## Quality Report

## STRUCTURAL BUSINESS Statistics Regulation Annexes I TO IV

Member State: Greece<br>Reference Year: 2011<br>REpORT ISSUED:SBS - SERVICES, IndUstries, Trade And Constructions

Compiling institution: Hellenic Statistical Authority (EL.STAT.)
Contact details:

| NAME: | S. Sideri, G. Gkolemi |
| :--- | :--- |
| E-MAIL ADDRESS: | s.sideri@statistics.gr, g.gkolemi@statistics.gr, |
| TeLEPHONE NUMBER: | +302131352000 |
| POSTAL ADDRESS: | Pireos 46 \& Eponiton, <br> 18510 Pireus |

Please answer in the grey-shaded cells or, when necessary, update the information given.
Please check the pre-filled cells marked in green.
There is no limit for the replies to open questions; the row height will be automatically adjusted to your text. Please note that, if you consider that any of your answer should be treated as confidential, the answer needs being labelled "CONFIDENTIAL" explicitly.

## Contact persons

## Annex I:

## Responsible institution:

Contact details:

| NAME: | S. Sideri, M.A. Stamouli |
| :--- | :--- |
| E-MAIL ADDRESS: | s.sideri@statistics.gr, m.stamouli@statistics.gr |
| Telephone number: | $+302131352056,+302131352489$ |

## Annex II:

## Responsible institution:

## CONTACT DETAILS:

| NAME: | G. Gkolemi |
| :--- | :--- |
| E-MAIL ADDRESS: | g.gkolemi@statistics.gr |
| TELEPHONE NUMBER: | +302131352044 |

## Annex III:

## RESPONSIBLE INSTITUTION:

CONTACT DETAILS:

| NAME: | M.A. Stamouli |
| :--- | :--- |
| E-MAIL ADDRESS: | m.stamouli@statistics.gr |
| Telephone number: | +302131352489 |

## Annex IV:

## RESPONSIBLE INSTITUTION:

CONTACT DETAILS:

| NAME: | G. Gkolemi <br> M.Gerogiorgi |
| :--- | :--- |
| E-MAIL ADDRESS: | g.gkolemi@statistics.gr <br> m.gerogiorgi@statistics.gr |


|  | +302131352044 |
| :--- | :--- |
| TELEPHONE NUMBER: | +302131352045 |

## Contents:

CONTACT PERSONS ..... 2
I. RELEVANCE ..... 6
I.1. COMPLETENESS .....  6
I.1.1. DATA AVAILABILITY ..... 6
THE AVAILABILITY RATE IS AS FOLLOWS (PRE-FILLED BY EUROSTAT): ..... 6
I.1.2. AVAILABILITY OF CHARACTERISTICS AND/OR BREAKDOWNS REQUIRED BY THE SBS-REGULATION. 12I.1.3. USE OF THE QUALITY FLAG 'CONTRIBUTION TO EUROPEAN TOTALS ONLY' (CETO-FLAG) FORESEEN INTHE SBS REGULATION (FOR MORE EXPLANATION SEE ANNEX)12
I.1.4. Application of 1\%-RULES FORESEEN IN THE SBS REGULATION ..... 13
I.1.5. DEROGATIONS FROM THE PROVISIONS OF THE SBS REGULATION ..... 13
I.2. CONFIDENTIALITY ..... 14
I.3. MONITORING USER INTEREST ..... 15
I.3.1. DATA DISSEMINATION REPORT ..... 15
I.3.2. CONSULTATION OF YOUR MAIN USERS (TARGET GROUP: NARROW SCOPE, E.G. NATIONAL ACCOUNTS, CENTRAL BANKS, ECONOMY DEPARTMENT ETC.). ..... 16
I.3.3. USERS' SATISFACTION (BROADER SCOPE) ..... 16
II. ACCURACY AND RELIABILITY ..... 17
II.1. CONCEPTS AND SOURCES ..... 17
II.2. NON-SAMPLING ERRORS ..... 23
II.2.1. UNIT NON-RESPONSE ..... 23
II.2.2. BIAS ..... 24
II.2.3 ImpUTATION ..... 24
II.2.4 COVERAGE ERRORS ..... 25
II.2.5. PROCESSING ERRORS ..... 26
II.3. INFERENCE (GROSSING UP) ..... 26
II.4. AsSESSMENT OF REVISIONS ..... 27
II.4.1. PRELIMINARY DATA VERSUS FINAL DATA ..... 27
II.4.2. AVERAGE SIZE OF REVISION ..... 28
II.4.3. REVISION POLICY ..... 29
III. COHERENCE AND COMPARABILITY ..... 30
III.1. COHERENCE ..... 30
III.2. COMPARABILITY ..... 30
III.2.1. COMPARABILITY OVER TIME ..... 30
III.2.2. GEOGRAPHICAL COMPARABILITY: COVERAGE OF TARGET POPULATION ..... 31
III.2.3. GEOGRAPHICAL COMPARABILITY: OTHER ISSUES ..... 31
IV. TIMELINESS AND PUNCTUALITY ..... 32
IV.1. Timeliness ..... 32
IV.2. PUNCTUALITY ..... 32
V. ACCESSIBILITY AND CLARITY ..... 34
V.1. ACCESSIBILITY ..... 34
V.2. Clarity ..... 35
VI. FURTHER COMMENTS ..... 35
ANNEX. ..... 36

## I. Relevance

## Definition

Relevance is the degree to which statistical outputs meet current and potential user needs. It depends on whether all the statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.,) reflect user needs.

## I.1. Completeness

The completeness is the extent to which data are available compared with the requirements in terms of characteristic, geographical and activity breakdown, as specified in the SBS Regulation ${ }^{1}$.

## I.1.1. Data availability

The availability rate is as follows (pre-filled by Eurostat):
$\frac{\sum \text { number of cells provided }}{\sum \text { number of fields applicable }} \times 100$

| 2011 | GR |
| :--- | ---: |
| 1A | 100 |
| 1B | 100 |
| 1C | 100 |
| 1E | 100 |
| 2A | 94 |
| 2B | 78 |
| 2C | 83 |
| 2D | 78 |
| 2F | 86 |
| 2H | 97 |
| 2I | 93 |
| 3A | 100 |
| 3B | 100 |
| 3C | 100 |
| 3D | 100 |
| 4A | 100 |
| 4B | 88 |
| 4C | 100 |
| 4D | 100 |
| 4F | 100 |
| 4G | 100 |
| 4H | 72 |
| Total | 58 |
|  |  |

[^0]SPECIFICATION OF MISSING DETAIL: (TABLE TO BE FILLED IN BY EUROSTAT)


```
B0510,B062,B0620,B071,B0710,B0
721,B0892,B099,B0990,C1106,C23
14,C2343,C2446,C2731,C304,C304
0,C3211,C3319,D3512,D3513,D351
4,D3521,D3523,E3831|
V13310:B05
1,B0510,B062,B0620,B071,B0710,
B0721,B0892,B099,B0990,C1106,C
2314,C2343,C2446,C2731,C304,C3
040,C3211,C3319,D3512,D3513,D3
514,D3521,D3523,E3831|
V13320:B
051,B0510,B062,B0620,B071,B071
0,B0721,B0892,B099,B0990,C1106
,C2314,C2343,C2446,C2731,C304,
C3040,C3211,C3319,D3512,D3513,
D3514,D3521,D3523,E3831
V13330
:B051,B0510,B062,B0620,B071,B0
710,B0721,B0892,B099,B0990,C11
06,C2314,C2343,C2446,C2731,C30
4,C3040,C3211,C3319,D3512,D351
3,D3514,D3521,D3523,E3831
V134
11:B051,B0510,B062,B0620,B071,
B0710,B0721,B0892,B099,B0990,C
1106,C2314,C2343,C2446,C2731,C
304,C3040,C3211,C3319,D3512,D3
513,D3514,D3521,D3523,E3831|
V1
5110:B051,B0510,B062,B0620,B07
1,B0710,B0721,B0892,B099,B0990
,C1106,C2314,C2343,C2446,C2731
,C304,C3040,C3211,C3319,D3512,
D3513,D3514,D3521,D3523,E3831|
V15120:B051,B0510,B062,B0620,B
071,B0710,B0721,B0892,B099,B09
90,C1106,C2314,C2343,C2446,C27
31,C304,C3040,C3211,C3319,D351
2,D3513,D3514,D3521,D3523,E383
1|
V15130:B051,B0510,B062,B0620
,B071,B0710,B0721,B0892,B099,B
0990,C1106,C2314,C2343,C2446,C
2731,C304,C3040,C3211,C3319,D3
512,D3513,D3514,D3521,D3523,E3
831|
V15140:B051,B0510,B062,B06
20,B071,B0710,B0721,B0892,B099
,B0990,C1106,C2314,C2343,C2446
,C2731,C304,C3040,C3211,C3319,
D3512,D3513,D3514,D3521,D3523,
E3831|
V15150:B051,B0510,B062,B
0620,B071,B0710,B0721,B0892,B0
99,B0990,C1106,C2314,C2343,C24
46,C2731,C304,C3040,C3211,C331
9,D3512,D3513,D3514,D3521,D352
3,E3831|
V15210:B051,B0510,B062
```

```
,B0620,B071,B0710,B0721,B0892,
B099,B0990,C1106,C2314,C2343,C
2446,C2731,C304,C3040,C3211,C3
319,D3512,D3513,D3514,D3521,D3
523,E3831|
V16110:B051,B0510,B0
62,B0620,B071,B0710,B0721,B089
2,B099,B0990,C1106,C2314,C2343
,C2446,C2731,C304,C3040,C3211,
C3319,D3512,D3513,D3514,D3521,
D3523,E3831|
V16130:B051,B0510,
B062,B0620,B071,B0710,B0721,B0
892,B099,B0990,C1106,C2314,C23
43,C2446,C2731,C304,C3040,C321
1,C3319,D3512,D3513,D3514,D352
1,D3523,E3831|
V16140:B051,B051
0,B062,B0620,B071,B0710,B0721,
B0892,B099,B0990,C1106,C2314,C
2343,C2446,C2731,C304,C3040,C3
211,C3319,D3512,D3513,D3514,D3
521,D3523,E3831|
V16150:B051,B0
510,B062,B0620,B071,B0710,B072
1,B0892,B099,B0990,C1106,C2314
,C2343,C2446,C2731,C304,C3040,
C3211,C3319,D3512,D3513,D3514,
D3521,D3523,E3831|
V18110:B051,
B062,B071,B099,C304
V20110:B051,B0510,B062,B0620,
B071,B0710,B0721,B0892,B099,
B0990,C1106,C2314,C2343,
C2446,C2731,C304,C3040,C3211,
C3319|
2B:
```

V11110:B051,B062,B071,B099,C304|
V12110:B051,B062,B071,B099,C304
V12120:B051,B062,B071,B099,C304
V12150:B051,B062,B071,B099,C304
V12170:B051,B062,B071,B099,C304
V13110:B051,B062,B071,B099,C304
V13310:B051,B062,B071,B099,C304
V13320:B051,B062,B071,B099,C304
V13330:B051,B062,B071,B099,C304
V16110:B051,B062,B071,B099,C304
V16130:B051,B062,B071,B099,C304
V16150:B051,B062,B071,B099,C304
2D:
V11310:B051,B0510,B062,B0620,B
071,B0710,B0721,B0892,B099,B09
90,C1106,C2314,C2343,C2446,C27
31,C304,C3040,C3211,C3319,D351
2,D3513,D3514,D3521,D3523,E3831|
V12110:B051,B0510,B062,B0620
,B071,B0710,B0721,B0892,B099,B
0990,C1106,C2314,C2343,C2446,C
2731,С304,C3040,C3211,C3319,D3
512,D3513,D3514,D3521,D3523,E3831|



|  |  |  |
| :---: | :---: | :---: |
| c) breakdown in series |  | $\square$ nothing missing |
| d) missing series |  | 区 <br> nothing missing <br> Series 1A, 1B, 1C, <br> 3A, 3B, 3C, 3D <br> transmitted on 31- <br> 07-2014, series 1E transmitted on 08-08-2014 |

## I.1.2. Availability of characteristics and/or breakdowns required by the SBS-Regulation

Please comment on the rates of available statistics calculated by Eurostat and explain the reasons why any characteristics or breakdowns required by the SBS Regulation are not available (e.g. derogations) and describe your plans for improvement in the future.
2011 series for annex I and III are transmitted on the 31/07/2014 and 08/08/2014 (1E only). The delay is due to extensive revision of data for the years 2008-2010 and 2011 (format only).

## I.1.3. Use of the quality flag 'Contribution to European totals only' (CETO-flag) foreseen in the SBS regulation (For more explanation see annex)

$\frac{\sum \text { number of CETO } \text { - flagged cells }}{\sum \text { number of fields applicable }} \times 100$

Not applied

| 2011 | GR | GR | GR | GR | GR |
| ---: | ---: | :--- | :--- | :--- | :--- |
|  | TOTAL | Section | Division | Group | Class |
| 1A | 0 | 0 | 0 | 0 | 0 |
| 1B | 0 | 0 | 0 | 0 | 0 |
| 1C | 0 | 0 | 0 | 0 | 0 |
| 1D | 0 | 0 | 0 | 0 | 0 |
| 1E | 0 | 0 | 0 | 0 | 0 |
| 2A | 0 | 0 | 0 | 0 | 0 |
| 2B | 0 | 0 | 0 | 0 | 0 |
| 2C | 0 | 0 | 0 | 0 | 0 |
| 2D | 0 | 0 | 0 | 0 | 0 |
| 2F | 0 | 0 | 0 | 0 | 0 |
| 2H | 0 | 0 | 0 | 0 | 0 |
| 2I | 0 | 0 | 0 | 0 | 0 |
| 3A | 0 | 0 | 0 | 0 | 0 |
| 3B | 0 | 0 | 0 | 0 | 0 |
| 3C | 0 | 0 | 0 | 0 | 0 |
| 3D | 0 | 0 | 0 | 0 | 0 |
| 4A | 0 | 0 | 0 | 0 | 0 |
| 4B | 0 | 0 | 0 | 0 | 0 |
| 4C | 0 | 0 | 0 | 0 | 0 |
| 4D | 0 | 0 | 0 | 0 | 0 |
| 4F | 0 | 0 | 0 | 0 | 0 |
| 4G | 0 | 0 | 0 | 0 | 0 |
| $4 H$ | 0 | 0 | 0 | 0 | 0 |

## I.1.4. Application of $\mathbf{1 \%}$-rules foreseen in the SBS regulation

Not applied.
Please indicate whether you intend to provide in the next reference year any of the data for which you have applied the $1 \%$-rule in the past.

Please indicate whether you intend to discontinue the provision of the data for which the $1 \%$ rule could be applied (Eurostat will check the validity of this request and will confirm or not).

## I.1.5. Derogations from the provisions of the SBS Regulation

Not applied

Please indicate whether you intend to provide data for which you have granted derogation earlier than the timing foreseen in the SBS Regulation.

## I.2. Confidentiality

I.2.1. The rate of confidential cells is as follows (pre-filled by Eurostat):
$\frac{\sum \text { Number of confidential cells }}{\sum \text { Number of cells provided }} \times 100$

|  | GR | GR | GR | GR | GR |
| :--- | ---: | :--- | :--- | :--- | :--- |
|  | 2011 | TOTAL | Section | Division | Group |
| Class |  |  |  |  |  |
| 1A | 9 | 0 | 0 | 11 | 10 |
| 1B | 22 | 7 | 20 | 25 | - |
| 1C | 5 | 0 | 6 | - | - |
| 1E | 0 | 0 | 0 | 0 | 0 |
| 2A | 10 | 0 | 21 | 12 | 8 |
| 2B | 37 | 35 | 31 | 40 |  |
| 2C | 24 | 12 | 25 |  |  |
| 2D | 13 | 0 | 26 | 15 | 10 |
| 2F | 17 | 0 | 21 | 15 | 18 |
| 2H | 3 | 0 | 4 |  |  |
| 2I | 7 | 17 | 6 |  |  |
| 3A | 0 | 0 | 0 | 0 | 0 |
| 3B | 15 | 0 | 19 | 16 | - |
| 3C | 0 | 0 | 0 | 0 | - |
| 3D | 20 | 0 | 22 | 20 | - |
| 4A | 0 | 0 | 0 | 0 | 0 |
| 4B | 20 | 0 | 24 | 22 |  |
| 4C | 0 | 0 | 0 |  |  |
| 4D | 0 | 0 | 0 | 0 | 0 |
| 4F | 0 | 0 | 0 | 0 | 0 |
| 4G | 0 | 0 | 0 | 0 |  |
| 4H | 25 | 0 | 29 | 27 |  |
| TOTAL | 20 | 15 | 23 | 29 | 8 |
|  |  |  |  |  |  |

I.2.2. Please describe your confidentiality rules (primary and secondary). Note: The described confidentiality rules will not be published by ESTAT.

For primary suppressions, the threshold rule is applied, with a min. frequency set to 3 and the min. frequency range set to $20 \%$. For secondary suppressions the hypercube method is applied.
I.2.3. Have you taken any measures to reduce the number of confidential cell?
[ X ] Yes
[ ] No

If yes, please describe them briefly: The Threshold Rule was used.
I.2.4. How do you evaluate the impact of the applied measured to reduce the number of confidential cells?

| very good | good | satisfactory | poor | very poor |
| :---: | :---: | :---: | :---: | :---: |
| $\boxed{Q}$ | $\square$ | $\square$ | $\square$ | $\square$ |

## I.3. Monitoring user interest

## If the SBS data of Annexes I to IV are not disseminated at national level by your NSI, please answer only to the questions 1.3.2.5 and 1.3.3.3.

## I.3.1. Data dissemination report

1.3.1.1. Does the dissemination/publishing unit in your NSI keep track of the number of hardcopies of the SBS publications sent or sold? ${ }^{2}$
[ $]$ Yes
If yes, how many publications were sent/sold from the most recent hard-copy publications (or in the last 12 months...):

## [ ] No

[ ] No (hardcopies are not printed)
1.3.1.2. Does the dissemination/publishing unit in your NSI keep track of the number of downloaded on-line SBS publications?

## [ ] Yes

If yes, how many downloaded publications/data were sent/sold for the most recent SBS publications/data (or in the last 12 months...):

## [ ] No

[ [] No (publications are not available on-line)
1.3.1.3. Does the dissemination/publishing unit in your institute keep track of the number of downloaded data from the on-line databases?
[ ] Yes
If yes, how many downloads of SBS data were made last year:

## [] No

[ ] No (data are not available in on-line databases)
1.3.1.4. Do you or the dissemination/publishing unit in your NSI provide any information which is not available in the published publications and in the published on-line databases?
[ $\quad$ ] Yes, to the public authorities

[^1][ ] Yes, to the public authorities and a limited set of registered main users
[X] Yes, to everyone with a specific request
[ ] No

## I.3.2. Consultation of your main users (target group: narrow scope, e.g. National Accounts, Central Banks, Economy department etc.)

I.3.2.1. Has your unit regular consultations with some of your main users?
[X] Yes
[ ] No
I.3.2.2. If yes, could you give a brief description of your main users and their needs (by main groups of users) Internal or external users?
Other Divisions of ELSTAT such as National Accounts, User Conference (http://www.statistics.gr/portal/page/portal/ESYE/PAGE-userconference13), Eurostat, Academic Researchers, Students, Public Authorities, and others.
I.3.2.3. If SBS data of Annexes I to IV are published at national level, could you please give a brief description of the general opinion of the main users about the quality of the data?
-
I.3.2.4. If SBS data of Annexes I to IV are published at national level, does the consultation with the key users reveal any specific unfulfilled need in addition to the requirements of the Annexes I to IV of the SBS Regulation? If yes, please specify.
(Not to be filled in if questions 1.3.2.1 to 1.3.2.4 have been answered)
I.3.2.5. If the SBS data as required for the Annexes I to IV of the SBS Regulation are not published as such at national level, would you please indicate why the data published by your NSI are more suitable for the users' needs?
For reasons of comparability the same tables are maintained throughout the reference years.

## I.3.3. Users' satisfaction (broader scope)

I.3.3.1. Have you organised a punctual or a regular survey related to the users' satisfaction regarding the availability of your data for Annexes I to IV of the SBS Regulation in your country? [ ] Yes
[x] No (ELSTAT contacts a general user's satisfaction survey and not one that is focused on SBS data).
I.3.3.2. If you have organised a survey as such, to what extent the users' needs were fulfilled by the available data and if they are relevant for all of them?

## II. Accuracy and reliability

## Definition

Accuracy of statistical outputs in the general statistical sense is the degree of closeness of estimates to the true values.

## If a different methodology is applied for different activity groups (or by Annex of the SBS <br> Regulation) this part of the quality report may be copied for each of the different methodologies. Please indicate clearly which activities or Annex of the SBS Regulation the information is referring to.

## II.1. Concepts and sources

Member states may use different data collection systems to comply with the SBS regulation.
It might be:

- the use of sample surveys ${ }^{3}$ (with administrative information present in the sampling frame and only used for stratification purpose),
- the use of a sample survey combined with use of administrative information (whereby this information is also used in the editing and imputation process and possibly in the inference process through calibration),
- the use of administrative data as the only source of information and all characteristics are calculated from the administrative records using or not a model based approach (in this case no survey information is used for a significant part of the strata covered).
It is necessary only to fill in the concerned column.
If several surveys are used in order to compile different SBS characteristics, the table should be copied as many times as there are survey.

[^2]|  | Methodology 1: Sample survey |  |  |  | Methodology 2: Sample survey combined with administrative information | Methodology 3: Administrative information |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| II.1.1. Description of source <br> a) Survey <br> 1. Please describe the sample design in particular: (If several surveys are organised to collect data, please describe separately, for each of them, the sample design). |  |  |  |  |  |  |
| - type of sample design | stratified <br> multistage <br> clustered |  |  |  | stratified $\square$ <br> multistage  <br> clustered $\square$ <br>  $\square$ |  |
| - stratification criteria | Activity <br> Employment size class <br> Region <br> Other (please specify: Turnover Size Class, <br> Apart from the activities B, C, D, E) |  |  |  | Activity $\square$ <br> Employment size class $\square$ <br> Region $\square$ <br> Other (please specify $\square$ |  |
| - selection schemes (sampling rates) | Section | N | n | Sampling Rate |  |  |
|  | B | 410 | 169 | 41,2\% |  |  |
|  | C | 3.762 | 3.762 | 100,0\% |  |  |
|  | C | 75.218 | 0 | 0,0\% |  |  |
|  | D | 15 | 15 | 100,0\% |  |  |
|  | E | 186 | 186 | 100,0\% |  |  |
|  | F | 105.298 | 4.568 | 4,3\% |  |  |
|  | G | 286.101 | 8.557 | 2,99\% |  |  |
|  | H | 67.618 | 4.300 | 6,36\% |  |  |
|  | I | 95.089 | 2.947 | 3,10\% |  |  |
|  | J | 12.765 | 1.927 | 15,10\% |  |  |
|  | L-M-N-S95 | 157.741 | 5.254 | 3,33\% |  |  |
|  | Total | 804.527 | 32.194 | 4,00\% |  |  |


| - | any possible threshold values | - |  |
| :--- | :--- | :--- | :--- | :--- |
| $-\quad$ the effective sample size |  |  |  |
| -If the reference period differs from the <br> calendar year is there a correction to bring it <br> in accordance with the reference period? For <br> SBS (calendar year). | Appropriate reweighting and application of calibration <br> method, is used. |  |  |
| Additional or specific information should be <br> added in the column 'Methodology ${ }^{\prime}$ if the <br> suggested options are not feasible with the <br> used concepts in your country of compiling <br> SBS data. |  |  |  |


| b) Administrative source <br> Please describe the administrative sources: |  |  |
| :---: | :---: | :---: |
| The used administrative sources: |  |  |
| - Please enumerate the characteristics directly available or with a good proxy in the administrative source. |  |  |
| - Please enumerate the characteristics for which a model based estimate is used. |  |  |
| - Is your unit able to check the plausibility of those data, namely by contacting directly the units? |  |  |
| The extent to which the administrative source are used: | [ ] : data source, basic data for some characteristics <br> [ ] : data source for imputation in case of non-response. <br> [ ] : data source for imputation, for strata not covered by the survey <br> [ ] : data source for 'mass imputation': (imputation of units not selected in the sample) [ $\quad$ ] : data source for calibration (calage sur marge) to optimize inference from survey results |  |
| - What kind of administrative data do you access? | [ ] : micro data <br> [ ] : aggregated data <br> [ ] : for the entire population <br> (global data) <br> [ ] : by each (or some) economic breakdown class <br> [ ] : for a part of the population (sole proprietor, companies, etc.) [ ] : other (please specify): | [ ] : micro data <br> [ ] : aggregated data <br> [ ] : for the entire population (global data) [ ] : by each (or some) economic breakdown class [ ] : for a part of the population (sole proprietor, companies, etc.) [ ] : other (please specify): |


| How do you assess the frequency to which the used administrative data sources are updated? |  | VG G S P VP <br> $\square$ $\square$ $\square$ $\square$ $\square$ | VG G S P VP <br> $\square$ $\square$ $\square$ $\square$ $\square$ |
| :---: | :---: | :---: | :---: |
| Are the administrative data subject to several revisions with (increasing) degree of completeness? |  | [ ] yes <br> [ ] no | [ ] yes <br> [ ] no |
| II.1.2.Relation between reporting units and the legal units / enterprise (statistical unit): |  |  |  |
| Which is the relation between the reporting unit for the survey/administrative data and the enterprise? |  |  |  |
| II.1.3. Definitions and concepts used in the survey/administrative sources: |  |  |  |
| How would you assess the proximity of the definitions and concepts (including statistical units) used in the survey/administrative source with those required for statistical purposes? | $\begin{array}{ccccc} \text { VG } & \text { G } & \text { S } & \text { P } & \text { VP } \\ \square & \square & \square & \square & \square \end{array}$ | $\begin{array}{ccccc} \text { VG } & \mathrm{G} & \text { S } & \text { P } & \text { VP } \\ \square & \square & \square & \square & \square \end{array}$ | $\begin{array}{ccccc} \text { VG } & \mathrm{G} & \text { S } & \text { P } & \text { VP } \\ \square & \square & \square & \square & \square \end{array}$ |
| Please list the main differences between the survey/administrative source and the statistical definitions and concepts. |  |  |  |
| Are there any of the SBS characteristics not included in those data sources? | $\square$ yes <br> If yes, please indicate the method used to compile those characteristics (estimation). $\qquad$ $\square$ no | $\square$ yes <br> If yes, please indicate the method used to compile those characteristics (estimation). $\qquad$ $\square$ no | $\square$ yes <br> If yes, please indicate the method used to compile those characteristics (estimation). $\qquad$ $\square$ no |

## II.1.4. Sampling error: coefficients of variation

## Coefficients of Variation

$\mathrm{CV}=\frac{\sqrt{\text { estimate of the sampling variance }}}{\text { estimated value }}$
For the main series, by type of economic activity (1A, 2A, 3A and 4A - Regulation No 295/2008), a coefficient of variation for turnover (characteristics 12110 ) is required on the NACE Rev2 - 3-digit (group) level. A

For the same series, coefficients of variation are expected for variables: $11110,12110,12150$, 13310,15110 and 16130 on NACE Rev. 2 Section level for the sections B, C, D, E, F, G, H, I, $\mathrm{J}, \mathrm{L}, \mathrm{M}$ and N and also on NACE Rev 2 - 2-digit (division) level for Div. 45, 46 and 47 covering the trade section and division 95. B

For the series broken down by employment size class (1B, 2B, 3B and 4B - Regulation No 295/2008) a coefficient of variation is required on NACE Rev 2 - 1-digit (section) level only for variables: $11110,12110,12150$ and 16110 . C

The size classes for which CV's are requested are those limited to the following set: $0-9,10-19,20-$ 49, 50-249 and 250+ persons employed for series 2B and 4B and 0-1, 2-9, 10-19, 20-49, 50-249, 250+ for series 1B and 3B.

Please provide in a separate file the coefficients of variation, according to the specifications from above, and describe the methods used and the aspects taken into account for computation of the CV (including software).
A. Nace rev2 3d 12110.xls

## B. Nace rev2 2d

$\begin{array}{llllllll}11110 & 12110 & 12150 & 13310 & 15110 & 16130 . x\end{array}$ Is

## C. Nace rev2 1d_employment_class

 11110_12110_12150_16110.xls
## Legend:

$V G=$ Very good; $G=$ Good; Satisfactory $=S$; Poor $=P ;$ Very poor $=V P$

## II.2. Non-sampling errors

## II.2.1. Unit non-response

Unit non-response occurs when not all the reporting units in the sample participate in the survey or the needed information is not available in the administrative data sources. In principle non-responses can occur using both data sources: survey and administrative data.
(If this is not applicable it should be explained why e.g. 'Administrative data have gone through an imputation procedure eliminating raw data flaws and imputing records not available.')

## II.2.1.1. Description of estimation methods for taking into account the unit non-responses

a) Please describe the methods used for taking into account the unit non-response.

Reweighting by taking into account the response rate in each stratum.
b) Please describe, when applicable, the measures taken or envisaged for minimising the unit nonresponse.

## II.2.1.2. Weighted unit non-response rate

The weighted unit non-response rate shows how well data collection has worked for the population of interest. The non-response rate could be weighted by the weights that take into account the most relevant characteristics. Weights are set at the sampling stage, based on a size criterion available in the business register.

We prefer the 'number of persons employed' as a weighting factor for the calculation of the nonresponses, as it is always positive. Turnover can also be used if it is the main quantitative characteristics available for all enterprises.
a) Weighted unit non-response rate
$\frac{\sum \text { weighted non }- \text { respondent units used in estimation }}{\sum \text { weighted total of units in the sample }} \times 100$

The weighted unit non-response rate should be complied for the data collected through survey or extracted from administrative sources. Please provide in a separate file the weighted unit nonresponse rates at the NACE Rev 2 3-digit (group) level. (Non Response Rate_SBS_2011.xls)

## Remarks:

Only if a different survey is used for either one of the variables 11110, 12110, 12150, 13310, 15110 and 16110, a separate unit non-response file ought to be included, mentioning the variable number in the field concerned.

If a variable is directly calculated from the reference frame (drawn from the Business Register), non-response is zero by definition.

Please describe below which characteristics was used for weighting non-response and comment on the remarks listed above.
b) How do you evaluate the recorded unit non-response rate in the overall context?

| Very high | High | On the average | Low | Very low |
| :---: | :---: | :---: | :---: | :---: |
| $\square$ | $\boxed{\square}$ | $\square$ | $\square$ | $\square$ |

## II.2.2. Bias

\(\left.\begin{array}{|l|}\hline Please comment on the possible bias resulting from non-response or from the estimation method. <br>
Bias cannot be valued from sample data. However, while computing the extrapolating factors <br>
Calibration is used, taking into consideration the employment's trend from Labour Force Survey <br>

and the Turnover Index trend, which reduces bias due to non-response.\end{array}\right]\)| Please select which of the options describes the bias of the estimate: |
| :--- |
| Small bias (with a limited effect in the |
| overall accuracy of the estimate. |

## II.2.3 Imputation

Imputation is the process used to resolve problems of missing, invalid or inconsistent responses identified during editing.

## II.2.3.1. Description of methods used

What imputation procedure was applied to cover up the uncovered non-response? Imputation procedures will normally rely on the available administrative data, but imputation may also be applied in other situations. (see annex on II.2.3).

Please briefly describe the imputation methods used for dealing with unit and item non- response (e.g. corrector factor in the weighting procedure, imputation based on available information from previous reference period etc.)

## The methods used where:

- Historical Data
- Hot-deck imputation: An enterprise of the same size class and of the same economic activity is used in another Region


## II.2.3.2 Evaluation of the impact of imputation

a) How do you evaluate the impact of imputation on CVs?
$\begin{array}{ccc}\text { Very important } & \text { Important } & \text { Not important } \\ \square & \boxed{\square}\end{array}$
The reduction of CVs can be assessed by comparing the CVs just using the reweighting procedures with the CVS after imputation procedures.

## II.2.4 Coverage errors

## II.2.4.1. Frame

Please describe the frame used for the SBS:

- What is the variable used for identifying principal and secondary activities?

Turnover

- What is the method used for identifying activities?

```
top-down
```

区 bottom-up
$\square$ other:

- Please comment on the frequency of updating the unit's principal activity (stability rules).

Every $2^{\text {nd }}$ year

- Please comment on the frequency of updating the business register in your NSI.


## Every $2^{\text {nd }}$ year

- How do you assess the impact of imperfection of the relevant business register on the quality of the key statistics?



## II.2.4.2. Out-of-scope units

Please provide information on the methods used to detect the out-of scope units and provide Eurostat with an estimated number of those units.

Out of scope units (only from the sample data)

## II．2．5．Processing errors

Processing errors can be of different types：at data entry（keying errors or optical scanning errors）； wrong handling of raw data errors．A good editing system may detect most of those errors．
a）Please tick the appropriate checks used in order to compile the SBS data and give a short description of your editing system．

| completeness checks （data integrity rules） | validity checks （internal consistency） | plausibility checks |
| :---: | :---: | :---: |
| 区 | 区 | 区 |

## II．3．Inference（grossing up）

Have you applied any methods for grossing－up the figures covered by the SBS Regulation－to cover the entire population of enterprises（there is no cut－off threshold used）？

```
|y
\squaren
```

b）If you have applied any methods for grossing－up，please provide information about the methods．

In some sections，calibration estimation is used in order to reduce the bias due to non－response and frame errors．The basic idea is to use estimates from one set of sources，which may be treated as sufficiently accurate to act as＂benchmarks＂．Estimates based on data from a further sample source are then adjusted so as to agree with these＂benchmarks＂．In our case the auxiliary variables used as＂benchmarks＂are：
－Turnover（12110），that has been calculated from the annual trend of the turnover indices
－Number of persons employed（16110），that has been calculated from the annual trend of the respective values obtained from the Labour Force Survey
－Number of employees（16130），that has been calculated from the annual trend of the respective values obtained from the Labour Force Survey
－The trend of Turnover（12110）and Number of persons employed（16110），of the common enterprises，between the current and the previous survey

## Calibration Weighting Technique

As initial weights needed as input to the method of calibration，the Horvitz－Thompson estimator is a natural choice．Given a sample $s=(1, \ldots, n)$ with the inclusion probabilities $\pi_{s}=\left(\pi_{1}, \ldots, \pi_{n}\right)$ ， Horvitz－Thompson estimate is given by
$\hat{y}_{H T}=\sum w_{i} y_{i}$,
where $\mathbf{y}=\left(y_{1}, \ldots, y_{q}\right)^{T}$ are the $q$ target variables which we would like to estimate, $y_{i}$ is the $q$ dimensional vector of target variables for unit $i$ in the sample, and $W_{i}=1 / \pi_{i}$ are the HorvitzThompson weights associated with the $i$ element.

If auxiliary information correlated to the target variable exists, this may be used to find a set of weights which reduce the sampling variance. One set of weights, often denoted calibration weights, $w_{i}^{*}$ can be found by minimizing:

$$
f\left(w_{i}^{*}, \ldots, w_{n}^{*}\right)=\sum_{i \in S} \pi_{i}\left(w_{i}^{*}-w_{i}\right)^{2}
$$

under the constraint that:

$$
\sum_{i \in S} W_{i}^{*} X_{i j}=\sum_{i=1}^{N} X_{i j}, \quad j=1,2, \ldots, p
$$

We denote:

$$
t_{x}=\left(\sum_{i=1}^{N} X_{i 1}, \ldots, \sum_{i=1}^{N} X_{i p}\right) \text { and } X_{s}=\left(\sum_{i \in S} X_{i 1}, \ldots, \sum_{i \in s} X_{i p}\right)
$$

Now the weights are found to be:

$$
\boldsymbol{W}_{i}^{*}=W_{i}\left(1+X_{i}\left(X_{s}^{T} W_{s} X_{s}\right)^{-1}\left(t_{x}-t_{x, H T}\right)^{T}\right)
$$

where:
$\bar{t}_{x, H T-}\left(\sum_{i \in S} W_{i} X_{i 1}, \ldots, \sum_{i \in S} W_{i} X_{i p}\right)$ and $W_{s}$ is an $n \times n$ diagonal matrix with the weights $\left\{W_{i}\right\}$ on the diagonal.

## II.4. Assessment of revisions

## II.4.1. Preliminary data versus final data

The quality of the preliminary data is measured by comparing them with the final value. For annexes 1 to 4 , an error measure defined as ratio between the sum of the absolute revision and the sum of the absolute later estimates, the relative mean absolute revisions is calculated:
The following formula is applied

## RMAR - Relative Mean Absolute Revisions

$R M A R=\frac{\sum_{t=1}^{T}\left|R_{t}\right|}{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}\right|}=\frac{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}-\hat{\theta}_{P t}\right|}{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}\right|}$
$\hat{\theta}_{L t}=$ Latest estimate
$\hat{\theta}_{P t}=$ Preliminary estimate

| Characteristics | 2008 | $2009 *$ | 2010 |
| :--- | :---: | :---: | :---: |
| a) Turnover (12110) | 0.00000 | 0.07382 |  |
| b) Number of persons employed (16110) | 0.00000 | 0.01177 |  |

* ANNEXES II AND IV

Please give a description of the methodology used for compiling preliminary data.
For annexes I and III the assessment of preliminary data was based on the trend of:

- The common enterprises of the survey between the years 2010-2011
- The turnover index of a) the sector of enterprise statistics for services and b) the sector of enterprise statistics of distributive trade (between years 2010 and 2011) and
- The employment characteristic of: a) the sector of enterprise statistics for services and b) of the sector of enterprise statistics of distributive trade (between years 2010 and 2011).

For annexes I and V the assessment of preliminary data was based on:

- The trend of common enterprises (between 2010 and 2011) in turnover, production value and investments applied in 2010'survey results
- The purchases of good and services estimated from a regression model using the variable of production value
- The variables employment and wages and salaries estimated using the trend of common enterprises (between 2010 and 2011) in these variables and the information from indexes


## II.4.2. Average size of revision

By revision we mean replacing the data that has been published before on the Eurostat website by new data and not when corrections are sent before the data is finally released on the website.

The revision size is measured as follows:

## RMAR - Relative Mean Absolute Revisions

$R M A R=\frac{\sum_{t=1}^{T}\left|R_{t}\right|}{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}\right|}=\frac{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}-\hat{\theta}_{P t}\right|}{\sum_{t=1}^{T}\left|\hat{\theta}_{L t}\right|}$
$\hat{\theta}_{L t}=$ Latest estimate
$\hat{\theta}_{P t}=$ Preliminary estimate

The following list of characteristics to be taken on board for the calculation of the revision size, is suggested by annex for the national series of the four annexes:

- Annex 1: Series 1A: $11110,12110,12120,12150,12170,13110,13310,1511$ 0, 16110,16130
- Annex 2, Series 2A $11110,12110,12120,12150,12170,13110,13131,13310$, $13320,15110,15150,16110,16130,16140,16150,18110,20110$
- Annex 3, Series 3B: $11110,12110,12120,12130,12150,13110,13120,1331$ $0,13320,15110,15150,16110,1613$
- Annex 4, Series 4A: $11110,12110,12120,12150,12170,13110,13310,1332$ $0,15110,15150,16110,16130,16140,16150,18110$

Not applied.

If revisions have been sent, please provide the reasons for making the revision.
For reference year 2011, one revision regarding the format only, of annexes I and III, has been sent.

## II.4.3. Revision policy

| Please describe for each annex your revision policy, including information such as the <br> average number of revisions (planned or not), the main reasons for revisions and the impact <br> of the revisions. |
| :--- |
| Annex I |
| One revision (not planned) regarding the format. |
| Annex II |
| - |
| Annex III |
| One revision (not planned) regarding the format. |
| Annex IV |
| - |
| Annex VIII |
| No revisions |

## III. Coherence and comparability

## III.1. Coherence

## Definition

Coherence of statistics is their adequacy to be reliably combined in different ways and for various uses. It focuses on the joint use of statistics that are produced for different primary purposes to show cases of incoherence rather than to prove coherence.

```
Please report on the inconsistencies that can already be documented for the following statistics as
well as work undertaken in this respect:
- Number of enterprises in the business register
- Production value of Prodcom
- Value added of national accounts
- Evolution of turnover and persons employed from short term statistics
- Other (please specify)
```


## Only to be filled in if this quality report includes information on the Annex VIII

Please report on the inconsistencies between the total turnover reported for Annex VIII and the corresponding data to be reported under the provisions of Annex I.
[Comment: as we do not know which countries will report on Annex VIII using this report, we cannot include an overview with remaining inconsistencies in the data disseminated by Eurostat]

## III.2. Comparability

## Definition

Comparability aims at measuring the impact of differences in applied statistical concepts and measurement tools and procedures, when statistics are compared between geographical areas, nongeographical domains, or over time.

## III.2.1. Comparability over time

Length of time series is the period when the statistics have been compiled for the first time until the latest reference year.

Length of comparable time series starts with the last break in time series and longs until the last reference year. Please split into individual annexes if time series are different.

| Indicator | Period (yyyy - yyyy) |
| :--- | :---: |
| III.2.1.1. Length of time series | $2000-2011$ |
| III.2.1.2. Length of comparable time series | $2000-2011$ |

> III.2.1.3. In case II.2.1.1. is not equal to II.2.1.2., please, indicate the reasons or differences, in concepts and methods of measurements for breaks in time series.
> From reference year 2008 onwards, NACE Rev. 2 was introduced where for the past years NACE Rev. 1.1 had been applied for the economic activity breakdown. For that reason, many economic activities are not comparable.

## III.2.2. Geographical comparability: Coverage of target population

III.2.2.1. Please report on the inclusion of branches of foreign enterprises and the exclusion of the results relating the activities abroad of enterprises of the reporting country.
Only turnover realized in the country is included.
III.2.2.2. Are the statistical units used for compiling the SBS series in conformity with the definitions in Regulation No 696/93?

Yes

## III.2.3. Geographical comparability: Other issues

III.2.3.1. Please report on any other issues (with the exception of differences in concepts and definitions in the source data mentioned in paragraph II.I.3) that have an influence on the comparability of the data of your country with that of the other EEA countries.

Full in conformity with SBS regulation.

## IV. Timeliness and Punctuality

## IV.1. Timeliness

## Definition

Timeliness of information reflects the length of time between its availability and the event or phenomenon it describes.

| Please provide the key dates for the following actions | Deadline(s) MM/YY |
| :--- | :--- | \left\lvert\, \(\left.\left.\begin{array}{l}If several data collections are organised, please indicate the <br>

deadline of the last\end{array} $$
\begin{array}{c}\begin{array}{c}\text { The surveys are carried out by } \\
\text { private collaborators that visit the } \\
\text { enterprises and deliver the } \\
\text { questionnaires in order to be filled } \\
\text { in. The time margin allowed to the } \\
\text { enterprises is 15-20 days } \\
\text { depending on their economic } \\
\text { activity. Then, the completed } \\
\text { questionnaires are collected from } \\
\text { the private collaborators and after } \\
\text { the initial completeness checks the } \\
\text { questionnaires are delivered to } \\
\text { ELSTAT. }\end{array} \\
\hline \text { Due to high non-response rates, } \\
\text { reminders are sent to the }\end{array}
$$\right.\right\} $$
\begin{array}{c}\text { enterprises and thus the collection } \\
\text { period is extended up to two (2) } \\
\text { months. }\end{array}
$$\right\}\)

## IV.2. Punctuality

## Definition

Punctuality refers to the time lag between the release date of data and the target date when it should have been delivered, for instance, with reference to dates announced in some official release calendar, laid down by Regulations or previously agreed among partners.

The punctuality of delivery date is calculated as actual date of data delivery - scheduled date of transmission to Eurostat. It shows the delay (positive value) or advance (negative value) in calendar days after the legal deadline (18 months after the end of the reference year fore final data; 10 months for preliminary data).

| Country | GR |
| :--- | :--- |
| R1A | 277 days (9 <br> months) |
| R1B | 277 days (9 <br> months) |
| R1C | 277 days (9 <br> months) |
| R1E | 277 days (9 <br> months) |
| R2A | 18 days |
| R2B | 18 days |
| R2C | 18 days |
| R2D | 18 days |
| R2F | 18 days |
| R2H | 18 days |
| R2I | 18 days |
| R3A | 277 days (9 <br> months) |
| R3B | 277 days (9 <br> months) |
| R3C | 277 days (9 <br> months) |
| R3D | 277 days (9 <br> months) |
| R4A | 53 days |
| R4B | 53 days |
| R4C | 53 days |
| R4D | 53 days |
| R4F | 53 days |
| R4G | 53 days |
| R4H | 53 days |
|  |  |

IV.2.1. Please comment the delays (if any) of transmission to Eurostat as calculated by Eurostat, e.g., the reasons for the late delivery and present the action plan for improving timeliness and respecting transmission delays (if needed, you can split this question for the different annexes).

Delays in the transmission of data regarding series of Annexes I and III for reference year 2011 were due to revisions that had to be made to the data with reference years 2008-2010!

## V．Accessibility and Clarity

## V．1．Accessibility

Definition
Accessibility refers to the physical conditions in which users can obtain data：where to go，
how to order，delivery time，clear pricing policy，convenient marketing conditions，availability of
micro and macro data，various formats（paper，files，CD＿ROM，Internet etc．）．

## If the SBS data are not disseminated at national level by your Institute please proceed to VI． Further comments．

If needed，this following question can be split for the different annexes．

V．1．1．Is the SBS data published at national level different from the data sent to Eurostat？


V．1．2．If yes，please gives a brief description of the reasons for these differences．

## Tabulation differences only

V．1．3．Do you publish additional indicators together with the SBS at the national level？
$\square$ yes
区 no
V．1．4．If yes，please give a brief description of the additional indicators published at the national level．

| V．1．5．How do you disseminate SBS data？ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member State | Paper／pdf Publications |  |  | Electronic Publications |  |  |
|  | News release | Statistical yearbook | Thematic publications | Internet－ Data base | $\begin{gathered} \text { CD/DVD- } \\ \text { Rom } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Other (fax, e- } \\ & \text { mail, etc.) } \end{aligned}$ |
| $\begin{gathered} \hline 2011 \\ \text { data } \end{gathered}$ | $\square$ yes | $\square$ yes | $\square$ yes | 区 yes | $\square$ yes | 区 yes |
| Action <br> plan <br> 2012 <br> data |  |  |  | 区 yes |  | 区 yes |
| $\rightarrow$ For 2011 data，please，mark with a cross where applicable． <br> $\rightarrow$ For 2012 data，please，report any scheduled action plan specifying the implementation date． |  |  |  |  |  |  |

V.1.6. Availability of paper publications in any foreign languages
[x] in English
[ ] in the following other language(s)
Please indicate links to your electronic publications on SBS www.statistics.gr

## V.2. Clarity

lefinition
Clarity refers to the data's information environment whether data are accompanied with appropriate metadata, illustrations such as graphs and maps, and whether information on their quality is also available.

```
V.2.1. Are statistical metadata available?
[ ] available for paper publications
[x] available on the Website (electronic version)
[ ] no methodological explanations on data are disseminated
    Please indicate links to your electronic publications of metadata
www.statistics.gr
```


## VI. Further Comments

Please provide further comments regarding SBS data quality which are not included in the parts above (e.g. foreseeable changes in the methodology; etc.).

## Annex

Note: numbering in the annex is not contiguous: paragraphs are numbered corresponding to the entry concerned in the quality report.

## I. RELEVANCE

Relevance is the degree to which statistics meet current and potential users' needs. It refers to whether all statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.) reflect user needs.
These questions need to be answered for the statistical concepts (like definitions of statistical units or classifications used) and on the availability of required statistics (completeness). The questions as regards the deviations from the statistical concept are covered under coherence and comparability, as they are also needed in that frame.
Conformity of characteristics (variables) with the regulation can be considered either as a relevance issue, an accuracy problem or a comparability item. We treat it in the accuracy chapter under II.1.3.2 where data production using administrative sources are dealt with.

## I. 1 COMPLETENESS

Completeness is the extent to which data are available - compared to what is requested according to the SBS-Regulation.
In this quality report completeness is measured via availability ratios, namely as the delivered cells for a certain level of detail or the total to the amount that was expected to be obtained.

## I.1.2. Availability of characteristics and/or breakdowns required by the SBSRegulation

In this question Member States shall describe the reasons why in some cases details are missing and to include the measures that the Member States took or are planning to take in order to change the situation.

If none of the details are missing, the answer shall be left in blank or if the Member State foresees no change in this situation.

## I.1.3. Use of the quality flag 'Contribution to European totals only' (CETO-flag) foreseen in the SBS regulation

In order to minimise the burden on businesses and the costs to the national statistical authorities, the Member States may mark data for use as a contribution to European totals only (CETO). Eurostat shall not publish those data, nor shall Member States mark nationally published data with a CETO flag. The use of the CETO flag shall be dependent on the individual Member State's share of the EU total of value added in the business economy as follows:
(a) Germany, France, Italy, and United Kingdom: CETO-flagged data may be sent for NACE Rev. 2 class level and for the size class breakdown at NACE Rev. 2 group level. No more than $15 \%$ of the cells may be marked.
(b) Belgium, Denmark, Ireland, Greece, Spain, the Netherlands, Austria, Poland, Portugal, Finland and Sweden: CETO-flagged data may be sent for NACE Rev. 2 class level and for
the size class breakdown at NACE Rev. 2 group level. No more than 25 \% of the cells may be marked. In addition, if, in any of these Member States, the share of a NACE Rev. 2 class or of a size class of NACE Rev. 2 group is less than $0,1 \%$ of the business economy of the Member State concerned, those data may additionally be sent as CETO-flagged.
(c) Bulgaria, Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Romania, Slovenia and Slovakia: CETO-flagged data may be sent for NACE Rev. 2 group and class level and for the size class breakdown at NACE Rev. 2 group level. No more than $25 \%$ of the cells at group level may be marked.

The measures designed to amend non-essential elements of this Regulation, inter alia, by supplementing it, relating to reviewing the rules for the CETO flag and grouping the Member States, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 12(3) by 29 April 2013 and every five years thereafter.

As Eurostat will present a comment on how he rules of SBS are respected, Member States can update and check if they agree with Eurostat's comment.

## I.1.4. Application of $1 \%$-rules foreseen in the SBS regulation

This question aims to identify the situations where Member States despite of the $1 \%$-rule are foreseen to provide data (or because are able to obtain the data concerned, e.g. using administrative sources), and situations where the Member States expects that this rule will apply in a new branch.

## I.1.5. Derogations from the provisions of the SBS Regulation

Some Member States were granted derogations. Sometimes however, the cause for requesting these derogations applies no longer and the Member States is able to provide the "missing data". In this question, information on this is expected.
This question can be let in blank if you do not have any derogation or if you do not foresee any change in the present situation.

## I.3. Monitoring user interest

The user interest is an important indication about relevance. The aim of the group of questions is to quantify this interest. It is split in three groups: Data dissemination, user consultation and user satisfaction.

## II Accuracy

## Definition

Accuracy in the general statistical sense means the closeness of computations or estimates to the exact or true values. The difference between the two values is the error.

As any statement on accuracy requires more information on the methods used for compiling the structural business statistics, most of the methodology description is filed under this chapter.

## II.1. Concepts and sources

Member states may use different data collection systems to comply with the SBS regulation. We distinguish:

- the use of sample surveys ${ }^{4}$ (with administrative information present in the sampling frame and only used for stratification purpose),
- the use of a sample survey combined with use of administrative information (whereby this information is also used in the editing and imputation process and possibly in the inference process through calibration),
- the use of administrative data as the only source of information and all characteristics are calculated from the administrative records using or not a model based approach (in this case no survey information is used for a significant part of the strata covered).
As such it is necessary only to fill in the column concerned:
- Column 1 if your data collection is made by the way of survey(s);
- the column 2 if your data collection is a combination of surveys and the use of administrative data (even if the administrative data is used for calibration or imputation);
— the column 3 is expected to be filled by those Member States that only use administrative data in the data collection for SBS.


## II.I.3. Definitions and concepts used in the survey / administrative source

In this question the Member States self-assessment is expected. If you identify any difference between the definitions please describe it in general - if you consider it as an important difference (in case your assessment is lower than good, please detail it as much as possible). Please split your answer between the differences for survey and the differences for administrative source.

## Sampling error and non-sampling errors

When describing accuracy it is customary to distinguish between sampling and non-sampling errors. Sampling errors can be described by an estimate of the uncertainty due to sampling, quantified in the coefficient of variation (COV). Calculation of this COV is dealt with in II.1.4.

Non-sampling errors are more varied in nature and harder to quantify. We distinguish:

- Frame errors (under-coverage / over-coverage)
- Reporting or measurement errors including non-response
- Processing errors
- Model assumption errors

Among those, reporting and measurement errors are focussed on non-response under heading II.2.1.

Coverage and processing errors are included in this report under the headings II.2.4 and II.2.5.

[^3]
## II.1.4. Sampling error: coefficient of variation

$\mathrm{CV}=\frac{\sqrt{\text { estimate of the sampling variance }}}{\text { estimated value }}$
Largely adopted as an estimate for the sampling variance is the Horvitz-Thompson variance, in which $\mathrm{w}_{\mathrm{h}}$ is the weight of the elements in stratum $h$. Since strata are independent from one another, the variance over the strata concerned is the sum of the variances. Remark that there is no variance contribution in an exhaustively surveyed stratum (of large enterprises), provided that there is no non-response.

$$
V=\sum_{h} V_{h}=\sum_{h}\left(w_{h}-1\right) \cdot w_{h} \sum_{i=1}^{n_{h}}\left(y_{i}-\mu_{h}\right)^{2}
$$

If there is no sampling (e.g. a model based approach is used for mass imputation using administrative records), sampling variance is zero by definition.

A 'Jacknife' method can be applied to estimate a variance in case an imputation procedure was used for part or all of the elements in the stratum:
Suppose $n_{i}$ elements were imputed in a stratum of $n_{t}$ enterprises. We can then calculate the variance among $n_{i}+1$ alternate elements consisting of the total estimate based on all elements and the $n_{i}$ estimates based on $n_{t}-1$ enterprises, whereby one imputed enterprise was dropped and consequently a weight factor $n_{t} /\left(n_{t}-1\right)$ was applied.
$\mathrm{V}=\operatorname{Var}\left(\mathrm{T}, \mathrm{T}_{1}, \ldots \mathrm{~T}_{\mathrm{i}}, \ldots \mathrm{T}_{\mathrm{ni}}\right)$ with $\mathrm{i}=1 \ldots \mathrm{n}_{\mathrm{i}}$ and $\mathrm{T}_{\mathrm{i}}=\mathrm{n}_{\mathrm{t}}\left(\mathrm{n}_{\mathrm{t}}-1\right) \sum \mathrm{y}_{\mathrm{j}}(\mathrm{j} \neq \mathrm{i})$
In case the data collection is exclusively based on an administrative source, the 'Jacknife' method may still be applied. In this case, all $n_{t}$ enterprises are considered imputation results $(\mathrm{t}=\mathrm{i})$. In this case, the objective value of this calculation is questionable: it reflects the intrastrata variability and quietly assumes that errors due to the model based approach are proportional to this.

## II.2.1 Non-response

The weighted unit non-response rate shows how well the data collection worked for the population of interest. The non-response rate could be weighted by the weights that take into account the most relevant characteristic. Weights are set at the sampling stage, based on a size criterion available in the business register. As weighting factor for the non-response calculation, we prefer the 'number of persons employed' as it is always positive. Turnover can also be used if this is the main quantitative characteristics available for all enterprises.

## II.2.1.1. Description of estimation method for taking unit non-response into account

## a) Description the methods used for taking unit non-response into account

This question deals with how MS deal with non-response: Is imputation used for nonrespondent enterprises? If so is there a size class threshold: i.e. is imputation used for all strata? In which case reweighting is used? Is there any calibration procedure?

## b) Measures taken or envisaged for minimising non-response.

In this question Member States shall inform about all kind of measures that have been taken, like fines, personal contacts with non-response units in order to motivate them to answer. On the other hand some other kind of measures can be considered like the use of partial data obtain by the way other surveys, for example.

## II.2.2. Bias

A measurement bias can be due to an inappropriate selection scheme or to a selective nonresponse. Whereas the former could be considered a sampling error (but probably due to some erroneous entry in the sampling frame), the latter occurs in the production process and is not related to the sampling stage. In a purely administrative survey, a missing or incomplete administrative record could also be considered a type of non-response. It remains to be seen whether it is of a complete random nature or not.
We will treat 'bias' as an outcome of non-response, leaving it out of the section which is split according to the data collection method. It is treated in section II.2.2

## II.2.3. Imputation

Imputation as a procedure in data production does not fit on the axis sampling/non sampling errors. In a survey, imputation can be applied to 'recover' cases of non-response where good approximations can be made, namely based on administrative records. For medium sized and larger enterprises, accounting information quite often contains enough data fields that are normally used for filling out a questionnaire and which yield very good estimates upon imputation.
Imputation is also an alternative for calibration in case individual administrative data are available for all of the elements in the stratum (both sampled and non-sampled). For example, the information available in the Business Register that was used for stratification is the minimal set that may successfully be used for imputation. Mass imputation on the non sampled enterprises then replaces inference.

Finally in any data collection from administrative sources only, the imputation procedure is based on a model, translating administrative data into statistical characteristics.

In the first case, the imputation normally leads to a substantially reduced coefficient of variation: without imputation the variance can be calculated using the weights corrected for non-response. After imputation of the medium and large enterprises, the 'jacknife' variance estimate can be used. It is then possible to assess the reduction of the coefficient of variation due to the imputation procedure.

## II.2.3.2 Evaluation of the impact of imputation

This question only refers to the imputation procedure to recover non-response, not to the imputation of corrected data after the editing has reveal (severe) raw data errors.
Please assess the reduction of the coefficient of variation obtained through imputation as compared to the case where only reweighting is applied. (Please use the Jacknife method described in this annex under II.2.3) Only one single comparison needs being made by annex, preferably on the characteristics turnover (12 110 ) and for the largest section it includes: e.g. for Nace Rev 2 C manufacturing industry.

## II.4. Assessment of revisions

Revisions and differences between preliminary and final data make use of the same formula. It has the advantage that (for positive definite characteristics) the denominator cannot be zero, hence there are no singularities possible (even with a 'true zero' revised to a non-zero entry). Moreover contrary to percentage changes, it is symmetrical. The factor 2 makes the differences asymptotically (meaning for very small differences) equal to percentage changes.

The formula then mentally translates as 'a weighted sum of squares of percentage changes'.

## II.4.1. Preliminary data versus final data

Member States shall present, based on its self-assessment, what they consider as the main reasons for the differences between the preliminary data and the final data, for example Member States can consider that the answering rate in the moment of preliminary data is too low or some of the administrative data used is not yet available.

If, based on your assessment you do consider the differences insignificant, you do not need to fill his answer.

## II.4.2. Average size of revision

In this question, it is very important to get information on what were the reasons why the data has been revised - for example: an error was detected by a user; after getting a confirmation from a unit, NSI was informed that the data was wrong; when editing data for year n it was detected an error on year n-1 data, etc.

## III.2. Comparability

## II.2.1. Comparability over time

It is very important in the context of a quality report to obtain information on the time length of the series and to identify the reasons why in some series the time length is shorter.


[^0]:    ${ }^{1}$ SBS Regulation: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:097:0013:0059:EN:PDF:

[^1]:    ${ }^{2}$ The ESTAT dissemination unit surveys the language policy in national publications: use of native language, use of English, use of any other language. This information is not specifically targeting SBS.

[^2]:    ${ }^{3}$ Exhaustive interrogation of all enterprises is considered a type of survey.

[^3]:    ${ }^{4}$ Exhaustive interrogation of all enterprises is considered a type of survey.

