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Principles and workplan for SGA2 on how to convert quasi-standards into real standards

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1. Definitions and aim of this document

ESSnet partners agreed to focus this deliverable on the identification of:

- the crucial elements needed to convert ESS quasi-standards into ESS standards;
- the steps of the conversion process;
- decision criteria to prioritize quasi-standards to be converted.

All the above mentioned elements will allow whoever will work on the “fast track” for standardisation to draw a precise workplan, which will be feasible as soon as the standardisation process will be completely refined, which is a task of SGA2, and the subjects involved in this process will be officially constituted (Permanent standardisation body)

The formal definition of an ESS standard was established by the Sponsorship on Standardisation. In the recommendation 1.1¹ the Sponsorship decided to adopt the ISO definition of a standard² and its proposed interpretation in the ESS context (reported in Annex A).

Six minimum criteria for being an ESS standard (reported in Annex B) have been derived by the Sponsorship on Standardisation on the basis of the interpretation of the concept of standard in ESS environment and an assessment procedure has been provided. The assessment procedure aims at checking if a normative document fulfils the criteria for being a standard. A candidate normative document is considered as a standard if it meets all minimum criteria; otherwise it is not considered as a standard.

At the coordination meeting in Paris 17-18 October 2013, ESSnet partners agreed that quasi-standards are normative documents (neither legal acts nor IT tools) which do not meet all the criteria for being standards but which nevertheless fulfill criteria n°1, 4 and 5 of the assessment procedure. In other words, criteria n°1, 4, and 5 are minimum requirements for being a quasi-standard.

At the same meeting, ESSnet partners agreed on the basic principle that not all normative documents should be converted into standards.

In this deliverable we analyse actual patterns of unfulfilled criteria on all normative documents classified as ESS quasi-standard and propose a procedure to convert current ESS quasi-standards into real ESS standards based on:

¹ <http://www.cros-portal.eu/content/recommandations-sponsorship-standardisation-september-2013>

² *‘A standard is a document, established by consensus and approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context. Note: Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.’* Source: ISO/IEC Guide 2 Standardization and related activities General vocabulary http://www.iso.org/iso/iso_iec_guide_2_2004.pdf

- the six minimum criteria for being a standard;
- the process for setting and implementing standards defined by the Sponsorship on Standardisation in its recommendations;
- the principle that not all quasi-standard must necessarily be converted;
- some information collected in the scope of the inventory by the attribute sheets.

2. Assessment criteria and conversion process

This deliverable is strictly linked with Work Package1 (WP1 in the following). A task of Deliverable 1 of WP1 requires analyses of the documents in a reference list³ in order to classify each of them as a standard or not.

To accomplish this task the partner leader of WP1 (INSEE) provided the criteria for being a standard, defined by the Sponsorship on Standardisation, to the partners involved in WP1 (SL, CSB, KSH, INSEE, ISTAT, ONS).

The assessment procedure consists of analysing each candidate document to check if the necessary features for being a standard can be found. In the assessment process all criteria have the same level of importance and no hierarchy among them exists. The consequence of non-compliance with a criterion is the same for all criteria: the document is not a standard.

The aim of Deliverable 4 of WP2 is to define a possible general procedure on how to make quasi-standards into real standards. Its scope refers to the possible cases of unfulfilled criteria and what should be done to fully meet them.

The consequences of non-compliance with different criteria may differ from one another. In other words, the non-compliance with criteria may result in different actions to do (work that should be complete to fulfill them). One can argue that when criterion n°5 (that provides rules, guidelines or characteristics) is unfulfilled, because of unclear sentences and/or the document is not clearly structured, the work to be complete in order to fulfill it is very different from the work to be complete in order to satisfy unfulfilled criterion n°2 (established by consensus). In the first case one should re-write the document, in the second case one should perform the adoption procedure.

According to the assessment procedure used in WP1, detailed information about not fulfilled criteria is not always requested. This is the case of criterion n°5 which regards the checking of rules, guidelines or characteristics of the candidate document providing, chapter by chapter, a percentage of classified sentences. In order to classify the document as standard or not, which is the scope of WP1, it was agreed, by all co-partners, that it was sufficient to analyse a sample of the document, giving only a Yes/No answer with respect to this criterion.

Moreover, in the present situation (no formal standard-setting process is operating), not all assessment criteria need to be thoroughly checked. This is the case of criterion n°6, the accordance

³ In total 103 normative documents were assessed: 1 international handbook which happened not to be a reference for the ESS, 78 Eurostat handbooks, 2 additional handbooks which happened not to have been mentioned in any regulation nor adopted by the ESSC, 15 international handbooks co-published by Eurostat, 7 IT tools.

with the Code of practice⁴. The method used in the assessment procedure states that you do not need to check compliance with criterion n°6 when criterion n°2 (established by ESS consensus) or criterion n°3 (approved by a recognised body) are not fulfilled, since the document will not qualify for being a standard. This time-saving rule is adequate for the current assessment purpose, that is to classify each document as a standard or not in the absence of a formal standard-setting process, but it does not allow to know if the document fulfills criterion n°6 when criteria n°2 or n°3 are not fulfilled. In these cases, you do not have information to evaluate whether it is worth to take/complete the standardisation procedure (as it may be when criterion n°6 is met) or not (as it may be when criterion n°6 is not met).

The previous considerations highlight the fact that in the process of designing how to transform quasi-standards into real standards, there is need for more information than what can be gathered with the assessment activities carried out for Deliverable 1 of WP1

As a matter of fact all documents considered quasi-standard after the assessment process should be further examined to collect more functional information for the conversion purpose (defining a possible general procedure to convert quasi-standards into standards).

Further information needed for the conversion purpose are shown in Table 1.

Table 1. Further information that should be provided for normative documents considered quasi-standard after the assessment process

Criteria to be fulfilled to be considered standard	Further information needed
1 - define precisely the document under review	
2 - find out the status of the document in the ESS: by whom was it written? discussed?	(a) the document has never been presented with a formal proposal to the standardization authority; (b) the document has been presented with a formal proposal to the standardization authority and it is under judgement; (c) the document has been presented with a formal proposal to the standardization authority but has been refused (provide details)
3 - acceptance by permanent body for standardization	(a) the document has never been presented for acceptance to the permanent body for standardization; (b) the document has been presented for acceptance to the permanent body for standardization and it is under judgement; (c) the document has been presented for acceptance to the permanent body for standardization but has been refused (provide details)
4 - purpose of the document under review	(a) the document is not clearly and without ambiguity intended for specific activities or their results; (b) the document is not intended for common (used by several actors) and repeated use; (c) the document is not intended for specific activities and

⁴ The normative document needs to be in accordance with the CoP concerning, in particular, the statistical production processes and the output of statistics (principles n°7 to n°15, see reference http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-32-11-955/EN/KS-32-11-955-EN.PDF).

	common and repeated use simultaneously
5 - check that this document provides rules, guidelines or characteristics	(a) the document doesn't contain any rules, guidelines nor characteristics; (b) the document contains rules and/or guidelines and/or characteristics but the provisions are not clearly defined, that is, they are ambiguous
6 - check that this document is in accordance with the Code of practice	(a) the document does not comply with at least one of the 7-15 principles in the CoP (specify which principles in the CoP)

3. Principles and rules in order to convert quasi-standards into standards

Precondition: we work as the process for setting and implementing standards, defined by the Sponsorship on Standardization, is already effective.

The 84 normative documents classified as "quasi-standards" are analysed, on the basis of the results of the assessment procedure, in order to highlight actual patterns of unfulfilled criteria, that is specific tuples of unfulfilled criteria, to focus on.

As Table 2 shows, only three possible patterns emerged within the possible four. In particular, 71 normative documents (84.5%) fulfill all criteria except criteria n°2 and n°6; but in case of absence of criteria n°2 and n°3, the method adopted for the assessment procedure states that you do not need to check the compliance with criterion n°6 since the document will not qualify for being a standard; the pattern 4 is associated to an exception to this rule. The residual 12 documents (14.3%) do not meet either criterion n°2 nor criterion n°3 (and, obviously, not criterion n°6).

Table 2. Pattern of unfulfilled criteria for the normative documents classified as quasi-standard

Pattern	Criteria						frequency
	1	2	3	4	5	6	
1	1	0	0	1	1	0	12
2	1	0	0	1	1	1	0
3	1	0	1	1	1	0	71
4	1	0	1	1	1	1	1
							84

From the adopted assessment procedure and the relationship between criteria and from the analysis of the different possible patterns for the 84 normative documents, indicate that the focus, for drawing the principles to convert quasi-standards into standards, relies on the fulfilment of the criteria n°2 and n°3. On the basis of the standard-setting process defined by the Sponsorship on Standardization, the permanent body for standardisation, that is responsible for the management of the standard, has to compile the detailed proposals for the standardisation authority. Thus, it's possible to define a hierarchy among criteria, in particular, criterion n°3 (acceptance of the

normative document by the permanent body for standardisation) can be seen as a precondition for criterion n°2 (adoption of a standard by the standardisation authority).

Starting from this perspective we can have 12 possible situations but only some of them are really plausible in our context. The plausible combinations of status are illustrated in Table 3.

Table 3. Plausible combinations of criteria n°2 and n°3

Criterion 3: is it fulfilled?	Criterion 2 is not fulfilled		
	(a) the normative document has never been presented with a formal proposal to the standardisation authority	(b) the normative document has been presented with a formal proposal to the standardisation authority and it is under judgement	(c) the normative document has been presented with a formal proposal to the standardisation authority but has been refused
Yes	X	X	X
No: (a) the normative document has never been presented for acceptance to the permanent body for standardisation	X	X	X
No: (b) the normative document has been presented for acceptance to the permanent body for standardisation and it is under judgement	X		
No: (c) the normative document has been presented for acceptance to the permanent body for standardisation but has been refused (provide details)	X		

Starting from the analysis of criterion n°3, it is possible that criterion n°3 is fulfilled and:

- criterion n°2 is not because of (a). First criterion n°6 needs to be checked, and in case it is fulfilled the normative document can be presented to the standardisation authority; if the normative document doesn't fulfil criterion °6 it can't be considered as a candidate to be a standard.
- criterion n°2 is not because of (b). You need to wait until the authority judgement: if the authority judgement is positive then the normative document can be defined a standard; otherwise, if the authority judgement is negative, then the normative document cannot be considered as a candidate to be a standard and there's no need, according to our opinion, to check the other criterion.
- criterion n°2 is not because of (c). The normative document cannot be considered as a candidate to be a standard.

If the criterion n°3 is not fulfilled then it may be possible that:

- a. The normative document has never been presented for acceptance to the permanent body for standardisation and
 - a. the normative document has never been presented with a formal proposal to the standardisation authority or
 - b. the normative document has been presented with a formal proposal to the standardisation authority and it is under judgement or
 - c. the normative document has been presented for acceptance with a formal proposal to the standardisation authority but has been refused.

In case a.a., once the document is checked against compliance to criterion n°6, it is then requested to be presented to the permanent body for standardisation; otherwise, if it does not fulfil criterion n°6, it cannot be considered as a candidate to become a standard.

Cases a.b. and a.c. are considered possible because the analysis refers to the present situation where no formal standard-setting process is still operating (transition phase), so the hierarchy among criteria n°2 and n°3 could not be guaranteed.

In case a.b., if the authority judgement is positive, the normative document can be defined a standard, otherwise, if it is negative, it cannot be considered as a candidate to be a standard and there is no need, according to our opinion, to check the other criteria.

In case a.c. the normative document can't be considered as a candidate to be a standard.

- b. The normative document has been presented for acceptance to the permanent body for standardisation and it is under judgement and
 - a. the normative document has never been presented with a formal proposal to the standardisation authority.

In case b.a., it's requested to wait until the final decision of the permanent body for standardisation. In case of a positive answer, the permanent body is expected to verify the compliance with criterion n°6 and, eventually, to present the normative document to the standardisation authority. In case of a negative answer then the normative document cannot be considered as a candidate to be a standard and there is no need to check the other criteria.

Cases b.b. and b.c. are not considered possible because it is not plausible that a normative document can be presented simultaneously to the two main bodies in order to be accepted or that it is presented to the permanent body having been refused by the standardisation authority.

- c. The normative document has been presented for acceptance to the permanent body for standardisation but has been refused and
 - a. the normative document has never been presented with a formal proposal to the standardisation authority.

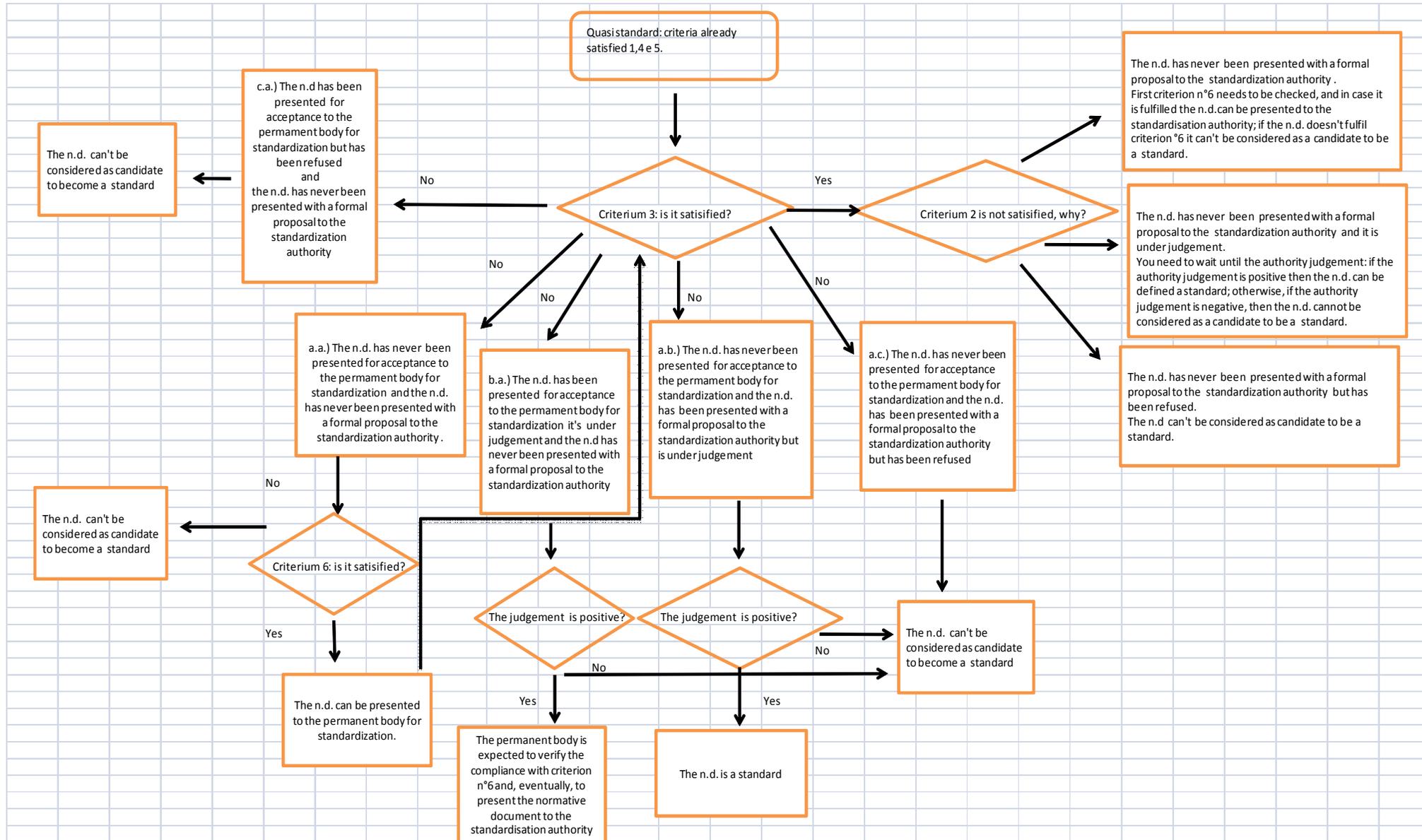
In case c.a., the normative document cannot be considered as a standard. The motivations for the refusal need to be provided in order to evaluate if they are substantial or not and if the work necessary for a new proposal of the revised version of the normative document is

worthwhile. The refusal by the permanent body guarantees the normative document is not defined as a standard, regardless of its compliance with criteria n°2 and n°6.

When a normative document has been rejected by the permanent body for standardisation it is not possible to make a formal proposal to the standardisation authority, therefore, the cases c.b. and c.c. are not plausible.

The steps to be followed are summarised in the following flow chart.

Steps to be followed to convert a quasi-standard into standard.



4. Workplan

In order to finalise the work to do to convert the quasi-standard candidates into standards it would be useful to define a hierarchy between them.

The hierarchy could be based on the following information collected by the attribute sheets:

- GSBPM (version 4.0) categories;
- statistics domains according to the Classification of statistical activities (CSA rev. 1);
- product/process related variable.

For example, higher priority should be given to quasi-standards classified in phases and sub-processes of GSBPM

- for which there is no standard or
- which are particularly relevant for the European statistical system and the need of an updating of the already existing standards is evident.

For each sub-processes (if there is more than one candidate in each sub-process) quasi-standards could be prioritised according to the other attributes.

To help for the future work (select quasi-standards for upgrading), the 84 quasi-standards have been classified according to the previous variables, on the basis of the compiled attribute sheets. The classification is reported in Annex C while the marginal distributions of the 84 normative documents by the three variables are reported in Annex D.

Areas for priority actions should be defined by comparing the classification of the 84 quasi-standards with the classification of all the normative documents considered as standard in the inventory.

5. Conclusions

Patterns of unfulfilled criteria for the normative documents classified as quasi-standard have been identified.

Further information needed for conversion purpose have been defined.

For each actual pattern of unfulfilled criteria, suggestions about what should be done to fully meet the criteria to be a standard (steps to be followed) have been provided.

Quasi-standards have been classified by GSBPM categories, statistics domains according to the Classification of statistical activities (DISA) and product-process related variable.

Decision criteria to prioritize quasi-standards to be converted have been provided.

Therefore, this deliverable is a useful input for the future conversion work and is a support for the decision-making process concerning the selection of quasi-standards to be further developed.

ANNEX A

INTERPRETATION OF THE ISO DEFINITION OF A STANDARD IN THE ESS

<i>ISO definition</i>	<i>Interpretation for an ESS standard</i>
A standard is	
A document	<u>Any medium</u> with information recorded on or in it
Established by consensus	Consensus <u>among ESS members</u>
Approved by a recognised body	According to the <u>formal procedure of standardisation</u> , not necessarily implemented by legal act
That provides rules, guidelines or characteristics	Sentences take the form of <u>statement, instruction, recommendation or requirement</u>
For common and repeated use	For common and repeated use <u>by several actors in the ESS</u>
For activities or their results	For the <u>production of EU statistics</u>
Aimed at the achievement of the optimum degree of order in a given context	Aimed at the achievement of the optimum degree of order in the <u>context of the implementation of the mission of the ESS</u>

Annex B

The following table and rules are taken from the Generic Statistical Business Process Model (2009) assessment template provided by INSEE as an example (Example Assessment GSBPM with explanatory notes for evidence.doc).

How to assess if a normative document fulfils the criteria for being a standard

Step number	Aim	Method	Result
1- define precisely the document under review	Identify without ambiguity the version of the document that is a candidate for being recognised as a standard	Make sure that the candidate is really one document written in natural language or a set of very well identified separate documents bound together without ambiguity (for instance one main text and annexes, several documents grouped together by a header that relates together these separate documents).	R1: yes/no
2- find out the status of the document in the ESS: by whom was it written? discussed?	make sure that it is established by ESS consensus	To be a standard, it has to be proven that the candidate document was adopted either: - by the ESS itself (at a committee meeting or in written procedure) - or by the EU Council in charge of statistics - or by a directors' group that had received an explicit mandate for this purpose	R2: yes/no
3- approved by a recognised body	In the short term, we suppose that Eurostat is/ will be the recognised body in charge of monitoring the standardisation process in the ESS	The version under review has been considered by a recognised body as an accepted document.	R3: yes/no
4- purpose of the document under review	check that the purpose of the document is twofold: 4a: for specific activities or their results 4b: for common and repeated use	The reviewers have to check that this document is clearly and without ambiguity intended for specific activities: these activities should be clearly mentioned in the document, in the foreword or in the introduction. It could possibly be modified by the Committee that has adopted it by consensus (as mentioned in the minutes). In a similar way, the document has to mention that it is intended for repeated use, and for use in common by several actors.	R4: yes/no
5- check that this document provides rules, guidelines or characteristics	The reviewers have to check that this document can be clearly used, and makes it easy for the reader to know which sentences are rules, which are only guidelines (i.e. not mandatory) and which sentences provide information about facts.	The reviewers have to read the document carefully and classify each sentence in the four categories (statement/ Instruction/ recommendation/ requirement) or the following category (ambiguous/ don't know). If the document is clearly structured, a summary of this analysis should be provided for each chapter of the document, showing which percentage of sentences cannot be classified.	Percentage of non classified sentences (for the whole document or for each chapter)

Step number	Aim	Method	Result
6- check that this document is in accordance with the Code of practice	Standardisation is an activity that is intended to improve the situation where it applies.	This step would require an assessment of conformity with CoP rules. It should be taken for granted that ESS documents accepted by Eurostat and by consensus satisfy this condition. For others, there is no need to check this conformity, since they will not qualify for being a standard	R6='yes' if R2='yes' and R3='yes' R6="no" or "missing" otherwise

Synthesis:

When the results of steps 1 to 6 are made available, the following decision process is applied:

- if one at least in R1, R2, R3 or R4 is equal to "No", the **document is not a standard**.
- otherwise, let us consider R5:
 - if R5 is above a satisfactory threshold fixed by the set of all reviewers (for instance 90%), then the **document is a standard**.
 - else:
 - o if R5 is above a satisfactory threshold for some chapters, then it could be considered that these chapters are sufficiently homogeneous to define a new autonomous document that would be then reassessed for criteria 1 to 4 (so as to check that the remaining part of the document could be considered as intended for a specific common and repeated activity, that would have been adopted by the ESSC under the same conditions). This **set of chapters could be considered a standard**.
 - o otherwise, this is a document that needs first rewriting, second a new discussion for amendment and third possibly adoption by the ESSC.

Annex C

Classification of the 84 quasi-standard by GSBPM categories, statistics domains according to the Classification of statistical activities (DISA) and product-process related variable

n	Name	type	Custodian	GSBPM category	DISA	Product/Process related
1	European Regional and Urban Statistics - Reference Guide (2010 Edition)	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate	3.2 Regional and small area statistics	Product and process related
2	Urban Audit Methodological Handbook (2004 Edition)	Handbook	Eurostat	10.Overarching	3.2 Regional and small area statistics	Product and process related
3	Urban Audit Reference Guide - Data 2003-2004 (2007 Edition)	Handbook	Eurostat	2 Design	3.2 Regional and small area statistics	Product related
4	Manual of Concepts on Land Cover and Land Use Information Systems (2000 Edition)	Handbook	Eurostat	2 Design	3.1 Environment	Product and process related
5	A common methodology for the collection of pesticide usage statistics within agriculture and horticulture (2008 Edition)	Handbook	Eurostat	1 Specify needs	2.4.1 Agriculture, forestry, fisheries	Process related
6	Methodology of animal statistics - Part A: Member states of the European Union - Part B: Candidate countries (2003 Edition)	Handbook	Eurostat	2 Design	2.4.1 Agriculture, forestry, fisheries	Process related
7	Handbook for compiling supply balance sheets - animal feed: supply (2002 Edition)	Handbook	Eurostat	5. Process	2.4.1 Agriculture, forestry, fisheries	Product and process related
8	Handbook for compiling supply balance sheets - wines (2002 Edition)	Handbook	Eurostat	2. Design	2.4.1 Agriculture, forestry, fisheries	Product related
9	Crop Production - Handbook to compile supply balance sheets (2001 Edition)	Handbook	Eurostat	2. Design	2.4.1 Agriculture, forestry, fisheries	Product and process related
10	Crop Production - Glossary 2001 (2001 Edition)	Handbook	Eurostat	2. Design	2.4.1 Agriculture, forestry, fisheries	Product related
11	Crop Production - Manual for current statistics (2001 Edition)	Handbook	Eurostat	2. Design	2.4.1 Agriculture, forestry, fisheries	Product related
12	Handbook for EU Agricultural Price Statistics, Version 2.0 (2008 Edition)	Handbook	Eurostat	2. Design, 3. Build, 5. Process	2.4.1 Agriculture, forestry, fisheries, 2.7 Prices	Product related
13	Target methodology for agricultural labour input (ALI) statistics (Rev. 1) (2000 Edition)	Handbook	Eurostat	2 Design, 1 Specify needs	2.4.1 Agriculture, forestry, fisheries	Process related
14	Manual on the economic accounts for agriculture and forestry EAA/EA 97 (Rev. 1.1) (2000 Edition)	Handbook	Eurostat	5 Process, 6 Analyse	2.4.1 Agriculture, forestry, fisheries	Process related
15	Web-forms for Intrastat (2000 Edition)	Handbook	Eurostat	3.1 Data collection instrument, 4 Collect	2.6 International trade and balance of payments	Product and process related
16	Essential SNA: Building the basics (2010 Edition)	Handbook	Eurostat	2.5 Statistical processing	2.1 Macroeconomic statistics, 2.2	Product and process related

				methodology	Economic accounts, 2.3 Business statistics, 2.4 Sectoral statistics, 2.5 Government finance, fiscal and public sector statistics, 2.6 International trade and balance of payments	
17	Manual on Government Deficit and Debt - Implementation of ESA95 (2010 Edition)	Handbook	Eurostat	2 Design, 4 Collect, 5 Process	2.5 Government finance, fiscal and public sector statistics	Product and process related
18	Regional accounts methods: tables of general government (2000 Edition)	Handbook	Eurostat	2.1 Design outputs, 2.4 Design & frame sample methodology, 2.5 Design statistical processing methodology, 5.2 Classify & code	3.2 Regional and small area statistics	Product and process related
19	Eurostat Manual of Supply, Use and Input-Output Tables (2008 Edition)	Handbook	Eurostat	2.5 Design statistical processing methodology, 2.6 Design production systems & workflow, 6.3 Scrutinize & explain	2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.4 Sectoral statistics, 4.3.3 Household surveys	Process related
20	Manual on compilation of taxes and social payments on a quarterly basis - First edition (2002 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.5 Design statistical processing methodology, 5.2 Classify & code, 9 Evaluate	2.5 Government finance, fiscal and public sector statistics	Process related
21	Manual on quarterly non-financial accounts for general government (2011 Edition)	Handbook	Eurostat	2.5 Design statistical processing methodology, 6.3 Scrutinize & explain, 9 Evaluate	2.5 Government finance, fiscal and public sector statistics	Process related
22	Manual on sources and methods for ESA 95 financial accounts - 2nd edition - 2011 update (2011 Edition)	Handbook	Eurostat	2 Design, 4 Collect, 5 Process	2.2 Economic accounts	Product and process related
23	Handbook on price and volume measures in national accounts (2001 Edition)	Handbook	Eurostat	5.7 Calculate aggregates, 6.2 Validate outputs	2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.3 Business statistics, 2.4 Sectoral statistics, 2.5 Government finance, fiscal and public sector statistics, 2.6 International trade and balance of payments, 2.7 Prices	Product and process related
24	Economy-wide material flow accounts and derived indicators - A methodological guide (2000 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
25	The European framework for integrated environmental and	Handbook	Eurostat	5. Process	2.4.1 Agriculture, forestry, fisheries	Process related

	economic accounting for forests - IEEAF (2002 Edition)					
26	OECD/Eurostat Environment Protection Expenditure and Revenue Joint Questionnaire / SERIEE Environmental Protection Expenditure Account: Conversion guidelines (2005 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
27	Environmental taxes - A statistical guide (2001 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
28	HICP-CT manual (rev 3) (2009 Oct Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.1 Design outputs, 5.7 Calculate aggregates	2.7 Prices	Product related
29	Manual on sources and methods for the compilation of COFOG statistics - Classification of the Functions of Government (COFOG) - (2011 edition)	Handbook	Eurostat	2.5 Design statistical processing methodology, 5.2 Classify & code, 6.3 Scrutinize & explain, 9 Evaluate	2.5 Government finance, fiscal and public sector statistics	Process related
30	Manual on sources and methods for quarterly financial accounts for general government (2008 Edition)	Handbook	Eurostat	2.3 Design data collection methodology, 2.5 Design statistical processing methodology, 5. Process, 7. Disseminate	2.5 Government finance, fiscal and public sector statistics	Product and process related
31	Using official statistics to calculate greenhouse gas emissions - A statistical guide (2010 Edition)	Handbook	Eurostat	6 Analyse	3.1 Environment	Process related
32	The Environmental Goods and Services Sector (2009 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
33	Manual for Air Emissions Accounts (2009 Edition)	Handbook	Eurostat	5 Process, 6 Analyse	3.1 Environment	Process related
34	Environmental expenditure statistics (2007 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
35	Environmental expenditure statistics: Industry data collection handbook (2005 Edition)	Handbook	Eurostat	1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	3.1 Environment	Product and process related
36	Guidelines for compiling the monthly Index of Production in Construction (2011 Edition)	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate, 5 Process	2.4.3 Mining, manufacturing, construction	Process related
37	Methodology for Business Statistics - Methodological Manual for Statistics on Credit Institutions, Version 1.9, June 2003	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate	2.4.6 Banking, insurance, financial statistics, 2.3 Business statistics	Process related

38	Eurostat Manual of Business Statistics (EMBS) "Structural statistics"; Methodological Manual of Audiovisual Business Statistics, December 2002	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate	2.3 Business statistics	Process related
39	Methodology for Business Statistics - Methodological Manual for Pension Funds Statistics, Version 1.2, August 2001	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate	2.3 Business statistics	Process related
40	Methodological manual for statistics on telecommunication services, Version 1.0, October 2001	Handbook	Eurostat	2 Design, 3 Build, 7 Disseminate	2.3 Business statistics	Process related
41	International trade in services - EU, 1992-2001; Compilation Guide (2003 Edition)	Handbook	Eurostat	5 Process, 6 Analyse	2.2 Economic accounts, 2.6 International trade and balance of payments	Process related
42	Methodological work on measuring the sustainable development of tourism - Part 2: Manual on sustainable development indicators of tourism (2006 Edition)	Handbook	Eurostat	2. Design	2.4.5 Tourism	Process related
43	European Implementation Manual on Tourism Satellite Accounts (TSA), Version 1.0	Handbook	Eurostat	2 Design, 3.1 Data collection instrument, 5 Process	2.4.5 Tourism	Process related
44	Methodological manual for statistics on congresses and conferences (2000 Edition)	Handbook	Eurostat	2. Design, 2.4 Design & frame sample methodology, 4.2 Set up collection	2.4.5 Tourism, 2.4.4 Transport	Process related
45	Methodological manual on the design and implementation of surveys on inbound tourism (2000 Edition)	Handbook	Eurostat	1 Specify needs, 2 Design, 3 Build, 4 Collect	2.4.5 Tourism	Process related
46	Methodological manual for statistics on the information society (2011 Edition)	Handbook	Eurostat	2.3 Variables, 5 Process, 2.5 Statistical processing methodology	3.3.3 Information society	Product and process related
47	The Joint Harmonised EU Programme of Business and Consumer Surveys. User Guide (2007 Edition)	Handbook	Eurostat	2.4 Design & frame sample methodology, 2.5 Design statistical processing methodology, 4. Collect	2.3 Business statistics, 4.3.2 Business and agricultural censuses and registers, 4.3.4 Business and agricultural surveys, 1.5 Income and consumption	Product and process related
48	Methodology for the calculation of Eurostat's demographic indicators (2004 Edition)	Handbook	Eurostat	5 Process	1.1 Population and migration	Process related
49	SHA Guidelines - Practical guidance for implementing a System of Health Accounts in the EU	Handbook	Eurostat	10. Overarching	1.4 Health	Process related
50	European Statistics on Accidents at Work (ESAW) (2012 Edition)	Handbook	Eurostat	10. Overarching	1.4 Health	Process related

51	Guidelines for the development and criteria for the adoption of health survey instruments (2005 Edition)	Handbook	Eurostat	1 Specify needs, 2.4 Data collection, 3 Build	1.4 Health, 4.3 Data sources	Process related
52	Classification of learning activities - Manual (2006 Edition)	Handbook	Eurostat	5.2 Classify & code	1.3 Education	Product related
53	A guide to educational expenditure statistics (2005 Edition)	Handbook	Eurostat	1 Specify needs, 1.4 Identify concepts, 5. Process	1.3 Education	Product and process related
54	Household Production and Consumption. Proposal for a Methodology of Household Satellite Accounts (2003 Edition)	Handbook	Eurostat	5 Process	1.5 Income and consumption	Process related
55	Labour market policy - Methodology - Revision of June 2006 (2006 Edition) + addendum 2009	Handbook	Eurostat	2. Design, 4. Collect	1.2 Labour	Process related
56	Harmonised European time use surveys, 2008 Guidelines (2008 edition)	Handbook	Eurostat	2. Design	1.2 Labour, 1.11 Time use	Product and process related
57	Household Budget Surveys in the EU; Methodology and recommendations for harmonisation - 2003 (2003 Edition)	Handbook	Eurostat	1 Specify needs, 2 Design, 3 Build, 5 Process, 6 Analyse	4.3.3 Household surveys	Product and process related
58	Patent Statistics at Eurostat: Methods for Regionalisation, Sector Allocation and Name Harmonisation (2011 Edition)	Handbook	Eurostat	8 Archive, 6 Analyse	4.7 Data analysis	Product and process related
59	Data Production Methods for Harmonised Patent Statistics: Patentee Name Harmonisation (2006 Edition)	Handbook	Eurostat	8 Archive, 6 Analyse	4.7 Data analysis	Product and process related
60	Data Production Methods for Harmonised Patent Statistics: Assignee sector allocation (2006 Edition)	Handbook	Eurostat	5 Process, 6 Analyse	4.7 Data analysis	Process related
61	The seasonal adjustment of short time series (2005 Edition)	Handbook	Eurostat	6 Analyse		Product and process related
62	The seasonal adjustment of qualitative business and consumer surveys (2005 Edition)	Handbook	Eurostat	6 Analyse	2.1 Macroeconomic statistics, 2.3 Business statistics, 4.3.4 Business and agricultural surveys	Product and process related
63	Survey sampling reference guidelines - Introduction to sample design and estimation techniques (2008 Edition)	Handbook	Eurostat	2. Design	3.3 Multi-domain statistics and indicators	Process related
64	Handbook of Recommended Practices for Questionnaire Development and Testing in the European Statistical System (2006)	Handbook	Eurostat	1 Specify needs, 3. Build	4.3 Data sources	Process related
65	Monographs of official statistics. Variance estimation methods in the European Union (2002	Handbook	Eurostat	2 Design, 2.4 Design & frame sample methodology, 6. Analyse	3.3 Multi-domain statistics and indicators	Process related

	Edition)					
66	ESS Handbook for Quality Reports (2009 Edition)	Handbook	Eurostat	6 Analyse	5.3 Quality frameworks and measurement of performance of statistical systems and	Product and process related
67	Handbook on Data Quality Assessment Methods and Tools (2007 Edition)	Handbook	Eurostat	6 Analyse	5.3 Quality frameworks and measurement of performance of statistical systems and	Product and process related
68	Quality measures for economic indicators (2005 Edition)	Handbook	Eurostat	6 Analyse		Product and process related
69	The European Self Assessment Checklist for Survey Managers (2003 Edition)	Handbook	Eurostat	6 Analyse	5.3 Quality frameworks and measurement of performance of statistical systems and	Product and process related
70	Handbook on Precision Requirements and Variance Estimation for ESS Household Surveys	Handbook	Eurostat	1 Specify needs, 5 Process, 6 Analyse	4.3.3 Household surveys	Process related
71	Road freight transport methodology (2011 Edition)	Handbook	Eurostat	2. Design, 3. Build, 4. Collect, 5. Process, 6. Analyse, 7. Disseminate	2.4.4 Transport	Product and process related
72	ESS Standard for Quality Reports (2009 Edition)	Handbook	Eurostat	10. Overarching	5.3 Quality frameworks and measurement of performance of statistical systems and	Product and process related
73	System of National Accounts, 2008 (2009 Edition)	Handbook	European Commission (Eurostat), International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations (Statistics Division), World Bank	1 Specify needs, 2 Design, 3 Build, 4 Collect, 5 Process, 6 Analyse	2.2 Economic accounts	Product and process related
74	Eurostat-OECD Methodological manual on purchasing power parities (2012 Edition)	Handbook	Eurostat; Organization for Economic Cooperation and Development (OECD)	1.4 Check data availability, 2.5 Statistical processing methodology, 5 Process	2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.7 Prices	Process related
75	Consumer price index manual: Theory and practice (2010 revised Edition)	Handbook	International Labour Office (ILO); International Monetary Fund (IMF); Organisation for Economic Co-operation and Development (OECD); Statistical Office of the European Communities (Eurostat); United Nations Economic Commission for Europe (UNECE); World Ba	1 Specify needs, 2 Design, 3 Build, 4 Collect, 5 Process, 6 Analyse	2.7 Prices	Product and process related

76	International Transactions in Remittances: Guide for Compilers and Users (2009 Edition)	Handbook	Eurostat, International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), World Bank	3 Build, 4 Collect, 5 Process, 6 Analyse	2.2 Economic accounts	Product and process related
77	Data Collection Manual for the OECD/Eurostat Joint Questionnaire on Inland Waters (2010 Edition)	Handbook	Organization for Economic Cooperation and Development (OECD) and Eurostat	4 Collect, 5 Process	3.1 Environment	Process related
78	Energy Statistics Manual 2004	Handbook	International Energy Agency, in co-operation with Eurostat	10. Overarching	2.4.2 Energy	Product and process related
79	Eurostat-OECD Manual on Business Demography Statistics (Edition 2007)	Handbook	Eurostat, Organization for Economic Cooperation and Development (OECD)	2. Design	2.3 Business statistics	Product and process related
80	Methodological guide for developing producer price indices for services (2005 Edition)	Handbook	Eurostat, Organization for Economic Cooperation and Development (OECD)	1 Specify needs, 2 Design, 3 Build, 4 Collect, 5 Process, 6 Analyse	2.4 Sectoral statistics	Process related
81	Tourism Satellite Account: Recommended Methodological Framework (2008 edition)	Handbook	United Nations, Eurostat, World Tourism Organization, Organization for Economic Cooperation and Development (OECD)	10. Overarching	2.2 Economic accounts	Process related
82	A System of Health Accounts (2011 Edition)	Handbook	Organization for Economic Cooperation and Development (OECD), Eurostat, World Health Organisation	3 Build	1.4 Health	Process related
83	UOE data collection on education systems 2012. Volume 1: Manual. Concepts, definitions and classifications. Volume 2: 2012 UOE questionnaires and instructions for their completion and submission. Volume 3: Electronic questionnaires: User guide	Handbook	UNESCO Institute for Statistics (UIS), Organization for Economic Cooperation and Development (OECD), Eurostat	10. Overarching	1.3 Education	Process related
84	Illustrated glossary for transport statistics - Fourth edition - 2010	Handbook	Eurostat, , United Nations Economic Commission for Europe (UNECE), European Conference of Ministers of Transport (ECMT)	2. Design	2.4.4 Transport	Process related

Annex D

Marginal distributions of the 84 quasi-standard stressed by GSBPM categories, statistics domains according to the Classification of statistical activities (DISA) and product-process related variable

Frequency distribution of quasi-standards by GSBPM categories	Frequency
1 Specify needs	1
1 Specify needs, 1.4 Identify concepts, 5. Process	1
1 Specify needs, 2 Design, 3 Build, 4 Collect	1
1 Specify needs, 2 Design, 3 Build, 4 Collect, 5 Process, 6 Analyse	3
1 Specify needs, 2 Design, 3 Build, 5 Process, 6 Analyse	1
1 Specify needs, 2.4 Data collection, 3 Build	1
1 Specify needs, 3. Build	1
1 Specify needs, 5 Process, 6 Analyse	1
1.3 Establish output objectives, 2.1 Design outputs, 5.7 Calculate aggregates	1
1.3 Establish output objectives, 2.2 Design variable descriptions, 5.1 Integrate data	6
1.3 Establish output objectives, 2.5 Design statistical processing methodology, 5.2 Classify & code, 9 Evaluate	1
1.4 Check data availability, 2.5 Statistical processing methodology, 5 Process	1
10.Overarching	7
2 Design, 1 Specify needs	1
2 Design, 2.4 Design & frame sample methodology, 6. Analyse	1
2 Design, 3 Build, 7 Disseminate	5
2 Design, 3 Build, 7 Disseminate, 5 Process	1
2 Design, 3.1 Data collection instrument, 5 Process	1
2 Design, 4 Collect, 5 Process	2
2. Design	12
2. Design, 2.4 Design & frame sample methodology, 4.2 Set up collection	1
2. Design, 3. Build, 4. Collect, 5. Process, 6. Analyse, 7. Disseminate	1
2. Design, 3. Build, 5. Process	1
2. Design, 4. Collect	1
2.1 Design outputs, 2.4 Design & frame sample methodology, 2.5 Design statistical processing methodology, 5.2 Classify & code	1
2.3 Design data collection methodology, 2.5 Design statistical processing methodology, 5. Process, 7. Disseminate	1
2.3 Variables, 5 Process, 2.5 Statistical processing methodology	1
2.4 Design & frame sample methodology, 2.5 Design statistical processing methodology, 4. Collect	1
2.5 Design statistical processing methodology, 2.6 Design production systems & workflow, 6.3 Scrutinize & explain	1
2.5 Design statistical processing methodology, 5.2 Classify & code, 6.3 Scrutinize & explain, 9 Evaluate	1
2.5 Design statistical processing methodology, 6.3 Scrutinize & explain, 9 Evaluate	1
2.5 Statistical processing methodology	1
3 Build	1
3 Build, 4 Collect, 5 Process, 6 Analyse	1
3.1 Data collection instrument, 4 Collect	1
4 Collect, 5 Process	1
5 Process, 6 Analyse	4
5. Process	4

5.2 Classify & code	1
5.7 Calculate aggregates, 6.2 Validate outputs	1
6 Analyse	7
8 Archive, 6 Analyse	2
Total	84

Frequency distribution of quasi-standards by statistics domains according to the Classification of statistical activities (DISA)

	Frequency
1.1 Population and migration	1
1.2 Labour	1
1.2 Labour, 1.11 Time use	1
1.3 Education	3
1.4 Health	3
1.4 Health, 4.3 Data sources	1
1.5 Income and consumption	1
2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.3 Business statistics, 2.4 Sectoral statistics, 2.5 Government finance, fiscal and public sector statistics, 2.6 International trade and balance of payments	1
2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.3 Business statistics, 2.4 Sectoral statistics, 2.5 Government finance, fiscal and public sector statistics, 2.6 International trade and balance of payments, 2.7 Prices	1
2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.4 Sectoral statistics, 4.3.3 Household surveys	1
2.1 Macroeconomic statistics, 2.2 Economic accounts, 2.7 Prices	1
2.1 Macroeconomic statistics, 2.3 Business statistics, 4.3.4 Business and agricultural surveys	1
2.2 Economic accounts	4
2.2 Economic accounts, 2.6 International trade and balance of payments	1
2.3 Business statistics	4
2.3 Business statistics, 4.3.2 Business and agricultural censuses and registers, 4.3.4 Business and agricultural surveys, 1.5 Income and consumption	1
2.4 Sectoral statistics	1
2.4.1 Agriculture, forestry, fisheries	10
2.4.1 Agriculture, forestry, fisheries, 2.7 Prices	1
2.4.2 Energy	1
2.4.3 Mining, manufacturing, construction	1
2.4.4 Transport	2
2.4.5 Tourism	3
2.4.5 Tourism, 2.4.4 Transport	1
2.4.6 Banking, insurance, financial statistics, 2.3 Business statistics	1
2.5 Government finance, fiscal and public sector statistics	5
2.6 International trade and balance of payments	1
2.7 Prices	2
3.1 Environment	10
3.2 Regional and small area statistics	4
3.3 Multi-domain statistics and indicators	2
3.3.3 Information society	1

4.3 Data sources	1
4.3.3 Household surveys	2
4.7 Data analysis	3
5.3 Quality frameworks and measurement of performance of statistical systems and	4
	2
Total	84

Frequency distribution of quasi standards by the product-process related variable	Frequency
Process related	39
Product and process related	38
Product related	7
Total	84