# **QUALITY REPORT**

# STRUCTURAL BUSINESS STATISTICS REGULATION ANNEXES I TO IV

MEMBER STATE: GREECE

REFERENCE YEAR: 2011

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:	+30 213 135 2000			
POSTAL ADDRESS:	Pireos 46 & Eponiton, 185 10 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:	+30 213 135 2056, +30 213 135 2489		

#### Annex II:

#### RESPONSIBLE INSTITUTION:

#### **CONTACT DETAILS:**

NAME:	G. Gkolemi
E-MAIL ADDRESS:	g.gkolemi@statistics.gr
TELEPHONE NUMBER:	+30 213 135 2044

## Annex III:

#### RESPONSIBLE INSTITUTION:

#### CONTACT DETAILS:

NAME:	M.A. Stamouli
E-MAIL ADDRESS:	m.stamouli@statistics.gr
TELEPHONE NUMBER:	+30 213 135 2489

# Annex IV:

#### RESPONSIBLE INSTITUTION:

#### **CONTACT DETAILS:**

NAME:	G. Gkolemi			
TVI HVIL	M.Gerogiorgi			
E-MAIL ADDRESS:	g.gkolemi@statistics.gr			
	m.gerogiorgi@statistics.gr			

TELEPHONE NUMBER:	+30 213 135 2044 +30 213 135 2045

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## 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<sup>1</sup>.

#### 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
21	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

 $<sup>^{1} \</sup>textbf{SBS Regulation:} \ \underline{\text{http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:097:0013:0059:EN:PDF:}$ 

a) characteristics		nothing missing
b) activities missing in series	2A:	nothing missing
b) activities illissing ill series	V11110: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	
	V12110: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  W12120 P051 P0510 P062 P06	
	V12120:B051,B0510,B062,B06	
	20,8071,80710,80721,80892,8099	
	,B0990,C1106,C2314,C2343,C2446	
	,C2731,C304,C3040,C3211,C3319,	
	D3512,D3513,D3514,D3521,D3523,	
	E3831	
	V12130: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	
	V12150: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	
	V12170: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	
	V13110:B051,B0510,	
	B062,B0620,B071,B0710,B0721,B0	
	892,B099,B0990,C1106,C2314,C23	
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	1,D3523,E3831	
	V13120: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	
	V13131: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	
	V13213:B051,	

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 V15110: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 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, C33191 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 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,C304,C3040,C3211,C3319,D3 512,D3513,D3514,D3521,D3523,E3831|

V13320: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 V15110:B051,B0510,B062,B0620,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| V16110: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.E38311 2F: V23110:B051,B0510,B062,B0620,B 071,B0710,B0721,B0892,B099,B09 90,C1042,C1062,C1103,C1104,C11 06,C1411,C1622,C1711,C1724,C19 1,C1910,C2017,C206,C2060,C2211 ,C2311,C2314,C2331,C2343,C2344 ,C2349,C2445,C2446,C264,C2640, C2652,C268,C2680,C2731,C2823,C 2824,C2895,C2896,C302,C3020,C3 04,C3040,C3091,C3211,C3314,C33 16,C3317,C3319,D3512,D3513,D35 14,D3521,D3523,E3831 2H: V21110:B V21120:B 4B: V11110:F411:CT20 49,CT50 249,CT250+ V11110:F422:CT250+| V11110:F43:CT250+| V11110:F431:CT250+| V11110:F432:CT250+| V11110:F433:CT250+| V11110:F439:CT250+| V12110:F411:CT20\_49,CT50\_249,CT250+| V12110:F422:CT250+ V12110:F43:CT250+ V12110:F431:CT250+ |V12110:F432:CT250+| V12110:F433:CT250+| V12110:F439:CT250+| V12120:F411:CT20\_49,CT50\_249,CT250+| V12120:F422:CT250+| V12120:F43:CT250+ V12120:F431:CT250+ V12120:F432:CT250+ |V12120:F433:CT250+| V12120:F439:CT250+ V12150:F411:CT20\_49,CT50\_249,CT250+|

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V12150:F422:CT250+
V12150:F43:CT250+|
V12150:F431:CT250+|
V12150:F432:CT250+|
V12150:F433:CT250+|
V12150:F439:CT250+|
V12170:F411:CT20_49,CT50_249,CT250+
V12170:F422:CT250+
V12170:F43:CT250+|
V12170:F431:CT250+|
V12170:F432:CT250+|
V12170:F433:CT250+|
V12170:F439:CT250+|
V13110:F411:CT20 49,CT50 249,CT250+
|V13110:F422:CT250+|
V13110:F43:CT250+
V13110:F431:CT250+
V13110:F432:CT250+|
V13110:F433:CT250+|
V13110:F439:CT250+|
V13310:F411:CT20_49,CT50_249,CT250+
V13310:F422:CT250+
V13310:F43:CT250+
V13310:F431:CT250+|
V13310:F432:CT250+|
V13310:F433:CT250+|
V13310:F439:CT250+|
V13320:F411:CT20_49,CT50_249,CT250+|
V13320:F422:CT250+
|V13320:F43:CT250+|
V13320:F431:CT250+|
V13320:F432:CT250+|
V13320:F433:CT250+|
V13320:F439:CT250+|
V13330:F411:CT20 49,CT50 249,CT250+
V13330:F422:CT250+
V13330:F43:CT250+
13330:F431:CT250+
V13330:F432:CT250+|
V13330:F433:CT250+|
V13330:F439:CT250+|
V16110:F411:CT20_49,CT50_249,CT250+
V16110:F422:CT250+
V16110:F43:CT250+|
V16110:F431:CT250+|
V16110:F432:CT250+|
V16110:F433:CT250+
|V16110:F439:CT250+|
16130:F411:CT20_49,CT50_249,CT250+|
V16130:F422:CT250+
V16130:F43:CT250+
V16130:F431:CT250+|
V16130:F432:CT250+|
V16130:F433:CT250+
V16130:F439:CT250+|
V16150:F411:CT20 49,CT50 249,CT250+
V16150:F422:CT250+
V16150:F43:CT250+
V16150:F431:CT250+|V16150:F432:CT250+|
V16150:F433:CT250+|
```

	V16150:F439:CT250+  4H: V23110:F:CT0_9  V23110:F41:CT0_9  V23110:F411:CT0_9,CT20_49,CT 50_249,CT250+  V23110:F412:CT0_9  V23110:F42:CT0_9  V23110:F421:CT0_9  V23110:F422:CT0_9,CT250+  V23110:F429:CT0_9  V23110:F431:CT0_9,CT250+  V23110:F431:CT0_9,CT250+  V23110:F432:CT0_9,CT250+  V23110:F433:CT0_9,CT250+  V23110:F439:CT0_9,CT250+  V23110:F439:CT0_9,CT250+  V23120:F411:CT0_9  V23120:F411:CT0_9  V23120:F412:CT0_9  V23120:F422:CT0_9  V23120:F421:CT0_9  V23120:F421:CT0_9,CT250+  V23120:F431:CT0_9,CT250+  V23120:F431:CT0_9,CT250+  V23120:F433:CT0_9,CT250+  V23120:F433:CT0_9,CT250+  V23120:F433:CT0_9,CT250+  V23120:F433:CT0_9,CT250+	
c) breakdown in series		nothing missing
d) missing series		
		nothing missing
		Series 1A, 1B, 1C, 3A, 3B, 3C, 3D transmitted on 31- 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)

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

## 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
21	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
4H	0	0	0	0	0

#### I.1.4. Application of 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		
21	7	17	6		
3A 3B 3C	0 15 0	0	0	0	0
		0	19	16	-
		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
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 hard-copies of the SBS publications sent or sold? <sup>2</sup>
[ ] 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?
Yes, to the public authorities

<sup>&</sup>lt;sup>2</sup> 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.

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?

[ ] Yes, to the public authorities and a limited set of registered main users

[X] Yes, to everyone with a specific request

[ ] No

# 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 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<sup>3</sup> (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.

<sup>&</sup>lt;sup>3</sup> Exhaustive interrogation of all enterprises is considered a type of survey.

	Methodology 1: Sample survey				Methodology 2: Sample survey combined with administrative information	Methodology 3: Administrative information
<ul> <li>II.1.1. Description of source</li> <li>a) Survey</li> <li>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).</li> </ul>						
- type of sample design	stratified multistage clustered				stratified	
- stratification criteria	Activity Employment size class Region Other (please specify: <u>Turnover Size Cla</u> Apart from the activities B, C, D, E)		区 区 区 Lass,	Activity Employment size class Region Other (please specify)		
- selection schemes (sampling rates)	Section	N	n	Sampling Rate		
	В	410	169	41,2%		
	С	3.762	3.762	100,0%		
	С	75.218	0	0,0%		
	D	15	15	100,0%		
	Е	186	186	100,0%		
	F	105.298	4.568	4,3%		
	G	286.101	8.557	2,99%		
	Н	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	-	
- the effective sample size	-	
- If the reference period differs from the calendar year is there a correction to bring it in accordance with the reference period? For SBS (calendar year).	Appropriate reweighting and application of calibration method, is used.	
- Additional or specific information should be added in the column 'Methodology <sup>2</sup> ' if the suggested options are not feasible with the used concepts in your country of compiling SBS data.		

	<u></u>	<del>_</del>	
b) Administrative source			
Please describe the administrative sources:			
The used administrative sources:			
		·	
- Please enumerate the characteristics directly			
available or with a good proxy in the administrative		'	
source.			
Source.			
- Please enumerate the characteristics for which a			
model based estimate is used.			
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		I late to the late for a second	
		[ ] : data source, basic data for some	
used:		characteristics	
		[ ]: data source for imputation in case of	
		non-response.	
		[ ]: data source for imputation, for strata	
		not covered by the survey	
		[ ]: data source for 'mass imputation':	
		(imputation of units not selected in the	
		sample)	
		[ ]: data source for calibration (calage sur	
		marge) to optimize inference from survey	
		results	
Wile of Linds Co. Individual Co. Ind			1
- What kind of administrative data do you access?		[ ] : micro data	[ ]: micro data
		[ ] : aggregated data	[ ] : aggregated data
		[ ] : for the entire population	[ ]: for the entire population
		(global data)	(global data)
		[ ]: by each (or some) economic	[ ] : by each (or some)
		breakdown class	economic breakdown class
		[ ]: for a part of the population	[ ]: for a part of the population
		(sole proprietor, companies, etc.)	(sole proprietor, companies, etc.)
		[ ] : other (please specify):	[ ] : other (please specify):
		[ ] . other (produce specify).	[ ] . other (prease speelly).
			-

How do you assess the frequency to which the used administrative data sources are updated?						VG *	G	S	P	VP	VG	G	S	P	VP
Are the administrative data subject to several revisions with (increasing) degree of completeness?						[ ] yes [ ] no					[]] yes				
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?	VG	G	S	P	VP	VG	G	S	P	VP	VG	G	S	P	VP
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?		please in			I used to imation).		please	indicate the characteri				please i	indicate characte		hod used to

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

#### **Coefficients of Variation**

$$CV = \frac{\sqrt{\text{estimate of the sampling variance}}}{\text{estimated value}}$$

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 12 11 0) is required on the NACE Rev2 – 3-digit (*group*) level. **A** 

For the same series, coefficients of variation are expected for variables: 11 11 0, 12 11 0, 12 15 0, 13 31 0, 15 11 0 and 16 13 0 on NACE Rev.2 – *Section level* for the sections B, C, D, E, F, G, H, I, J, L, 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: 11 11 0, 12 11 0, 12 15 0 and 16 11 0. 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 11110\_12110\_12150\_13310\_15110\_16130.x

C. Nace rev2 1d\_employment\_class 11110 12110 12150 16110.xls



VG= Very good; G=Good; Satisfactory= S; Poor=P; Very poor=VP

### 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 non-response.

#### 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 non-responses, 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

 $\frac{\sum \text{weighted non-respondent units used in estimation}}{\sum \text{weighted total of units in the sample}} \times 100$ 

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 non-response 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	ı
	$\boxtimes$				ı

#### **II.2.2.** Bias

Please comment on the possible bias resulting from non-response or from the estimation method.					
Bias cannot be valued from sample de	ata. However, while computing the extra	ipolating factors			
Calibration is used, taking into consid	deration the employment's trend from L	abour Force Survey			
and the Turnover Index trend, which	reduces bias due to non-response.				
Please select which of the options des	scribes the bias of the estimate:				
	Small bias (with a limited effect in the				
unbiased	overall accuracy of the estimate.	Substantial bias			
	×				
	Δ				

#### 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

11.2.3.2 Evaluation of the imp	pact of imputation	
a) How do you evaluate the in	mpact of imputation on CVs?	
Very important	Important	Not important
	×	
The reduction of CVs can be procedures with the CVS after	assessed by comparing the CVs ju er imputation procedures.	ast using the reweighting
-		
II.2.4 Coverage errors		
II.2.4.1. Frame		

11.2.7.1. I Tume						
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						
⊠ bottom-up						
other:						
- Please comment on the frequency of updating the unit's principal activity (stability rules).						
Every 2 <sup>nd</sup> year						
- Please comment on the frequency of updating the business register in your NSI.						
Every 2 <sup>nd</sup> year						
- How do you assess the impact of imperfection of the relevant business register on the quality of the key statistics?						
almost none low medium high very high don't know						

#### 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			
×					

# II.3. Inference (grossing up)

Horvitz-Thompson estimate is given by

.s. Interence (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)?    Yes   no
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:
<ul> <li>Turnover (12110), that has been calculated from the annual trend of the turnover indices</li> <li>Number of persons employed (16110), that has been calculated from the annual trend of the respective values obtained from the Labour Force Survey</li> <li>Number of employees (16130), that has been calculated from the annual trend of the respective values obtained from the Labour Force Survey</li> <li>The trend of Turnover (12110) and Number of persons employed (16110), of the common enterprises, between the current and the previous survey</li> </ul>
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 $s = (1,, n)$ with the inclusion probabilities $\pi_s = (\pi_1,, \pi_n)$ ,

 $\hat{y}_{HT} = \sum w_i y_i ,$ 

where  $\mathbf{y} = (y_1, ..., y_q)^T$  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 Horvitz-Thompson 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:

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

under the constraint that:

$$\sum_{i \in S} w_i^* \chi_{ij} = \sum_{i=1}^N \chi_{ij}, \qquad j=1, 2, ..., p.$$

We denote:

$$t_x = \begin{pmatrix} \sum_{i=1}^{N} x_{i1} & \dots & \sum_{i=1}^{N} x_{ip} \end{pmatrix} \text{ and } X_s = \begin{pmatrix} \sum_{i \in s} x_{i1} & \dots & \sum_{i \in s} x_{ip} \end{pmatrix}$$

Now the weights are found to be:

$$\mathbf{W}_{i}^{*} = \mathbf{W}_{i} \left( 1 + \mathbf{\chi}_{i} \left( \mathbf{X}_{s}^{T} \mathbf{W}_{s} \mathbf{X}_{s} \right)^{-1} \left( \mathbf{t}_{x} - \mathbf{t}_{x,HT} \right)^{T} \right)$$

where:

 $\bar{t}_{x,HT-}\left(\sum_{i\in S}W_i\chi_{i1},...,\sum_{i\in S}W_i\chi_{ip}\right)$  and  $W_s$  is an  $n\times n$  diagonal matrix with the weights  $\{W_i\}$  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**

$$RMAR = \frac{\sum_{t=1}^{T} |R_{t}|}{\sum_{t=1}^{T} |\hat{\theta}_{Lt}|} = \frac{\sum_{t=1}^{T} |\hat{\theta}_{Lt} - \hat{\theta}_{Pt}|}{\sum_{t=1}^{T} |\hat{\theta}_{Lt}|}$$

 $\hat{\theta}_{It}$  = Latest estimate

 $\hat{\theta}_{Pt}$  = Preliminary estimate

Characteristics	2008	2009*	2010
<b>a)</b> Turnover (12110)	0.00000	0.07382	
<b>b)</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

$$RMAR = \frac{\sum_{t=1}^{T} \left| R_{t} \right|}{\sum_{t=1}^{T} \left| \hat{\theta}_{Lt} \right|} = \frac{\sum_{t=1}^{T} \left| \hat{\theta}_{Lt} - \hat{\theta}_{Pt} \right|}{\sum_{t=1}^{T} \left| \hat{\theta}_{Lt} \right|}$$

 $\hat{\boldsymbol{\theta}}_{Lt} = \text{Latest estimate}$ 

# $\hat{\theta}_{Pt}$ = 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: 11 11 0, 12 11 0, 12 12 0, 12 15 0, 12 17 0, 13 11 0, 13 31 0, 15 11 0, 16 11 0, 16 13 0
- Annex 2, Series 2A 11 11 0, 12 11 0, 12 12 0, 12 15 0, 12 17 0, 13 11 0, 13 13 1, 13 31 0, 13 32 0, 15 11 0, 15 15 0, 16 11 0, 16 13 0, 16 14 0, 16 15 0, 18 11 0, 20 11 0
- Annex 3, Series 3B: 11 11 0, 12 11 0, 12 12 0, 12 13 0, 12 15 0, 13 11 0, 13 12 0, 13 31 0, 13 32 0, 15 11 0, 15 15 0, 16 11 0, 16 13
- Annex 4, Series 4A: 11 11 0, 12 11 0, 12 12 0, 12 15 0, 12 17 0, 13 11 0, 13 31 0, 13 32 0, 15 11 0, 15 15 0, 16 11 0, 16 13 0, 16 14 0, 16 15 0, 18 110

#### 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
average number of revisions (planned or not), the main reasons for revisions and the impact
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			
Action	Deadline(s) MM/YY		
a) data-collection, if any  If several data collections are organised, please indicate the deadline of the last	The surveys are carried out by private collaborators that visit the enterprises and deliver the questionnaires in order to be filled in. The time margin allowed to the enterprises is 15-20 days depending on their economic activity. Then, the completed questionnaires are collected from the private collaborators and after the initial completeness checks the questionnaires are delivered to ELSTAT.  Due to high non-response rates, reminders are sent to the enterprises and thus the collection period is extended up to two (2) months.		
b) post-collection phase	-		
c) dissemination in your country, if applicable	ł		

# 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
_	277 days (9
R1A	months)
	277 days (9
R1B	months)
	277 days (9
R1C	months)
545	277 days (9
R1E	months)
R2A	18 days
R2B	18 days
R2C	18 days
R2D	18 days
R2F	18 days
R2H	18 days
R2I	18 days
	277 days (9
R3A	months)
	277 days (9
R3B	months)
	277 days (9
R3C	months)
Dan	277 days (9
R3D	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 th	ne SBS data pu	blished at nation	onal level diffe	rent from the d	ata sent to Eur	ostat?
$\boxtimes$	yes					
	no					
V.1.2. If y	es, please give	s a brief descri	ption of the rea	sons for these	differences.	
Tabulation	differences or	nly				
V.1.3. Do you publish additional indicators together with the SBS at the national level?  yes  no						
V.1.4. If yes, please give a brief description of the additional indicators published at the national level.						
V.1.5. Hov	w do you disser	minate SBS da	ta?			
Member	Paper/pdf Publications Electronic Publications					
State	News	Statistical	Thematic	Internet-	CD/DVD-	Other (fax, e-
2011	release	yearbook	publications	Data base	Rom	mail, etc.)
2011 data	yes	yes	yes	ĭ yes	yes	🗵 yes
Action plan 2012 data				⊠ yes		⊠ yes
→ For 2011 data, please, mark with a cross where applicable.						
→ For 202	12 data, please,	report any sch	neduled action p	plan specifying	the implemen	tation 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

#### **Definition**

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 SBS-Regulation

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<sup>4</sup> (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.

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<sup>&</sup>lt;sup>4</sup> Exhaustive interrogation of all enterprises is considered a type of survey.

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

$$CV = \frac{\sqrt{\text{estimate of the sampling variance}}}{\text{estimated value}}$$

Largely adopted as an estimate for the sampling variance is the Horvitz-Thompson variance, in which  $w_h$  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.

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

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  $n_t/(n_t-1)$  was applied.

$$V = Var(T, T_1, ..., T_i, ..., T_{ni}) \text{ with } i=1...n_i \text{ and } T_i = n_t/(n_t-1) \sum y_j(j\neq i)$$

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 (t=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 non-respondent 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 non-response. 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 11 0) 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.