and kaolin |
| 1430 | Mining of chemical and fertilizer minerals |
| 1440 | Production of salt |
| 1450 | Other mining and quarrying n.e.c. |

Section D Manufacturing

Subsection DA Manufacture of food products, beverages and tobacco

| | |
|------|--|
| 1511 | Production and preserving of meat |
| 1512 | Production and preserving of poultry meat |
| 1513 | Production of meat and poultry meat products |
| 1520 | Processing and preserving of fish and fish products |
| 1531 | Processing and preserving of potatoes |
| 1532 | Manufacture of fruit and vegetable juice |
| 1533 | Processing and preserving of fruit and vegetables n.e.c. |
| 1541 | Manufacture of crude oils and fats |
| 1542 | Manufacture of refined oils and fats |
| 1543 | Manufacture of margarine and similar edible fats |
| 1551 | Operation of dairies and cheese making |
| 1552 | Manufacture of ice cream |
| 1561 | Manufacture of grain mill products |
| 1562 | Manufacture of starches and starch products |
| 1571 | Manufacture of prepared feeds for farm animals |
| 1572 | Manufacture of prepared pet foods |
| 1581 | Manufacture of bread; manufacture of fresh pastry goods and cakes |
| 1582 | Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes |
| 1583 | Manufacture of sugar |
| 1584 | Manufacture of cocoa; chocolate and sugar confectionery |
| 1585 | Manufacture of macaroni, noodles, couscous and similar farinaceous products |
| 1586 | Processing of tea and coffee |
| 1587 | Manufacture of condiments and seasonings |
| 1588 | Manufacture of homogenized food preparations and dietetic food |
| 1589 | Manufacture of other food products n.e.c. |
| 1591 | Manufacture of distilled potable alcoholic beverages |
| 1592 | Production of ethyl alcohol from fermented materials |
| 1593 | Manufacture of wines |
| 1594 | Manufacture of cider and other fruit wines |
| 1595 | Manufacture of other non-distilled fermented beverages |
| 1596 | Manufacture of beer |
| 1597 | Manufacture of malt |
| 1598 | Production of mineral waters and soft drinks |
| 1600 | Manufacture of tobacco products |

| | |
|----------------------|---|
| <u>Subsection DB</u> | <u>Manufacture of textiles and textile products</u> |
| 1711 | Preparation and spinning of cotton-type fibres |
| 1712 | Preparation and spinning of woollen-type fibres |
| 1713 | Preparation and spinning of worsted-type fibres |
| 1714 | Preparation and spinning of flax-type fibres |
| 1715 | Throwing and preparation of silk, including from noils, and throwing and texturing of synthetic or artificial filament yarns |
| 1716 | Manufacture of sewing threads |
| 1717 | Preparation and spinning of other textile fibres |
| 1721 | Cotton-type weaving |
| 1722 | Woollen-type weaving |
| 1723 | Worsted-type weaving |
| 1724 | Silk-type weaving |
| 1725 | Other textile weaving |
| 1730 | Finishing of textiles |
| 1740 | Manufacture of made-up textile articles, except apparel |
| 1751 | Manufacture of carpets and rugs |
| 1752 | Manufacture of cordage, rope, twine and netting |
| 1753 | Manufacture of non-wovens and articles made from non-wovens, except apparel |
| 1754 | Manufacture of other textiles n.e.c. |
| 1760 | Manufacture of knitted and crocheted fabrics |
| 1771 | Manufacture of knitted and crocheted hosiery |
| 1772 | Manufacture of knitted and crocheted pullovers, cardigans and similar articles |
| 1810 | Manufacture of leather clothes |
| 1821 | Manufacture of workwear |
| 1822 | Manufacture of other outerwear |
| 1823 | Manufacture of underwear |
| 1824 | Manufacture of other wearing apparel and accessories n.e.c. |
| 1830 | Dressing and dyeing of fur; manufacture of articles of fur |
| <u>Subsection DC</u> | <u>Manufacture of leather and leather products</u> |
| 1910 | Tanning and dressing of leather |
| 1920 | Manufacture of luggage, handbags and the like, saddlery and harness |
| 1930 | Manufacture of footwear |
| <u>Subsection DD</u> | <u>Manufacture of wood and wood products</u> |
| 2010 | Sawmilling and planeing of wood; impregnation of wood |
| 2020 | Manufacture of veneer sheets; manufacture of plywood, laminate board, particle board, fibre board and other panels and boards |
| 2030 | Manufacture of builders' carpentry and joinery |
| 2040 | Manufacture of wooden containers |
| 2051 | Manufacture of other products of wood |
| 2052 | Manufacture of articles of cork, straw and plaiting materials |
| <u>Subsection DE</u> | <u>Manufacture of pulp, paper and paper products; publishing and printing</u> |
| 2111 | Manufacture of pulp |
| 2112 | Manufacture of paper and paperboard |
| 2121 | Manufacture of corrugated paper and paperboard and of containers of paper and paperboard |
| 2122 | Manufacture of household and sanitary goods and of toilet requisites |
| 2123 | Manufacture of paper stationery |
| 2124 | Manufacture of wallpaper |
| 2125 | Manufacture of other articles of paper and paperboard n.e.c. |
| 2211 | Publishing of books |
| 2212 | Publishing of newspapers |
| 2213 | Publishing of journals and periodicals |
| 2214 | Publishing of sound recordings |
| 2215 | Other publishing |
| 2221 | Printing of newspapers |
| 2222 | Printing n.e.c. |
| 2223 | Bookbinding |
| 2224 | Pre-press activities |
| 2225 | Ancillary activities related to printing |
| 2231 | Reproduction of sound recording |
| 2232 | Reproduction of video recording |
| 2233 | Reproduction of computer media |

| | |
|----------------------|---|
| <u>Subsection DF</u> | <u>Manufacture of coke, refined petroleum products and nuclear fuel</u> |
| 2310 | Manufacture of coke oven products |
| 2320 | Manufacture of refined petroleum products |
| 2330 | Processing of nuclear fuel |
| <u>Subsection DG</u> | <u>Manufacture of chemicals, chemical products and man-made fibres</u> |
| 2411 | Manufacture of industrial gases |
| 2412 | Manufacture of dyes and pigments |
| 2413 | Manufacture of other inorganic basic chemicals |
| 2414 | Manufacture of other organic basic chemicals |
| 2415 | Manufacture of fertilizers and nitrogen compounds |
| 2416 | Manufacture of plastics in primary forms |
| 2417 | Manufacture of synthetic rubber in primary forms |
| 2420 | Manufacture of pesticides and other agro-chemical products |
| 2430 | Manufacture of paints, varnishes and similar coatings, printing ink and mastics |
| 2441 | Manufacture of basic pharmaceutical products |
| 2442 | Manufacture of pharmaceutical preparations |
| 2451 | Manufacture of soap and detergents, cleaning and polishing preparations |
| 2452 | Manufacture of perfumes and toilet preparations |
| 2461 | Manufacture of explosives |
| 2462 | Manufacture of glues and gelatines |
| 2463 | Manufacture of essential oils |
| 2464 | Manufacture of photographic chemical material |
| 2465 | Manufacture of prepared unrecorded media |
| 2466 | Manufacture of other chemical products n.e.c. |
| 2470 | Manufacture of man-made fibres |
| <u>Subsection DH</u> | <u>Manufacture of rubber and plastic products</u> |
| 2511 | Manufacture of rubber tyres and tubes |
| 2512 | Retreading and rebuilding of rubber tyres |
| 2513 | Manufacture of other rubber products |
| 2521 | Manufacture of plastic plates, sheets, tubes and profiles |
| 2522 | Manufacture of plastic packing goods |
| 2523 | Manufacture of builders' ware of plastic |
| 2524 | Manufacture of other plastic products |
| <u>Subsection DI</u> | <u>Manufacture of other non-metallic mineral products</u> |
| 2611 | Manufacture of flat glass |
| 2612 | Shaping and processing of flat glass |
| 2613 | Manufacture of hollow glass |
| 2614 | Manufacture of glass fibres |
| 2615 | Manufacture and processing of other glass, including technical glassware |
| 2621 | Manufacture of ceramic household and ornamental articles |
| 2622 | Manufacture of ceramic sanitary fixtures |
| 2623 | Manufacture of ceramic insulators and insulating fittings |
| 2624 | Manufacture of other technical ceramic products |
| 2625 | Manufacture of other ceramic products |
| 2626 | Manufacture of refractory ceramic products |
| 2630 | Manufacture of ceramic tiles and flags |
| 2640 | Manufacture of bricks, tiles and construction products, in baked clay |
| 2651 | Manufacture of cement |
| 2652 | Manufacture of lime |
| 2653 | Manufacture of plaster |
| 2661 | Manufacture of concrete products for construction purposes |
| 2662 | Manufacture of plaster products for construction purposes |
| 2663 | Manufacture of ready-mixed concrete |
| 2664 | Manufacture of mortars |
| 2665 | Manufacture of fibre cement |
| 2666 | Manufacture of other articles of concrete, plaster and cement |
| 2670 | Cutting, shaping and finishing of ornamental and building stone |
| 2681 | Production of abrasive products |
| 2682 | Manufacture of other non-metallic mineral products n.e.c. |

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|----------------------|---|
| <u>Subsection DJ</u> | <u>Manufacture of basic metals and fabricated metal products</u> |
| 2710 | Manufacture of basic iron and steel and of ferro-alloys |
| 2721 | Manufacture of cast iron tubes |
| 2722 | Manufacture of steel tubes |
| 2731 | Cold drawing |
| 2732 | Cold rolling of narrow strip |
| 2733 | Cold forming or folding |
| 2734 | Wire drawing |
| 2741 | Precious metals production |
| 2742 | Aluminium production |
| 2743 | Lead, zinc and tin production |
| 2744 | Copper production |
| 2745 | Other non-ferrous metal production |
| 2751 | Casting of iron |
| 2752 | Casting of steel |
| 2753 | Casting of light metals |
| 2754 | Casting of other non-ferrous metals |
| 2811 | Manufacture of metal structures and parts of structures |
| 2812 | Manufacture of builders' carpentry and joinery of metal |
| 2821 | Manufacture of tanks, reservoirs and containers of metal |
| 2822 | Manufacture of central heating radiators and boilers |
| 2830 | Manufacture of steam generators, except central heating hot water boilers |
| 2840 | Forging, pressing, stamping and roll forming of metal; powder metallurgy |
| 2851 | Treatment and coating of metals |
| 2852 | General mechanical engineering |
| 2861 | Manufacture of cutlery |
| 2862 | Manufacture of tools |
| 2863 | Manufacture of locks and hinges |
| 2871 | Manufacture of steel drums and similar containers |
| 2872 | Manufacture of light metal packaging |
| 2873 | Manufacture of wire products |
| 2874 | Manufacture of fasteners, screw machine products, chain and springs |
| 2875 | Manufacture of other fabricated metal products n.e.c. |
| <u>Subsection DK</u> | <u>Manufacture of machinery and equipment n.e.c.</u> |
| 2911 | Manufacture of engines and turbines, except aircraft, vehicle and cycle engines |
| 2912 | Manufacture of pumps and compressors |
| 2913 | Manufacture of taps and valves |
| 2914 | Manufacture of bearings, gears, gearing and driving elements |
| 2921 | Manufacture of furnaces and furnace burners |
| 2922 | Manufacture of lifting and handling equipment |
| 2923 | Manufacture of non-domestic cooling and ventilation equipment |
| 2924 | Manufacture of other general purpose machinery n.e.c. |
| 2931 | Manufacture of agricultural tractors |
| 2932 | Manufacture of other agricultural and forestry machinery |
| 2941 | Manufacture of portable hand held power tools |
| 2942 | Manufacture of other metalworking machine tools |
| 2943 | Manufacture of other machine tools n.e.c. |
| 2951 | Manufacture of machinery for metallurgy |
| 2952 | Manufacture of machinery for mining, quarrying and construction |
| 2953 | Manufacture of machinery for food, beverage and tobacco processing |
| 2954 | Manufacture of machinery for textile, apparel and leather production |
| 2955 | Manufacture of machinery for paper and paperboard production |
| 2956 | Manufacture of other special purpose machinery n.e.c. |
| 2960 | Manufacture of weapons and ammunition |
| 2971 | Manufacture of electric domestic appliances |
| 2972 | Manufacture of non-electric domestic appliances |

| | |
|----------------------|--|
| <u>Subsection DL</u> | <u>Manufacture of electrical and optical equipment</u> |
| 3001 | Manufacture of office machinery |
| 3002 | Manufacture of computers and other information processing equipment |
| 3110 | Manufacture of electric motors, generators and transformers |
| 3120 | Manufacture of electricity distribution and control apparatus |
| 3130 | Manufacture of insulated wire and cable |
| 3140 | Manufacture of accumulators, primary cells and primary batteries |
| 3150 | Manufacture of lighting equipment and electric lamps |
| 3161 | Manufacture of electrical equipment for engines and vehicles n.e.c. |
| 3162 | Manufacture of other electrical equipment n.e.c. |
| 3210 | Manufacture of electronic valves and tubes and other electronic components |
| 3220 | Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy |
| 3230 | Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods |
| 3310 | Manufacture of medical and surgical equipment and orthopaedic appliances |
| 3320 | Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment |
| 3330 | Manufacture of industrial process control equipment |
| 3340 | Manufacture of optical instruments and photographic equipment |
| 3350 | Manufacture of watches and clocks |
| <u>Subsection DM</u> | <u>Manufacture of transport equipment</u> |
| 3410 | Manufacture of motor vehicles |
| 3420 | Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers |
| 3430 | Manufacture of parts and accessories for motor vehicles and their engines |
| 3511 | Building and repairing of ships |
| 3512 | Building and repairing of pleasure and sporting boats |
| 3520 | Manufacture of railway and tramway locomotives and rolling stock |
| 3530 | Manufacture of aircraft and spacecraft |
| 3541 | Manufacture of motorcycles |
| 3542 | Manufacture of bicycles |
| 3543 | Manufacture of invalid carriages |
| 3550 | Manufacture of other transport equipment n.e.c. |
| <u>Subsection DN</u> | <u>Manufacturing n.e.c.</u> |
| 3611 | Manufacture of chairs and seats |
| 3612 | Manufacture of other office and shop furniture |
| 3613 | Manufacture of other kitchen furniture |
| 3614 | Manufacture of other furniture |
| 3615 | Manufacture of mattresses |
| 3621 | Striking of coins |
| 3622 | Manufacture of jewellery and related articles n.e.c. |
| 3630 | Manufacture of musical instruments |
| 3640 | Manufacture of sports goods |
| 3650 | Manufacture of games and toys |
| 3661 | Manufacture of imitation jewellery |
| 3662 | Manufacture of brooms and brushes |
| 3663 | Other manufacturing n.e.c. |
| 3710 | Recycling of metal waste and scrap |
| 3720 | Recycling of non-metal waste and scrap |
| Section E | Electricity, gas and water supply |
| 4011 | Production of electricity |
| 4012 | Transmission of electricity |
| 4013 | Distribution and trade of electricity |
| 4021 | Manufacture of gas |
| 4022 | Distribution and trade of gaseous fuels through mains |
| 4030 | Steam and hot water supply |
| 4100 | Collection, purification and distribution of water |

Section F**Construction**

| | |
|------|--|
| 4511 | Demolition and wrecking of buildings; earth moving |
| 4512 | Test drilling and boring |
| 4521 | General construction of buildings and civil engineering works |
| 4522 | Erection of roof covering and frames |
| 4523 | Construction of motorways, roads, airfields and sport facilities |
| 4524 | Construction of water projects |
| 4525 | Other construction work involving special trades |
| 4531 | Installation of electrical wiring and fittings |
| 4532 | Insulation work activities |
| 4533 | Plumbing |
| 4534 | Other building installation |
| 4541 | Plastering |
| 4542 | Joinery installation |
| 4543 | Floor and wall covering |
| 4544 | Painting and glazing |
| 4545 | Other building completion |
| 4550 | Renting of construction or demolition equipment with operator |

Section G**Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods**

| | |
|------|--|
| 5010 | Sale of motor vehicles |
| 5020 | Maintenance and repair of motor vehicles |
| 5030 | Sale of motor vehicle parts and accessories |
| 5040 | Sale, maintenance and repair of motorcycles and related parts and accessories |
| 5050 | Retail sale of automotive fuel |
| 5111 | Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods |
| 5112 | Agents involved in the sale of fuels, ores, metals and industrial chemicals |
| 5113 | Agents involved in the sale of timber and building materials |
| 5114 | Agents involved in the sale of machinery, industrial equipment, ships and aircraft |
| 5115 | Agents involved in the sale of furniture, household goods, hardware and ironmongery |
| 5116 | Agents involved in the sale of textiles, clothing, footwear and leather goods |
| 5117 | Agents involved in the sale of food, beverages and tobacco |
| 5118 | Agents specializing in the sale of particular products or ranges of products n.e.c. |
| 5119 | Agents involved in the sale of a variety of goods |
| 5121 | Wholesale of grain, seeds and animal feeds |
| 5122 | Wholesale of flowers and plants |
| 5123 | Wholesale of live animals |
| 5124 | Wholesale of hides, skins and leather |
| 5125 | Wholesale of unmanufactured tobacco |
| 5131 | Wholesale of fruit and vegetables |
| 5132 | Wholesale of meat and meat products |
| 5133 | Wholesale of dairy produce, eggs and edible oils and fats |
| 5134 | Wholesale of alcoholic and other beverages |
| 5135 | Wholesale of tobacco products |
| 5136 | Wholesale of sugar and chocolate and sugar confectionery |
| 5137 | Wholesale of coffee, tea, cocoa and spices |
| 5138 | Wholesale of other food, including fish, crustaceans and molluscs |
| 5139 | Non-specialized wholesale of food, beverages and tobacco |
| 5141 | Wholesale of textiles |
| 5142 | Wholesale of clothing and footwear |
| 5143 | Wholesale of electrical household appliances and radio and television goods |
| 5144 | Wholesale of china and glassware, wallpaper and cleaning materials |
| 5145 | Wholesale of perfume and cosmetics |
| 5146 | Wholesale of pharmaceutical goods |
| 5147 | Wholesale of other household goods |
| 5151 | Wholesale of solid, liquid and gaseous fuels and related products |
| 5152 | Wholesale of metals and metal ores |
| 5153 | Wholesale of wood, construction materials and sanitary equipment |
| 5154 | Wholesale of hardware, plumbing and heating equipment and supplies |
| 5155 | Wholesale of chemical products |
| 5156 | Wholesale of other intermediate products |
| 5157 | Wholesale of waste and scrap |
| 5181 | Wholesale of machine tools |
| 5182 | Wholesale of mining, construction and civil engineering machinery |
| 5183 | Wholesale of machinery for the textile industry and of sewing and knitting machines |
| 5184 | Wholesale of computers, computer peripheral equipment and software |
| 5185 | Wholesale of other office machinery and equipment |

| | |
|------|--|
| 5186 | Wholesale of other electronic parts and equipment |
| 5187 | Wholesale of other machinery for use in industry, trade and navigation |
| 5188 | Wholesale of agricultural machinery and accessories and implements, including tractors |
| 5190 | Other wholesale |
| 5211 | Retail sale in non-specialized stores with food, beverages or tobacco predominating |
| 5212 | Other retail sale in non-specialized stores |
| 5221 | Retail sale of fruit and vegetables |
| 5222 | Retail sale of meat and meat products |
| 5223 | Retail sale of fish, crustaceans and molluscs |
| 5224 | Retail sale of bread, cakes, flour confectionery and sugar confectionery |
| 5225 | Retail sale of alcoholic and other beverages |
| 5226 | Retail sale of tobacco products |
| 5227 | Other retail sale of food, beverages and tobacco in specialized stores |
| 5231 | Dispensing chemists |
| 5232 | Retail sale of medical and orthopaedic goods |
| 5233 | Retail sale of cosmetic and toilet articles |
| 5241 | Retail sale of textiles |
| 5242 | Retail sale of clothing |
| 5243 | Retail sale of footwear and leather goods |
| 5244 | Retail sale of furniture, lighting equipment and household articles n.e.c. |
| 5245 | Retail sale of electrical household appliances and radio and television goods |
| 5246 | Retail sale of hardware, paints and glass |
| 5247 | Retail sale of books, newspapers and stationery |
| 5248 | Other retail sale in specialized stores |
| 5250 | Retail sale of second-hand goods in stores |
| 5261 | Retail sale via mail order houses |
| 5262 | Retail sale via stalls and markets |
| 5263 | Other non-store retail sale |
| 5271 | Repair of boots, shoes and other articles of leather |
| 5272 | Repair of electrical household goods |
| 5273 | Repair of watches, clocks and jewellery |
| 5274 | Repair n.e.c. |

Section H Hotels and restaurants

| | |
|------|--|
| 5510 | Hotels |
| 5521 | Youth hostels and mountain refuges |
| 5522 | Camping sites, including caravan sites |
| 5523 | Other provision of lodgings n.e.c. |
| 5530 | Restaurants |
| 5540 | Bars |
| 5551 | Canteens |
| 5552 | Catering |

Section I Transport, storage and communication

| | |
|------|--|
| 6010 | Transport via railways |
| 6021 | Other scheduled passenger land transport |
| 6022 | Taxi operation |
| 6023 | Other land passenger transport |
| 6024 | Freight transport by road |
| 6030 | Transport via pipelines |
| 6110 | Sea and coastal water transport |
| 6120 | Inland water transport |
| 6210 | Scheduled air transport |
| 6220 | Non-scheduled air transport |
| 6230 | Space transport |
| 6311 | Cargo handling |
| 6312 | Storage and warehousing |
| 6321 | Other supporting land transport activities |
| 6322 | Other supporting water transport activities |
| 6323 | Other supporting air transport activities |
| 6330 | Activities of travel agencies and tour operators; tourist assistance activities n.e.c. |
| 6340 | Activities of other transport agencies |
| 6411 | National post activities |
| 6412 | Courier activities other than national post activities |
| 6420 | Telecommunications |

Section J**Financial intermediation**

| | |
|------|---|
| 6511 | Central banking |
| 6512 | Other monetary intermediation |
| 6521 | Financial leasing |
| 6522 | Other credit granting |
| 6523 | Other financial intermediation n.e.c. |
| 6601 | Life insurance |
| 6602 | Pension funding |
| 6603 | Non-life insurance |
| 6711 | Administration of financial markets |
| 6712 | Security broking and fund management |
| 6713 | Activities auxiliary to financial intermediation n.e.c. |
| 6720 | Activities auxiliary to insurance and pension funding |

Section K**Real estate, renting and business activities**

| | |
|------|--|
| 7011 | Development and selling of real estate |
| 7012 | Buying and selling of own real estate |
| 7020 | Letting of own property |
| 7031 | Real estate agencies |
| 7032 | Management of real estate on a fee or contract basis |
| 7110 | Renting of automobiles |
| 7121 | Renting of other land transport equipment |
| 7122 | Renting of water transport equipment |
| 7123 | Renting of air transport equipment |
| 7131 | Renting of agricultural machinery and equipment |
| 7132 | Renting of construction and civil engineering machinery and equipment |
| 7133 | Renting of office machinery and equipment, including computers |
| 7134 | Renting of other machinery and equipment n.e.c. |
| 7140 | Renting of personal and household goods n.e.c. |
| 7210 | Hardware consultancy |
| 7221 | Publishing of software |
| 7222 | Other software consultancy and supply |
| 7230 | Data processing |
| 7240 | Database activities |
| 7250 | Maintenance and repair of office, accounting and computing machinery |
| 7260 | Other computer related activities |
| 7310 | Research and experimental development on natural sciences and engineering |
| 7320 | Research and experimental development on social sciences and humanities |
| 7411 | Legal activities |
| 7412 | Accounting, book-keeping and auditing activities; tax consultancy |
| 7413 | Market research and public opinion polling |
| 7414 | Business and management consultancy activities |
| 7415 | Management activities of holding companies |
| 7420 | Architectural and engineering activities and related technical consultancy |
| 7430 | Technical testing and analysis |
| 7440 | Advertising |
| 7450 | Labour recruitment and provision of personnel |
| 7460 | Investigation and security activities |
| 7470 | Industrial cleaning |
| 7481 | Photographic activities |
| 7482 | Packaging activities |
| 7485 | Secretarial and translation activities |
| 7486 | Call centre activities |
| 7487 | Other business activities n.e.c. |

Section O**Other community, social and personal service activities**

| | |
|------|---|
| 9001 | Collection and treatment of sewage |
| 9002 | Collection and treatment of other waste |
| 9003 | Sanitation, remediation and similar activities |
| 9111 | Activities of business and employers' organizations |
| 9112 | Activities of professional organizations |
| 9120 | Activities of trade unions |
| 9131 | Activities of religious organizations |
| 9132 | Activities of political organizations |
| 9133 | Activities of other membership organizations n.e.c. |
| 9211 | Motion picture and video production |
| 9212 | Motion picture and video distribution |
| 9213 | Motion picture projection |
| 9220 | Radio and television activities |
| 9231 | Artistic and literary creation and interpretation |
| 9232 | Operation of arts facilities |
| 9233 | Fair and amusement park activities |
| 9234 | Other entertainment activities n.e.c. |
| 9240 | News agency activities |
| 9251 | Library and archives activities |
| 9252 | Museums activities and preservation of historical sites and buildings |
| 9253 | Botanical and zoological gardens and nature reserves activities |
| 9261 | Operation of sports arenas and stadiums |
| 9262 | Other sporting activities |
| 9271 | Gambling and betting activities |
| 9272 | Other recreational activities n.e.c. |
| 9301 | Washing and dry-cleaning of textile and fur products |
| 9302 | Hairdressing and other beauty treatment |
| 9303 | Funeral and related activities |
| 9304 | Physical well-being activities |
| 9305 | Other service activities n.e.c. |

Annex 13 : NACE-code (“A1”) - categories relevant to pilot studies on extended NACE

Section A Agriculture, hunting and forestry

| | |
|------|--|
| 0111 | Growing of cereals and other crops n.e.c. |
| 0112 | Growing of vegetables, horticultural specialities and nursery products |
| 0113 | Growing of fruit, nuts, beverage and spice crops |
| 0121 | Farming of cattle, dairy farming |
| 0122 | Farming of sheep, goats, horses, asses, mules and hinnies |
| 0123 | Farming of swine |
| 0124 | Farming of poultry |
| 0125 | Other farming of animals |
| 0130 | Growing of crops combined with farming of animals (mixed farming) |
| 0141 | Agricultural service activities; landscape gardening |
| 0142 | Animal husbandry service activities, except veterinary activities |
| 0150 | Hunting, trapping and game propagation, including related service activities |
| 0201 | Forestry and logging |
| 0202 | Forestry and logging related service activities |

Section B Fishing

| | |
|------|--------------|
| 0501 | Fishing |
| 0502 | Fish farming |

Section L Public administration and defence; compulsory social security

| | |
|------|--|
| 7511 | General (overall) public service activities |
| 7512 | Regulation of the activities of agencies that provide health care, education, cultural services and other social services, excluding social security |
| 7513 | Regulation of and contribution to more efficient operation of business |
| 7514 | Supporting service activities for the government as a whole |
| 7521 | Foreign affairs |
| 7522 | Defence activities |
| 7523 | Justice and judicial activities |
| 7524 | Public security, law and order activities |
| 7525 | Fire service activities |
| 7530 | Compulsory social security activities |

Section M Education

| | |
|------|--|
| 8010 | Primary education |
| 8021 | General secondary education |
| 8022 | Technical and vocational secondary education |
| 8030 | Higher education |
| 8041 | Driving school activities |
| 8042 | Adult and other education n.e.c. |

Section N Health and social work

| | |
|------|--|
| 8511 | Hospital activities |
| 8512 | Medical practice activities |
| 8513 | Dental practice activities |
| 8514 | Other human health activities |
| 8520 | Veterinary activities |
| 8531 | Social work activities with accommodation |
| 8532 | Social work activities without accommodation |

Section P Activities of households

| | |
|------|--|
| 9500 | Activities of households as employers of domestic staff |
| 9600 | Undifferentiated goods producing activities of private households for own use |
| 9700 | Undifferentiated services producing activities of private households for own use |

Section Q Extra-territorial organizations and bodies

| | |
|------|--|
| 9900 | Extra-territorial organizations and bodies |
|------|--|

Annex 14 : Data collection codes (“PROC”)

To distinguish in the range the different ways in which respondents can be requested to complete the questionnaire, the data collection procedure variable (PROC) must be used.

The data collection variable refers to the collection procedure used for collecting most of the information. This means that if some information is taken from the SBR, for instance, the data collection information procedure variable will refer to that part of the data that are directly collected from the respondent.

| Value | Data collection approach |
|--------------|--|
| 10 | Postal, non electronic version |
| 11 | Postal, electronic version |
| 20 | Face-to-face, non electronic version |
| 21 | Face-to-face, electronic version |
| 30 | Telephone, non electronic version |
| 31 | Telephone, electronic version |
| 40 | Use of internet |
| 50 | Mixed mode collection (e.g.: both postal and interview to collect data from one enterprises) |

Annex 15 : Regulation (EC) No 1552/2005 of the European Parliament and of the Council

http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/oj/2005/l_255/l_25520050930en00010005.pdf

I

(Acts whose publication is obligatory)

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
(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 285(1) thereof,

Having regard to the proposal from the Commission,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ⁽¹⁾,

Whereas:

(1) At the Lisbon European Council on 23 and 24 March 2000 the European Union set the strategic goal of becoming the most competitive and dynamic knowledge-based economy in the world, capable of sustained economic growth with more and better jobs and greater social cohesion.

(2) The employability, adaptability and mobility of citizens are vital for the Union to maintain its commitment to becoming the most competitive and dynamic knowledge-based economy in the world.

(3) Lifelong learning is a key element in developing and promoting a skilled, trained and adaptable workforce.

(4) The Council Conclusions of 5 May 2003 on reference levels of European average performance in education and training (Benchmarks) ⁽²⁾ adopted the following benchmark for lifelong learning: 'Therefore, by 2010, the European Union average level of participation in Lifelong Learning should be at least 12,5 % of the adult working age population (25 to 64 age group)'.

⁽¹⁾ Opinion of the European Parliament of 23 February 2005 (not yet published in the Official Journal) and Council Decision of 27 June 2005.

⁽²⁾ OJ C 134, 7.6.2003, p. 3.

(5) The Lisbon European Council confirmed lifelong learning as a basic component of the European social model.

(6) The new European Employment Strategy confirmed by Council Decision 2003/578/EC of 22 July 2003 on guidelines for the employment policies of the Member States ⁽³⁾ aims to contribute better to the Lisbon strategy and to implement coherent and comprehensive strategies for lifelong learning.

(7) When applying this Regulation, account should be taken of the notion of 'people at a disadvantage in the labour market' given in the guidelines for the employment policies of the Member States.

(8) Particular attention should be given to training at the workplace and during working hours, both these aspects being crucial dimensions of lifelong learning.

(9) Comparable statistical information at Community level, with specific respect to vocational training in enterprises, is essential for the development of lifelong learning strategies and for the monitoring of progress in their implementation.

(10) The production of specific Community statistics is governed by the rules set out in Council Regulation (EC) No 322/97 of 17 February 1997 on Community Statistics ⁽⁴⁾.

(11) The transmission of data subject to statistical confidentiality is governed by the rules set out in Regulation (EC) No 322/97 and in Council Regulation (Euratom, EEC) No 1588/90 of 11 June 1990 on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities ⁽⁵⁾.

⁽³⁾ OJ L 197, 5.8.2003, p. 13.

⁽⁴⁾ OJ L 52, 22.2.1997, p. 1. Regulation as amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).

⁽⁵⁾ OJ L 151, 15.6.1990, p. 1. Regulation as last amended by Regulation (EC) No 1882/2003.

- (12) Commission Regulation (EC) No 831/2002 of 17 May 2002 implementing Council Regulation (EC) No 322/97 on Community Statistics, concerning access to confidential data for scientific purposes ⁽¹⁾ established the conditions under which access to confidential data transmitted to the Community authority may be granted.
- (13) Since the objective of this Regulation, namely the creation of common statistical standards that permit the production of harmonised data on vocational training in enterprises, cannot be sufficiently achieved by the Member States and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.
- (14) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽²⁾. These measures should take into account the capacities available in the Member States for data collection and processing.
- (15) The Statistical Programme Committee has been consulted in accordance with Article 3 of Council Decision 89/382/EEC, Euratom of 19 June 1989 establishing a Committee on the Statistical Programmes of the European Communities ⁽³⁾,

HAVE ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation establishes a common framework for the production of Community statistics on vocational training in enterprises.

Article 2

Definitions

For the purpose of this Regulation, the following definitions shall apply:

- ⁽¹⁾ OJ L 133, 18.5.2002, p. 7.
⁽²⁾ OJ L 184, 17.7.1999, p. 23.
⁽³⁾ OJ L 181, 28.6.1989, p. 47.

1. 'enterprise' means the enterprise as defined in Council Regulation (EEC) No 696/93 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community ⁽⁴⁾;

2. 'NACE Rev. 1.1' means the common statistical classification of economic activities within the European Community, as established by Council Regulation (EEC) No 3037/90 of 9 October 1990 on the statistical classification of economic activities in the European Community ⁽⁵⁾.

Article 3

Data to be collected

1. The data shall be collected by the Member States with a view to producing Community statistics for the analysis of continuing vocational training in enterprises in the following fields:

- (a) training policy and training strategies of enterprises in developing the skills of their workforce;
- (b) management, organisation 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 at a disadvantage in the labour market;

⁽⁴⁾ OJ L 76, 30.3.1993, p. 1. Regulation as last amended by Regulation (EC) No 1882/2003.

⁽⁵⁾ OJ L 293, 24.10.1990, p. 1. Regulation as last amended by Regulation (EC) No 1882/2003.

- (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.
2. Specific data shall be collected by the Member States with respect to initial vocational training in enterprises on:
- (a) participants in initial vocational training; and
 - (b) total expenditure on initial vocational training.

Article 4

Scope of statistics

The statistics on vocational training in enterprises shall cover at least all economic activities defined in sections C to K and O of the NACE Rev. 1.1.

Article 5

Statistical units

1. For the collection of the data, the enterprise active in one of the economic activities referred to in Article 4 and employing 10 or more employees shall be used as a statistical unit.
2. Having regard to the specific national size distribution of enterprises and the evolution of policy needs, Member States may extend the definition of the statistical unit in their country. The Commission may also decide to extend this definition in accordance with the procedure referred to in Article 14(2), if such extension would enhance substantially the representativeness and the quality of the result of the survey in the Member States concerned.

Article 6

Data sources

1. Member States shall acquire the required data using either a survey in enterprises or a combination of a survey in enterprises and other sources, applying the principles of reduced burden on respondents and of administrative simplification.
2. Member States shall lay down the modalities for enterprises to reply to the survey.
3. Through the survey the enterprises shall be called upon to give correct and complete data within the prescribed deadlines.

4. Other sources, including administrative data, could be used to complete the data to be collected where these sources are appropriate in terms of relevance and timeliness.

Article 7

Survey characteristics

1. The survey shall be a sample survey.
2. Member States shall take the necessary measures to ensure that the data they transmit reflect the structure of the population of the statistical units. The survey shall be conducted in such a way as to permit a breakdown of the results at Community level in at least the following categories:
 - (a) economic activities pursuant to NACE Rev. 1.1; and
 - (b) size of the enterprises.
3. Sampling and precision requirements, the sample sizes needed to meet these requirements, and the detailed specifications of the NACE Rev. 1.1 and size categories into which the results can be broken down shall be determined in accordance with the procedure referred to in Article 14(2).

Article 8

Survey approach

1. In order to reduce the burden on respondents the survey approach shall permit the data collection to be customised with respect to:
 - (a) training and non-training enterprises; and
 - (b) different forms of vocational training.
2. The specific data to be collected with respect to training and non-training enterprises and to the different forms of vocational training shall be determined in accordance with the procedure referred to in Article 14(2).

Article 9

Quality control and reports

1. Member States shall take the necessary measures to ensure the quality of the data they transmit.
2. No later than 21 months after the end of each reference period referred to in Article 10, Member States shall submit to the Commission (Eurostat) a quality report containing all the information and data requested for it to verify the quality of the data transmitted. The report shall specify possible breaches of the methodological requirements.

3. On the basis of the reports referred to in paragraph 2, the Commission (Eurostat) shall assess the quality of the data transmitted with particular regard to ensuring the comparability of the data between Member States.

4. The quality requirements for the data to be collected and transmitted for Community statistics on vocational training in enterprises, the structure of the quality reports referred to in paragraph 2 and any measures necessary for assessing or improving the quality of the data shall be determined in accordance with the procedure referred to in Article 14(2).

Article 10

Reference period and periodicity

1. The reference period to be covered by the data collection shall be one calendar year.
2. The Commission shall determine the first reference year for which the data are to be collected in accordance with the procedure referred to in Article 14(2).
3. Member States shall collect the data every five years.

Article 11

Transmission of data

1. Member States and the Commission, within their respective fields of competence, shall promote the conditions for increased use of electronic data collection, electronic data transmission and automatic data processing.
2. Member States shall transmit to the Commission (Eurostat) the individual data on enterprises in accordance with the existing Community provisions on transmission of data subject to statistical confidentiality as set out in Regulations (EC) No 322/97 and (Euratom, EEC) No 1588/90. Member States shall ensure that the transmitted data do not permit the direct identification of the statistical units.
3. Member States shall transmit the data in electronic form, in conformity with the appropriate technical format and the interchange standard to be determined in accordance with the procedure referred to in Article 14(2).
4. Member States shall transmit the complete and correct data no later than 18 months after the end of each reference year.

Article 12

Report on implementation

1. By 20 October 2010 and after consultation of the Statistical Programme Committee, the Commission shall transmit a report to the European Parliament and the Council on the implementation of this Regulation. In particular, this report shall:
 - (a) assess the benefits accruing to the Community, the Member States and the users of the statistics produced in relation to the burden on the respondents; and
 - (b) identify areas for potential improvement and amendments considered necessary in the light of the results obtained.
2. Following the report, the Commission may propose measures to improve the implementation of this Regulation.

Article 13

Implementing measures

The measures necessary for the implementation of this Regulation, including measures to take account of economic and technical developments concerning the collection, transmission and processing of the data, shall be adopted in accordance with the procedure referred to in Article 14(2).

Article 14

Committee procedure

1. The Commission shall be assisted by the Statistical Programme Committee.
2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

Article 15

Financing

1. For the first reference year for which the Community statistics provided for in this Regulation are produced, the Commission shall make a financial contribution to the Member States to help cover the costs incurred by them in collecting, processing and transmitting the data.

2. The amount of the financial contribution shall be fixed as part of the relevant annual budgetary procedure. The budget authority shall determine the appropriation available.

3. In implementing this Regulation, the Commission may have recourse to experts and to technical assistance organisations, the financing of which may be provided for within the overall financial framework for this Regulation. The Commission may organise seminars, colloquia or other meetings of experts as are likely to facilitate the implementation of this

Regulation, and undertake appropriate information, publication and dissemination actions.

Article 16

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 7 September 2005.

For the European Parliament

The President

J. BORRELL FONTELLES

For the Council

The President

C. CLARKE

Annex 16 : Commission regulation



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, (date)

±

±

Draft

COMMISSION REGULATION (EC) No .../...

Of (date)

**implementing Council Regulation (EC) No 1552/2005 of the European Parliament and
the Council on statistics relating to vocational training in enterprises**

(Text with EEA relevance)

Draft

COMMISSION REGULATION (EC) No .../...

of

implementing Regulation (EC) No 1552/2005 of the European Parliament and the Council on statistics relating to vocational training in enterprises

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation No 1552/2005/EC of the European Parliament and the Council of 7th September 2005 on statistics relating to vocational training in enterprises⁴ *and in particular Articles 7(3), 8(2), 9(4), 10(2), and 11(3) thereof,*

Whereas:

- Regulation (EC) No 1552/2005 establishes a common framework for the production of Community statistics on vocational training in enterprises.
- In order to implement Regulation (EC) No 1552/2005, measures concerning the sampling and precision requirements and sample size needed to meet these requirement, and the detailed NACE and size categories into which the results can be broken down should be adopted,
- The Commission should define the specific data to be collected with respect to the training and non-training enterprises and to the different forms of vocational training,
- Implementing measures concerning the quality requirements for the data to be collected and transmitted for Community statistics on vocational training in enterprises, the structure of the quality reports and any measures necessary for assessing or improving the quality of the data should be adopted,
- The first reference year for which the data are to be collected should be established,
- Provisions should also be adopted concerning the appropriate technical format and interchange standard of the electronically transmitted data,

⁴ OJ L 255 . 30.9.2005 p. 1

- The measures provided for in this Regulation are in accordance with the opinion of the Statistical Programme Committee.

HAS ADOPTED THIS REGULATION:

Article 1

This regulation lays down measures to implement Regulation (EC) No 1552/2005/EC on statistics relating to vocational training in enterprises.

Article 2

The first reference year for which the data are to be collected shall be the calendar year 2005.

Article 3

The specific variables to be transmitted to the Commission (Eurostat) shall be as specified in Annex I.

Article 4

Sampling and precision requirements, the sample sizes needed to meet these requirements, and the detailed specifications of the NACE and size categories into which the results can be broken down shall be as specified in Annex II.

Article 5

Member States shall be responsible for data checking, error correction, imputation and weighting.
Imputation and weighting of variables shall follow the principles laid down in Annex III.
Derogation from these principles shall be fully justified and reported in the quality report.

Article 6

Data shall be transmitted to the Commission (Eurostat) by the means and in the format specified in Annex IV.

Article 7

Each Member State shall perform a quality evaluation of its data, to be presented in the form of a quality report. The quality report shall be prepared and presented to the Commission (Eurostat) in accordance with the format specified in Annex V.

Article 8

With a view to achieving a high level of harmonisation of the survey results across countries, the Commission (Eurostat) in close cooperation with Member States, shall propose methodological and practical recommendations and guidelines for the implementation of the survey in the form of a "European Union Manual".

Article 9

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [...]

For the Commission

[...]

Member of the Commission

Annex I

Variables

Note to the table:

The value "core" and "key" in the column "variable group" are explained in Annex III.

The value "ID" means that the variable is an "identification variable".

In the column "variable type" the value "QL" refers to "Qualitative variable" and "QT" refers to "Quantitative variable".

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|---|--|
| COUNTRY | ID | | 2 | Char | Country code | No missing - Unique by Country |
| ENTERPR | ID | | 6 | Num | Enterprise ID | No missing - Unique by case |
| WEIGHT | ID | | 10 | Num | Two decimal positions - use "." as decimal separator | No Missing |
| NACE_SP | ID | | 4 | Num | Sampling plan NACE - category economic activity | No missing |
| SIZE_SP | ID | | 1 | Num | Sampling plan size group | No missing |
| NSTRA_SP | ID | | 5 | Num | Sampling plan – Number of enterprises in the stratum defined by NACE_SP and SIZE_SP, i.e. the population | No missing |
| N_SP | ID | | 5 | Num | Sampling plan - Number of sampled enterprises from the sample-frame in the stratum defined by NACE_SP and SIZE_SP | No missing |
| SUB_SP | ID | | 1 | Num | Sub-sample indicator, shows if enterprise belongs to sub-sample | No missing |
| N_RESPST | ID | | 5 | Num | Number of responding enterprises in the stratum defined by NACE_SP and SIZE_SP, i.e. the population | No missing |
| N_EMPREG | ID | | 6 | Num | Number of persons employed according to the register | |
| RESPONSE | ID | | 1 | Num | Response indicator | No missing |
| PROC | ID | | 2 | Num | Record data collection method | No missing |
| IDLANGUA | ID | | 2 | Char | Language identification | |
| IDREGION | ID | | 3 | Char | Region identification NUTS - level 1 | No missing |
| EXTRA1 | ID | | 10 | Num | Extra variable 1 | |
| EXTRA2 | ID | | 10 | Num | Extra variable 2 | |
| EXTRA3 | ID | | 10 | Num | Extra variable 3 | |
| A1 | Core | QL | 4 | Num | Actual NACE CODE | Core variable - No missing - No Imputation |
| A2tot04 | Key | QT | 6 | Num | Total number of persons employed 31-12-2004 | Key variable - No missing |
| A2tot05 | Core | QT | 6 | Num | Total number of persons employed 31-12-2005 | Core Variable - No missing - No Imputation |
| A2m05 | | QT | 6 | Num | Total number of males employed 31-12-2005 | |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|--|--|
| A2f05 | | QT | 6 | Num | Total number of females employed 31-12-2005 | |
| A3a | | QT | 6 | Num | Persons employed - Under 25 years of age | |
| A3b | | QT | 6 | Num | Persons employed - 25 to 54 year of age | |
| A3c | | QT | 6 | Num | Persons employed - 55 years and older | |
| A4 | Key | QT | 12 | Num | Total number of hours worked in the reference year 2005 by persons employed | Key variable - No missing - in Hours |
| A4m | | QT | 12 | Num | Total number of hours worked in the reference year 2005 by male persons employed | in Hours |
| A4f | | QT | 12 | Num | Total number of hours worked in the reference year 2005 by female persons employed | in Hours |
| A5 | Key | QT | 12 | Num | Total labour costs (direct + indirect) of all persons employed in the ref year 2005 | Key variable - No missing - in Euro |
| A6 | | QL | 1 | Num | SIGNIFICANTLY new technologically improved products or services or methods of producing or delivering products and services during the reference year. | |
| B1a | Core | QL | 1 | Num | Internal CVT courses | Core Variable - No missing - No Imputation |
| B1b | Core | QL | 1 | Num | External CVT courses | Core Variable - No missing - No Imputation |
| B2aflag | Core | QL | 1 | Num | Flag - on-the-job training | Core Variable - No missing - No Imputation |
| B2a | | QT | 6 | Num | Participants in other form of CVT - On-the job training | |
| B2bflag | Core | QL | 1 | Num | Flag - job rotation | Core Variable - No missing - No Imputation |
| B2b | | QT | 6 | Num | Participants in other form of CVT - Job-rotation, exchanges, secondments or study visits | |
| B2cflag | Core | QL | 1 | Num | Flag - Learning and quality circles | Core Variable - No missing - No Imputation |
| B2c | | QT | 6 | Num | Participants in other form of CVT - Learning or quality circles | |
| B2dflag | Core | QL | 1 | Num | Flag - self directed learning | Core Variable - No missing - No Imputation |
| B2d | | QT | 6 | Num | Participants in other form of CVT - Self directed learning | |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|--|--|
| B2eflag | Core | QL | 1 | Num | Flag - attendance at conferences etc | Core Variable - No missing - No Imputation |
| B2e | | QT | 6 | Num | Participants in other form of CVT - Attendance at conferences, etc. | |
| B3a | | QL | 1 | Num | CVT courses for persons employed in the previous year 2004 | |
| B3b | | QL | 1 | Num | Expect to provide CVT courses for persons employed during the next year 2006 | |
| B4a | | QL | 1 | Num | Other forms of CVT for persons employed in the previous year 2004 | |
| B4b | | QL | 1 | Num | Expect to provide other forms of CVT for persons employed during the next year 2006 | |
| C1tot | Key | QT | 6 | Num | Total CVT course participants | Key Variable - No missing |
| C1m | | QT | 6 | Num | CVT course participants - Male | |
| C1f | | QT | 6 | Num | CVT course participants - Female | |
| C2a | | QT | 6 | Num | CVT participants - Under 25 years of age | |
| C2b | | QT | 6 | Num | CVT participants - 25 to 54 year of age | |
| C2c | | QT | 6 | Num | CVT participants - 55 years and older | |
| C3tot | Key | QT | 10 | Num | Paid working time (in hours) spent on all CVT courses | Key Variable - No Missing - In Hours |
| C3i | | QT | 10 | Num | Paid working time (in hours) for internal CVT courses | In Hours |
| C3e | | QT | 10 | Num | Paid working time (in hours) for external CVT courses | In Hours |
| C4tot | Key | QT | 10 | Num | Paid working time (in hours) spent on all CVT courses | Key variable - No Missing - In Hours |
| C4m | | QT | 10 | Num | Paid working time (in hours) in CVT courses - Male | In Hours |
| C4f | | QT | 10 | Num | Paid working time (in hours) in CVT courses - Female | In Hours |
| C5a | | QT | 10 | Num | Paid working time in hours - Languages, Foreign (222) and Mother Tongue (223) | In Hours |
| C5b | | QT | 10 | Num | Paid working time in hours - Sales (341) and Marketing (342) | In Hours |
| C5c | | QT | 10 | Num | Paid working time in hours - Accounting (344) and Finance (343), Management and Administration (345) and Office work(346) | In Hours |
| C5d | | QT | 10 | Num | Paid working time in hours - Personal skills/development (090) , Working life (347) | In Hours |
| C5e | | QT | 10 | Num | Paid working time in hours - Computer science (481) and Computer use (482) | In Hours |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|--|-------------------------------------|
| C5f | | QT | 10 | Num | Paid working time in hours - Engineering, Manufacturing and Construction (5) | In Hours |
| C5g | | QT | 10 | Num | Paid working time in hours - Environment protection (850) and Occupational health and safety (862) | In Hours |
| C5h | | QT | 10 | Num | Paid working time in hours - Personal services (81), Transport services (84), Protection of property and persons (861) and Military (863) | In Hours |
| C5i | | QT | 10 | Num | Paid working time in hours - Other training subjects | In Hours |
| C6a | | QT | 10 | Num | Paid working time (in hours) - Schools, colleges, universities and other higher education institutions | In Hours |
| C6b | | QT | 10 | Num | Paid working time (in hours) - Public training institutions (financed or guided by the government; e.g. adult education centre) | In Hours |
| C6c | | QT | 10 | Num | Paid working time in (hours) - Private training companies | In Hours |
| C6d | | QT | 10 | Num | Paid working time (in hours) - Private companies whose main activity is not training, (equipment suppliers , Parent / Associate companies) | In Hours |
| C6e | | QT | 10 | Num | Paid working time (in hours) - Employer's associations, chambers of commerce, sector bodies | In Hours |
| C6f | | QT | 10 | Num | Paid working time (in hours) - Trade unions | In Hours |
| C6g | | QT | 10 | Num | Paid working time (in hours) - Other training providers | In Hours |
| C7aflag | | QL | 1 | Num | Flag - fees | |
| C7a | | QT | 10 | Num | CVT course costs - Fees and payments for courses for employees | In Euro |
| C7bflag | | QL | 1 | Num | Flag - travel costs | |
| C7b | | QT | 10 | Num | CVT course costs - Travel and subsistence payments | In Euro |
| C7cflag | | QL | 1 | Num | Flag - Labour costs trainers | |
| C7c | | QT | 10 | Num | CVT course costs - Labour costs of internal trainers | In Euro |
| C7dflag | | QL | 1 | Num | Flag - Training centre and teaching materials etc. | |
| C7d | | QT | 10 | Num | CVT course costs - Training centre, or rooms and teaching materials for CVT courses | In Euro |
| C7sflag | | QL | 1 | Num | "Sub-total only" flag | |
| C7sub | Key | QT | 10 | Num | CVT costs sub-total | Key Variable - No Missing - In Euro |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|---|-------------------------------------|
| PAC | Key | QT | 10 | Num | Personal absence cost - to be calculated (PAC=C3tot*A5/A4) | Key Variable - No Missing - In Euro |
| C8aflag | | QL | 1 | Num | Flag - CVT contributions | |
| C8a | | QT | 10 | Num | Contributions CVT | In Euro |
| C8bflag | | QL | 1 | Num | Flag - CVT receipts | |
| C8b | | QT | 10 | Num | Receipts CVT | In Euro |
| C7tot | Key | QT | 10 | Num | Total cost CVT - to be calculated (C7sub + C8a - C8b) | Key Variable - No Missing - In Euro |
| C9a1 | | QL | 1 | Num | Migrants and ethnic minorities - employed | |
| C9a2 | | QL | 1 | Num | Migrants and ethnic minorities - specific courses | |
| C9b1 | | QL | 1 | Num | Persons with a disability - employed | |
| C9b2 | | QL | 1 | Num | Persons with a disability - specific courses | |
| C9c1 | | QL | 1 | Num | Persons without formal qualifications - employed | |
| C9c2 | | QL | 1 | Num | Persons without formal qualifications - specific courses | |
| C9d1 | | QL | 1 | Num | Persons at risk of losing job / redundancy - employed | |
| C9d2 | | QL | 1 | Num | Persons at risk of losing job / redundancy - specific courses | |
| C10a1 | | QL | 1 | Num | Part-time contract persons - employed | |
| C10a2 | | QL | 1 | Num | CVT courses geared to part-time contract holders | |
| C10b1 | | QL | 1 | Num | Fixed term contract persons - employed | |
| C10b2 | | QL | 1 | Num | CVT courses geared to fixed term contract holders | |
| D1 | | QL | 1 | Num | Own or shared training centre | |
| D2 | | QL | 1 | Num | Person or unit within your enterprise with responsibility for the organisation of CVT | |
| D3 | | QL | 1 | Num | Enterprise makes use of an external advisory service | |
| D4 | | QL | 1 | Num | Enterprise implements regular formal procedures with the objective of evaluating the future skills needs of the enterprise | |
| D5 | | QL | 1 | Num | Conduct structured interviews with its employees with the objective of establishing the specific training needs of persons employed | |
| D6 | | QL | 1 | Num | Planning of CVT in the enterprise lead to a written training plan or programme | |
| D7 | | QL | 1 | Num | Annual training budget, which includes provision for CVT | |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|---|--------------------|
| D8 | | QL | 1 | Num | Measure the satisfaction of the persons trained after the training | |
| D9 | | QL | 1 | Num | After the training assess the trainees to establish whether the targeted skills were in fact successfully acquired | |
| D10 | | QL | 1 | Num | Enterprise assess the participants' occupational behaviour and change in performance following the training | |
| D11 | | QL | 1 | Num | Measures the impact of training on business performance through the use of indicators | |
| D12 | | QL | 1 | Num | National, sectorial or other agreements between the social partners, which influenced the CVT plans, policies and practices | |
| D13 | | QL | 1 | Num | Existence of a formal structure | |
| D13a | | QL | 1 | Num | Role of formal structure - Objective and priority setting for CVT activities | |
| D13b | | QL | 1 | Num | Role of formal structure - Establishing the criteria for the selection of the target population who should participate to CVT | |
| D13c | | QL | 1 | Num | Role of formal structure - The subject matter of the CVT activity | |
| D13d | | QL | 1 | Num | Role of formal structure - The budgeting process related to CVT | |
| D13e | | QL | 1 | Num | Role of formal structure - The procedure for the selection external CVT providers | |
| D13f | | QL | 1 | Num | Role of formal structure - Evaluation of training outcomes | |
| D14a | | QL | 1 | Num | Publicly-funded advisory service aimed at identifying training needs and/or developing training plans | |
| D14b | | QL | 1 | Num | Financial subsidies towards the costs of training persons employed | |
| D14c | | QL | 1 | Num | Tax relief on expenditure on training persons employed | |
| D14d | | QL | 1 | Num | Procedures to ensure the standards of trainers (e.g.. by national registers, assessment etc.) | |
| D14e | | QL | 1 | Num | Provision of recognised standards and frameworks for qualifications and certification | |
| D15a | | QL | 1 | Num | The high costs of CVT courses | max 3 - no ranking |
| D15b | | QL | 1 | Num | The lack of suitable CVT courses in the market | max 3 - no ranking |
| D15c | | QL | 1 | Num | Difficulties in assessing the enterprise's CVT needs | max 3 - no ranking |
| D15d | | QL | 1 | Num | A major training effort was realised in a previous year | max 3 - no ranking |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|---|--|
| D15e | | QL | 1 | Num | The high workload and the limited available time of persons employed | max 3 - no ranking |
| D15f | | QL | 1 | Num | The current level of training is appropriate to the enterprises needs | max 3 - no ranking |
| D15g | | QL | 1 | Num | A higher focus on IVT than CVT | max 3 - no ranking |
| D15h | | QL | 1 | Num | Other reasons | max 3 - no ranking |
| E1a | | QL | 1 | Num | The existing skills and competences corresponded to the current needs of the enterprise | max 3 - no ranking |
| E1b | | QL | 1 | Num | The enterprise's preferred strategy was to recruit individuals with the required skills and competencies | max 3 - no ranking |
| E1c | | QL | 1 | Num | The enterprise had difficulties in assessing its needs concerning CVT. | max 3 - no ranking |
| E1d | | QL | 1 | Num | The lack of suitable CVT courses in the market | max 3 - no ranking |
| E1e | | QL | 1 | Num | The costs of CVT courses were too high for the enterprise. | max 3 - no ranking |
| E1f | | QL | 1 | Num | The enterprise preferred to focus on IVT rather than CVT | max 3 - no ranking |
| E1g | | QL | 1 | Num | An investment in CVT was made in a previous year and did not require to be repeated in 2005 . | max 3 - no ranking |
| E1h | | QL | 1 | Num | The persons employed had no available time to participation in CVT | max 3 - no ranking |
| E1i | | QL | 1 | Num | Other reasons | max 3 - no ranking |
| F1tot05 | Core | QT | 6 | Num | Total number of IVT participants in the enterprise during 2005 | Core Variable - No Missing - No Imputation |
| F1m05 | | QT | 6 | Num | Total number of male IVT participants in the enterprise during 2005 | |
| F1f05 | | QT | 6 | Num | Total number of female IVT participants in the enterprise during 2005 | |
| F2aflag | | QL | 1 | Num | Flag - IVT individual labour costs | |
| F2a | | QT | 10 | Num | IVT Costs - Labour costs of individuals registered on an IVT activity | In Euro |
| F2bflag | | QL | 1 | Num | Flag - IVT other costs | |
| F2b | | QT | 10 | Num | IVT Costs - Other costs - training fees, travel costs, teaching materials, costs of training centres etc. | In Euro |
| F2cflag | | QL | 1 | Num | Flag - IVT trainer or mentor labour costs | Optional Variable |
| F2c | | QT | 10 | Num | IVT Costs - Labour costs of IVT trainers or mentors | Optional Variable - In Euro |
| F3aflag | | QL | 1 | Num | Flag IVT contributions | |
| F3a | | QT | 10 | Num | Contributions IVT | In Euro |

| Variable name | Variable group | Variable type | Variable length | Variable format | Variable description | Variable remark |
|---------------|----------------|---------------|-----------------|-----------------|-----------------------------------|-------------------------------------|
| F3bflag | | QL | 1 | Num | Flag IVT receipts | |
| F3b | | QT | 10 | Num | Receipts IVT | In Euro |
| F2tot | Key | QT | 10 | Num | Total IVT Costs (F2b + F3a - F3b) | Key Variable - No Missing - In Euro |

Annex II

Sample

- The Statistical Business Register (SBR) referred to in Council Regulation 2186/93 of 22 July 1993 shall normally be taken as the main source of the sampling frame. A nationally representative stratified probability sample of enterprises shall be taken from this frame.
- The sample shall be stratified by NACE and size category according to the following minimum specification:
 - 20 NACE rev1.1 categories [C, D(15-16, 17-19, 21-22, 23-26, 27-28, 29-33, 34-35, 20+36-37), E, F, G(50,51,52), H, I(60-63, 64), J(65-66, 67), K+O]
 - 3 enterprise size categories, according to their number of persons employed: (10-49)(50-249)(250 and more)
- A sample size shall be calculated to assure a **maximum** half length of the 95% confidence interval of 0.2 for the estimated parameters, which are a proportion of "training enterprises" (after allowance for the non-response rate in the sample) for each of the 60 stratified elements identified above.
- The following formula may be used in determining the sample size:

$$n_h = 1/[c^2 \cdot te_h + 1/N_h] / r_h$$

Where:

n_h = the number of sampling units in the stratum cell, h

r_h = the anticipated response rate in the stratum cell, h

c = maximum length of half the confidence interval

te_h = the anticipated proportion of training enterprises in the stratum cell, h

N_h = the total number of enterprises (training and non-training) in the stratum cell, h

Annex III

Imputation principals and record weighting

Countries shall take all appropriate measures to reduce item and unit non-response. Prior to imputation countries shall make all reasonable efforts to use other data sources.

Core variables, for which no missing value shall be accepted, nor imputation permitted are:

- A1, A2tot05, B1a, B1b, B2aflag, B2bflag B2cflag, B2dflag B2eflag, F1tot05.

Key variables, for which every effort should be made to avoid missing values and for which imputation is recommended are:

- A2tot04, A4, A5, C1tot , C3tot, C4tot, C7sub, C7tot, PAC, F2tot.

Imputation for item non-response shall be recommended within the following general limits (Member state experts should at all times apply their professional judgement in the application of these rules):

When a record contains less than 50% of variables presented then this record shall normally be considered as a unit non response.

- For a single NACE / Size cell imputations shall not be allowed if more than 50% of the responding enterprises have missing data for more than 25% of the quantitative variables.
- For a single NACE / Size cell no imputation shall be performed on a quantitative variable if the proportion of responding enterprises for that particular variable is less than 50%.
- For a single NACE / Size cell no imputation shall be performed on a qualitative variable if the proportion of responding enterprises for that particular variable is less than 80%.

Quantitative and qualitative variables are identified in Annex 1.

Departures from these principals shall be fully documented and justified in the national quality report.

Member states shall calculate and transmit a weight to be applied to each data record together with any auxiliary variables, which may have been used in the calculation of this weight.

These auxiliary variables should be recorded as the variables EXTRA1, EXTRA2, EXTRA3 as necessary. The methodology adopted for establishing the weights shall be detailed in the quality report.

Annex IV

Data file format and transmission rules

Data shall be transmitted to the Commission (Eurostat) in electronic form by means of a secure data transmission software application (STADIUM / EDAMIS) to be made available by the Commission (Eurostat).

Countries shall transmit two checked data sets to ESTAT:

- a) The data set prior to imputation with preliminary checks.
- b) The fully checked data set after imputation.

Both data sets shall contain the variables identified in Annex 1.

Both files shall be presented in comma separated variable (.csv) format. The first record in each file shall be a header record containing the "variable names" as defined in Annex 1. Subsequent records shall detail the values of these variables for each responding enterprise.

Annex V

Quality Report Format

1 Relevance

Implementation of the survey and the degree to which statistics meet current and potential user's needs.

- Description and classification of users.
- Individual needs of each user group.
- Evaluation if and to what degree these needs have been satisfied.

2 Accuracy

2.1 Sampling errors

- Description of the sample design and the realised sample.
- Description of the calculation of the final weights including non-response model and auxiliary variables used.
- Estimator used, e.g. Horvitz-Thompson estimator.
- Variance of the estimates according to the sample strata.
- Variance estimation software.
- In particular, a description of the auxiliary variables or information used should be reported in order to recalculate the final weights within Eurostat since it is needed for variance estimation.
- In case of non-response analysis, a description of the biases in the sample and results.

Tables to be provided (broken down by **NACE and size classes** according to the national sampling plan):

- Number of enterprises in the sampling frame.
- Number of enterprises in the sample.

Tables to be provided (broken down by **NACE and size classes** according to the national sampling plan, however allocation according to the observed enterprise characteristics):

- Coefficients of variation⁵ for the following **key statistics**.
 - Total number of persons employed.
 - Total number of enterprises that provided CVT.
 - Ratio of the total number of enterprises that provided CVT to the total number of enterprises.
 - Total number of enterprises that provided CVT courses.
 - Ratio of the total number of enterprises that provided CVT courses to the total number of enterprises.
 - Total number of persons employed in enterprises that provided CVT.
 - Total number of participants in CVT courses.
 - Ratio of the total number of participants in CVT courses to the total number of persons employed.
 - Ratio of the total number of participants in CVT courses to the total number of persons employed in enterprises that provided CVT.
 - Total costs of CVT courses.
 - Total number of enterprises providing IVT.
 - Total number of participants in IVT.
 - Total costs of IVT.
 - Ratio of the total number of enterprises providing IVT to the total number of enterprises.

2.2 Non-sampling errors

2.2.1 Coverage errors

- Description of the register used for sampling, and its overall quality.
- Information included in the register, and its updating frequency.

⁵

The **coefficient of variation** is the ratio of the square root of the variance of the estimator to the expected value. It is estimated by the ratio of the square root of the estimate of the sampling variance to the estimated value. The estimation of the sampling variance must take into account the sampling design and changes of strata.

- Errors due to the discrepancies between the sampling frame and the target population and sub-populations (over-coverage, under-coverage, misclassifications).
- Methods used to obtain this information.
- Notes on the processing of misclassifications.

Tables to be provided (broken down by NACE and size classes according to the national sampling plan, however allocation according to the observed enterprise characteristics):

- Number of enterprises.
- Ratio of the number of enterprises for which the observed strata equals the sampling strata: the number of enterprises in the sampling strata. Indicate whether the changes of activities have been taken into account.

2.2.2 Measurement errors

Where appropriate an assessment of errors that occurred at the stage of data collection due **for example to:**

- The questionnaire design (results of pre-tests or laboratory methods; questioning strategies) - questionnaire to be submitted in annex.
- Reporting unit / respondent (reactions of respondents):
 - Memory errors.
 - Lack of attention of the respondents.
 - Effects of age, education etc.
 - Errors when filling the forms.
- Information system of the respondent and the use of administrative records (correspondence between the administrative and survey concept, e.g. Reference period, availability of individual data).
- Modes of data collection (comparison of different data collection methods).
- Interviewer characteristics and behaviour.
 - Socio-economic characteristics.
 - Different ways of administering the questionnaire.
 - Different assistance to the respondent.
 - Specific studies or techniques to assess these errors.

- Methods used to reduce this kind of errors.
- Detailed comments on problems with the questionnaire as a whole or with single questions (comments on all variables).
- Description and assessment of measures taken to assure the high quality of "participants" and to assure that "participant events" were not collected.

2.2.3 Processing errors

Description of the data editing process.

- Processing system and tools used.
- Errors due to coding, editing, weighting, and tabulation etc.
- Quality checks at macro/micro level.
- Corrections and failed edits breakdown into missing values, errors and anomalies.

2.2.4 Non-response errors

- A description of the measures undertaken regarding "re-contacts".
- Unit and item response rates.
- Assessment of unit non-response.
- Assessment item non-response.
- Full report on imputation procedures including methods used for imputation and/or re-weighting.
- Methodological notes and results of non-response analysis or other methods to assess the effects of non-response.

Tables to be provided (broken down by **NACE and size classes** according to the national sampling plan, however allocation according to the observed enterprise characteristics):

- Unit response rates⁶.
- Item response rates⁷ for the following with respect to all respondents.
 - Total number of hours work as a function of all respondents.
 - Total labour cost as a function of all respondents.

⁶ The **unit response rate** is the ratio of the number of in scope respondents to the number of questionnaires sent to the population selected.

⁷ The **item response rate** for a variable is the ratio of the number of available data to the number of available and missing data (equal to the number of in scope respondents).

- Item response rates for the following with respect to enterprises offering CVT courses.
 - CVT courses by specific age groups as a function of enterprises offering CVT courses.
 - Total number of participants in courses, males, females as a function of enterprises offering CVT courses.
 - Total number of hours on CVT courses, males, females as a function of enterprises offering CVT courses.
 - Number of hours on CVT courses managed internally and externally as a function of enterprises offering CVT courses.
 - Total costs of CVT courses as a function of enterprises offering CVT courses.
- Item response rates for the following with respect to enterprises offering IVT.
 - Total costs of IVT as a function of enterprises offering IVT.

3 Timeliness and punctuality

- Table of dates when each of the following phases of the project started and ended.
 - Data collection.
 - Sending out questionnaires.
 - Reminders and follow-up.
 - Face-to-face interviews.
 - Data checking and editing.
 - Further validation and imputation.
 - Non-response survey (as appropriate).
 - Estimations.
 - Data transmission to Eurostat.
 - Dissemination of national results.

4 Accessibility and clarity

- What results where or will be sent to enterprises.
- Dissemination scheme of results.

- Copy of any methodological documents relating to the statistics provided.

5 Comparability

- As appropriate and relevant countries should comment upon.
 - Deviations from the European questionnaire.
 - Was the survey linked to another national survey.
 - To what extent was the survey realised through existing data in registers.
 - Definitions and recommendations.

6 Coherence

- Comparison of statistics for the same phenomenon or item from other surveys or sources.
- Assessment of coherence with structural business statistics for the number of persons employed as a function of NACE and Size Group.
- Assessment of the coherence of the age group distribution of persons employed (A3a,A3b,A3c) with other national data sources as a function of NACE and Size Group (if available).
- Assessment of the coherence of the age group distribution of CVT participants (C2a,C2b,C2c) with other national data sources as a function of NACE and Size Group (if available).

Tables to provide (broken down by NACE and size classes according to the national sampling plan, however allocation according to the observed enterprise characteristics):

- Number of persons employed from Structural Business Statistics (Regulation⁸ code 16 11 0).
- Number of persons employed from CVTS3.
- Percentage of differences (SBS – CVTS3) / SBS.
- Number of persons employed for each age group A3a,A3b,A3c.
- Number of persons employed in other source for each age group.
- Percentage of differences of (A3x – other national source A3x)/A3x (where x=a,b,c).
- Number of CVT participants for each age group C2a,C2b,C2c.

⁸

OJ L 344, 18.12.1998, p. 67.

- Number of CVT participants in other source for each age group.
- Percentage of CVT participants $(C2x - \text{other national source of } C2x) / C2x$ (where $x=a,b,c$).

7 Burden and Benefit

- Analysis of the burden and benefit at the national level through for example a consideration of:
 - Average time for answering to the each questionnaire.
 - Problematic questions and variables.
 - Which variables have been most / least useful in describing CVT at the national level.
 - Estimated or actual satisfaction level of data users at the national level.
 - Different burden for small and large enterprises.
 - Efforts made to reduce burden.