

Guide to the Agencies of the Hellenic Statistical System on the Implementation of the European Statistics Code of Practice

Version 1.0

A. INTRODUCTION

One of the responsibilities of ELSTAT is to develop, disseminate and coordinate the implementation of the European Statistics Code of Practice (CoP) within the frame of the Hellenic Statistical System (ELSS). The ELSS agencies⁽¹⁾ are required by law to implement the CoP when developing, producing and disseminating statistics.

The purpose of this Guide is to help the ELSS agencies in understanding and observing the CoP. It will be updated from time to time, taking into account the experience and feedback from the co-operation with the agencies.

Within the European Statistical System (ESS) and the CoP, the concept of statistical quality is seen in a broad context and not only in connection with the accuracy of statistical data. It requires quality assessment of the whole statistical production chain.

Legal basis

According to the provisions of Article 1, paragraphs 4, 5 and 6, of the Greek Statistical Law 3832/2010 "Hellenic Statistical System (ELSS); Establishment of the Hellenic Statistical Authority (ELSTAT) as an independent authority"⁽²⁾, as in force:

"The activities of the ELSS agencies concerning the development, production and dissemination of statistics are governed by the statistical principles of "professional independence", "impartiality", "objectivity", "reliability", "statistical confidentiality" and "cost – effectiveness", as these principles are defined in the provisions of Article 2 of Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 and are developed in the European Statistics Code of Practice, as stipulated in Article 11 of the same Regulation, as in force from time to time.

When developing, producing and disseminating statistics, ELSS agencies shall implement the European Statistics Code of Practice, as in force from time to time.

In order to guarantee the quality in the development, production and dissemination of the statistical results, the ELSS agencies shall follow uniform standards and harmonised methods and apply the evaluation criteria of quality, such as "relevance", "accuracy", "timeliness", "punctuality", "accessibility", "clarity", "comparability" and "coherence", as these are defined in Article 12 of the Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009, as in force from time to time".

Following the provisions of Article 2, paragraph 1 of the above law: *"ELSTAT coordinates all the activities of the other ELSS agencies which concern the development, production and dissemination of the official statistics of Greece".*

(1) The List of the Agencies of the ELSS is posted on the website of ELSTAT at the following link:
http://www.statistics.gr/documents/20181/1196143/Agencies_HSS_23102018_EN.pdf/4283fa48-9201-4679-ba9a-df4b6e6508c1

(2) The Greek Statistical Law is available at the following link:
http://www.statistics.gr/documents/20181/300673/Stat_Law3832_EN.pdf/de31bfc8-c4d4-4d39-aa5f-d4592d1c8330

The Code of Practice and national guidelines

The CoP in its current version was adopted by the ESS Committee on 16 November 2017⁽³⁾. It is based on 16 principles covering the institutional environment, the statistical processes and the statistical output. For each of the 16 principles, a set of indicators of good practice –84 indicators in total– has been developed.

According to Article 5a, paragraph 2g, of Regulation (EC) 223/2009, as amended by Regulation (EU) 2015/759⁽⁴⁾, the heads of the National Statistical Institutes (NSIs) "shall produce national guidelines, where this is necessary, to ensure quality in the development, production and dissemination of all European statistics within their national statistical system and monitor and review their implementation...".

Recognising that the various ELSS agencies have structures and priorities that are different to those of an NSI, this Guide provides guidelines to the ELSS agencies aiming at facilitating the practical and effective implementation by them of various CoP principles and indicators. It concerns, in particular, those principles and indicators that ELSTAT considers are likely to present challenges in their implementation. The Guide is not an additional set of national requirements for the ELSS agencies but an aid for them to understanding and applying the CoP. It should therefore be seen as a tool for ensuring quality in the various stages of the statistical production process in ELSS agencies, in order to provide users with high quality statistical products and services meeting their needs. The guidelines are equally applicable to all ELSS statistics as, in accordance with the Greek Statistical Law, the CoP applies equally to all official statistics produced by the ELSS agencies, including those statistics that are not "European Statistics" in the formal meaning of that phrase.

The approach followed in this Guide is to make explicit, in relation to particular principles and indicators, what is expected of each of the main players:

- i. the ELSS agency (hereinafter "the Agency") as an institution;
- ii. the Statistical Head within the Agency;
- iii. individual staff involved in the production of official statistics; and
- iv. ELSTAT as the coordinating body and source of expertise.

The Guide contains 4 Annexes. The Annexes I and II contain Templates concerning the Quality Policy and the Statistical Confidentiality Policy, respectively, aiming at supporting the Agencies in compiling their respective policies. The Annex III contains a Template of Quality Report, which has been based on the single standard Single Integrated Metadata Structure (SIMS) for the presentation of metadata and quality reports that has been developed in the ESS. Finally, the Annex IV contains a Template of the Documentation of Statistical Processes.

It is likely that the guidelines below will evolve following any revisions of the CoP and on the basis of ELSTAT's experience from the certification process of ELSS statistics. Therefore, the present Guide is a "live" document that will be revised from time to time, as required.

(3) The European Statistics Code of Practice is available at the following link:
<https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7>

(4) The consolidated Regulation is available at the following link: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&qid=1435820363605&from=EN>

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
1/1.2, 1.3, 1.4	Agency	Appoint a Statistical Head who has sufficient statistical knowledge and experience. Give him/her sufficient practical authority within the Agency, in order to perform successfully his/her duties as Statistical Head. Accept the judgment of the Statistical Head on statistical matters and support his/her work by providing him/her the required resources.
	Statistical Head	Keep himself/herself informed on all the statistical activities of the Agency. Assess compliance of the Agency with the CoP on an ongoing and regular basis. Draw to the attention of the political or administrative leadership of the Agency, as appropriate, matters requiring remedial action and consult the President of ELSTAT, if matters are not resolved.
	Staff involved in statistical work	Be familiar with the CoP. Recognise the responsibility and authority of the Statistical Head for ensuring compliance with the CoP. Bring to the attention of the Statistical Head any matter that seems to present difficulties in relation to compliance.
	ELSTAT	Provide, if requested, advice to the Agency on the suitability of an individual before appointing him/her as Statistical Head. Provide training for all Statistical Heads on matters concerning the implementation of the CoP.
1/1.5 3/3.1	Agency	Ensure adequate resources, both in magnitude and in quality, for the implementation of the statistical work programme of the Agency. Publish on its website, on annual basis, the Agency's statistical work programme for the next year, as well as the evaluation report of the statistical work programme of the previous year.
	Statistical Head	Take care of the compilation and uploading on the website of the Agency each year of the Agency's statistical work programme for the next year, as well as of the evaluation report of the Agency's statistical work programme of the previous year, with the required sections. Take care of the publication of statistical outputs according to the timetable set in the statistical work programme.
	Staff involved in statistical work	Provide input for the compilation of the Agency's statistical work programme and evaluation report. Conduct all the statistical works provided for in the statistical work programme within the set deadlines in it.
	ELSTAT	Provide advice and guidance to the Statistical Head regarding the compilation of the Agency's statistical work programme and evaluation report.
1a/1a.1, 1a.2, 1a.3	Agency	Sign memoranda of cooperation with ELSTAT and the other ELSS agencies, with other Statistical Authorities of ESS and with members of the European System of Central Banks, as appropriate, as well as with academic institutions and other agencies, in the framework of the development, production and dissemination of its statistics.

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
4/4.1, 4.2, 4.3 15/15.7	Statistical Head	Be the link of the Agency with ELSTAT and the other ELSS agencies, on statistical issues. Participate actively in the meetings of the Coordination Committee of ELSS and take care of the execution by the Agency of the decisions he/she takes. Coordinate all the Agency's activities related to the development, production and dissemination of its statistics and inform the staff of the Agency involved in statistical work on the developments taking place in the ELSS and the international statistical community. Ensure timely fulfillment of all obligations of the Agency in the context of the certification of its statistics by ELSTAT, as well as of its other statistical obligations deriving from national and/or European legislation, as appropriate. This includes the development of cooperation of Agency's staff with ELSTAT's staff, the staff of other ELSS agencies, Statistical Authorities of ESS and the European System of Central Banks, as well as with the staff of other agencies, on statistical issues.
	Staff involved in statistical work	Provide the Statistical Head with any information he/she asks for his/her statistical work. Collaborate with the Statistical Head to solve any problems in the development, production and dissemination of the Agency statistics and apply his/her instructions. Cooperate also, in this context, with the staff of the other ELSS agencies, Statistical Authorities of ESS and the European System of Central Banks, as appropriate, as well as with the staff of other agencies, on statistical issues.
	ELSTAT	Cooperate with the Agency, in the framework of the certification of its statistics, by providing relevant advice and guidance to it, whenever necessary. Convene the Coordination Committee of ELSS twice a year, as well as extraordinarily, whenever necessary, to discuss issues related to the production of ELSS statistics. Monitor and review the implementation by the Agency of the national guidelines to ensure quality the development, production and dissemination of all statistics produced within the ELSS.
	Agency	Publish on its website the quality policy of the Agency, where the principles and rules implemented by the Agency to ensure the quality of its statistical output and services are laid out, as well as quality guidelines, which contain guiding principles and best practices for ensuring quality in the various stages of the statistical production process in the Agency.
	Statistical Head	Compile the quality policy and quality guidelines of the Agency, and monitor their implementation in the statistical production. Take care of the compilation, updating and uploading on the Agency's website, by the competent Units of the Agency, of the quality reports pertaining to the statistical processes. Take care of the documentation, by the competent Units of the Agency, of all statistical processes under their competence.
	Staff involved in statistical work	Be informed on the Agency's quality policy and quality guidelines, and implement them in their daily statistical work. Compile and update, as appropriate, the quality reports of the statistical processes under their competence. Proceed to the documentation of all statistical processes under their competence, as well as to its updating, whenever necessary.

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
5/5.4, 5.5	ELSTAT	Provide to the Statistical Head advice and guidance regarding the compilation and monitoring of the Agency's quality policy, quality guidelines and documentation of statistical processes. Provide training to the staff of the Agency on issues pertaining to quality management and reporting.
	Agency	Publish on its website the statistical confidentiality policy of the Agency, where the principles and rules implemented by the Agency for the observance of statistical confidentiality are laid out. Take physical, technological and organisational measures to protect the statistical confidentiality of the information provided by data owners and/or surveyed units.
	Statistical Head	Compile the statistical confidentiality policy of the Agency, on the basis of the relevant legislation in force. Decide on the level of detail at which statistical data can be released, in order to avoid the direct or indirect identification of the surveyed unit or the data subject.
6/6.3, 6.6	Staff involved in statistical work	Be familiar with the provisions of the legislation in force as regards the statistical confidentiality, as well as with the statistical confidentiality policy of the Agency. Apply the above provisions and policy in their statistical work.
	ELSTAT	Provide advice and guidelines to the Statistical Head as regards matters pertaining to the protection of statistical confidentiality in the dissemination of Agency's statistics.
	Agency	Publish on its website the revision policy of the Agency, where the principles and rules implemented by the Agency for the revision of its statistics are laid out. Upload, on annual basis, on its website a schedule of the planned revisions of Agency's statistics for the next year, where applicable. Announce on its website any errors discovered in published statistics, with the relevant corrections.
	Statistical Head	Compile the revision policy of the Agency. Compile, on annual basis, the schedule of the planned revisions of Agency's statistics for the next year, where applicable, and monitor its observance. Take care of the correction, by the competent Units of the Agency, of any errors discovered in published statistics and of the compilation of a relevant announcement for the users.
	Staff involved in statistical work	Be informed on the Agency's revision policy and implement it, when the conduct of scheduled or non-scheduled revisions of Agency's statistics is required. Complete the planned revisions of statistics in accordance with the relevant published timetable. Inform the Statistical Head on any errors discovered in published statistics and correct them at the earliest possible.
	ELSTAT	Provide to the Statistical Head advice and guidance regarding the compilation of the Agency's revision policy.

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
6/6.5, 6.7 13/13.2, 13.4	Agency	Publish, on annual basis, on its website a Press Release Calendar containing the specific dates of publication of the Agency's statistics in the next year. Ensure the simultaneous dissemination of the above statistics to all users at the exact dates defined in the Press Release Calendar and at a predetermined time known in advance to all potential users of Agency's statistics. In the case where exceptional reasons impose the postponement of publication or the change of the specified date of publication of Agency's statistics, preannounce the above postponement or change, as well as the reasons imposing it.
	Statistical Head	Compile, on annual basis, a Press Release Calendar containing the exact dates of publication of Agency's statistics in the next year, taking into consideration the relevant annual statistical work programme of the Agency and after consultation with the competent Units of the Agency that produce the above statistics. Monitor the observance of the Press Release Calendar.
	Staff involved in statistical work	Cooperate with the Statistical Head in compiling the Press Release Calendar. Take care of the observance of the publication dates of statistics, as provided for in the Press Release Calendar.
	ELSTAT	Provide advice and guidelines to the Statistical Head, as regards the compilation of the Press Release Calendar and the means of ensuring the simultaneous dissemination of the above statistics to all users.
7/7.1 15/15.6	Agency	Publish on its website methodological reports of all the Agency's statistical processes.
	Statistical Head	Keep himself/herself informed on the methodology of all Agency's statistical processes. Discuss with the competent Units of the Agency on any planned by them changes in the methodology and take the final decision.
	Staff involved in statistical work	Compile and update, as appropriate, methodological reports of the statistical processes under their competence, taking into account existing methodological recommendations and best practices in the ESS, as appropriate. Review, from time to time, the methodology used for the conduct of statistical processes under their competence and inform the Statistical Head on any required change of it, aiming at improving the quality of statistical outputs and/or reducing the cost of the statistical process and the burden of respondents.
	ELSTAT	Provide advice and guidance to the Statistical Head on the compilation of the methodological reports, as well as on any required changes in the methodology of Agency's statistical processes, in the framework of the certification of the Agency's statistics.
7/ 7.2, 7.4	Agency	Publish on its website the metadata of all the Agency's statistical processes.

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
7/7.5, 7.6	Statistical Head	Keep himself/herself informed on the metadata of all Agency's statistical processes and on any changes planned in them, as well as on the conformity of the above metadata with the relevant ones that are applied in the ESS, as appropriate. Take care of the compilation, updating and uploading on the Agency's website, by the competent Units of the Agency, of the metadata pertaining to the statistical processes.
	Staff involved in statistical work	Compile and update, as appropriate, the metadata of the statistical processes under their competence, taking into account the relevant developments in the ELSS and the ESS, as appropriate.
	ELSTAT	Provide advice and guidelines to the Statistical Head as regards the presentation of metadata.
	Agency	Follow the necessary procedures for the recruitment of staff with appropriate qualifications and skills from disciplines related to the statistical science. Organise training courses on statistical issues for its staff.
10/10.2, 10.3 8/8.6, 8.7 9/9.4	Statistical Head	Specify the required qualifications for all statistical posts of the Agency, on the basis of input provided by the competent Units of the Agency. Record, on regular basis, the training needs of the Agency's staff related to the performance of their statistical duties and compile a relevant training programme for the Agency.
	Staff involved in statistical work	Participate in training courses organised by the Agency or other Statistical Authorities, with the aim of enhancing their knowledge and skills for better performing their statistical duties.
	ELSTAT	Provide training on statistical issues to the Statistical Head and/or other staff of the Agency.
	Agency	Take advantage of the possibilities offered by new technologies for data collection and utilise data from administrative and other sources for the production of Agency's statistics. Provide training to the staff of the Agency on new information and communication technologies. Sign memoranda of cooperation or other formal agreements with administrative data owners, as appropriate, to facilitate the use of these data in the production of Agency's statistics.
	Statistical Head	Decide on the use of new information and communication technologies and/or new data sources in the production of Agency's statistics, after consultation with the competent Units of the Agency, aiming at improving the quality of Agency's statistics and reducing the response burden. Organise seminars and/or training courses on the use of new information and communication technologies for the Agency's staff. Compile memoranda of cooperation between the Agency and administrative data owners, as appropriate, in collaboration with the competent Units of the Agency.

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

B. LIST OF GUIDELINES

Principle/ Indicator ⁽⁵⁾	Whom it concerns	What is expected
11/11.1, 11.2, 11.3 3/3.3, 3.4	Staff involved in statistical work	Participate in seminars and/or training courses on the use of new information and communication technologies, organised by the Agency or other Statistical Authorities. Investigate possible data sources that could be used for data collection in the framework of the production of statistics and inform accordingly the Statistical Head.
	ELSTAT	Provide advice and guidance to the Statistical Head on the incorporation of administrative data in the statistical production. Organise seminars and/or training courses on the use of new information and communication technologies in the production of statistics.
	Agency	Keep and update a list of the users of Agency's statistics. Conduct a user satisfaction survey on an ongoing basis.
	Statistical Head	Decide on the priorities and negative priorities as regards the production of Agency's statistics, on the basis of the statistical obligations of the Agency and the results of the user satisfaction survey. Include the priorities and negative priorities in the Agency's statistical work programme.
	Staff involved in statistical work	Record the comments and remarks of users as regards the Agency's statistical outputs and services and inform accordingly the Statistical Head. Inform the Statistical Head on possible negative priorities of Agency's statistics.
	ELSTAT	Take input from the users of the Agency's statistics in the framework of the certification process of the above statistics. Take into consideration the priorities and negative priorities of the Agency's statistics in the compilation of the Hellenic Statistical Programme (ELSP).

(5) The principle to which the expected actions refer, accompanied by its indicators, is mentioned first and it is followed, as appropriate, by other relevant principle or principles with their indicators.

ANNEX I: TEMPLATE FOR THE QUALITY POLICY

... (the Agency⁽⁶⁾ is written), as a member of the ELSS (hereinafter referred to as "the Agency"), aims at developing, producing and disseminating statistics of high quality that are relevant to all stakeholders for policy-making, decision-making, research and dialogue. In this framework, it is committed to ensuring and further improving the quality of its statistics, by continuously upgrading their production and dissemination processes. The above objective is achieved through the full implementation of the Greek and EU legal and institutional framework for statistics. This includes the Greek Statistical Law (Law 3832/2010, as amended and in force), the European Statistical Law (Regulation (EC) 223/2009, as amended by Regulation (EU) 2015/759), the CoP, the European Regulations on statistics, the Regulation on the Statistical Obligations of the ELSS Agencies and the memoranda of cooperation signed between the Agency and the other ELSS agencies.

As a member of ELSS, the Agency cooperates and participates in any activity required and organised in the framework of the ELSS and the ESS, as appropriate.

RULES AND PRINCIPLES OF THE QUALITY POLICY

The Quality Policy of the Agency is defined by the following rules and principles:

- The development, production and dissemination of the Agency's statistics is governed by the CoP principles, as in force.
- In developing, producing and disseminating its statistics, the Agency follows uniform standards and harmonised methods in the ESS and applies the evaluation criteria of quality, such as "relevance", "accuracy", "timeliness", "punctuality", "accessibility", "clarity", "comparability" and "coherence", as these are defined in Article 12 of Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009, as in force.
- For ensuring the quality and reliability of produced statistics, a Statistical Head is appointed in the Agency, who has the responsibilities and characteristics provided for in the CoP and performs his/her duties with professional independence.
- The Agency systematically and regularly reviews its statistical processes and output and makes improvements where needed. It uploads the quality reports of its statistical processes (surveys/works) on its website.
- The data provided to the Agency for statistical purposes, from administrative sources, are subject to checks by the Agency prior to their use for the production of statistics, with a view to assessing their accuracy and reliability.
- The Agency seeks to take full advantage of the possibilities offered by the new technologies for data collection and processing, with the aim of upgrading the statistical production processes, improving the reliability and timeliness of the statistical outputs, saving resources and reducing the response burden.
- Individual data of statistical units (households and enterprises) collected by the Agency for statistical processing are strictly confidential and used exclusively for statistical purposes.
- The Agency protects the data collected from statistical units and/or administrative sources, by taking all the necessary measures for their physical and logical protection. It also takes all the necessary measures to protect the security and integrity of statistical databases.

(6) In the case where the Agency is a Ministry with supervised entities that produce statistics, the following is written: "The Ministry... with its supervised entities that produce statistics".

- One of the main priorities of the Agency is to meet the needs of users of statistics, both at national and international level. The Agency strives for the satisfaction of users' needs by increasing the production and improving the accessibility of statistics, as well as by continuously improving its website, taking always into account the availability of resources and its national and international obligations.
- As a member of ELSS, the Agency fulfills timely and uninterruptedly all its obligations provided for in the Regulation on the Statistical Obligations of the ELSS Agencies, as in force.

ANNEX II: TEMPLATE FOR THE STATISTICAL CONFIDENTIALITY POLICY

... (the Agency⁽⁷⁾ is written) as a member of the ELSS (hereinafter referred to as the "Agency"), in the framework of ensuring and continuously improving the quality of its statistics, aims, inter alia, to obtain and safeguard the confidence of the statistical units (households and enterprises) that provide confidential information for the production of statistics. On the basis of the above confidence, the Agency protects, in all the stages of statistical production, the secrecy of personal data collected from the statistical units.

This policy includes the rules and principles implemented by the Agency for the observance of statistical confidentiality. These rules and principles have been developed on the basis of the national and European legislation in force, and the existing European and international principles on statistical confidentiality.

1. DEFINITIONS

"Secret data" means the data which allow the direct identification of statistical units concerned.

"Confidential data" means the data which only allow the indirect identification of statistical units concerned. In order to define whether a statistical unit is identifiable or not, all relevant means are taken into consideration which can be reasonably used by third parties to identify the statistical units. Confidential data also include anonymised survey microdata, in case these allow the indirect identification of statistical units concerned.

"Use for statistical purposes" means the use for the development and production of statistics.

2. LEGISLATIVE FRAMEWORK

The Statistical Confidentiality Policy of the Agency is based on:

- a) the provisions on statistical confidentiality of the Greek Statistical Law (Law 3832/2010, as amended and in force), as further specified in the Regulation on the Statistical Obligations of the ELSS Agencies and the Regulation on the Operation and Administration of ELSTAT, as in force,
- b) the provisions on statistical confidentiality of Regulation (EC) 223/2009 of the European Parliament and of the Council, as amended by Regulation (EU) 2015/759, as well as the provisions of the Commission Regulation (EU) 557/2013, as regards access to confidential data for scientific purposes,
- c) the CoP (principle 5 and its indicators), the UN Fundamental Principles of Official Statistics (principle 6) and the Declaration of the International Statistical Institute (ISI) on Professional Ethics (professional value 1 and ethical principle 6).

3. RULES AND PRINCIPLES OF THE STATISTICAL CONFIDENTIALITY POLICY

The Statistical Confidentiality Policy of the Agency is defined through the following rules and principles:

- Personal data of statistical units collected, in paper or electronic form, by the Agency for statistical processing are strictly confidential and used exclusively for statistical purposes. They are not published or disseminated to third parties.
- The staff of the Agency who handles primary data at the level of statistical unit, in paper or elec-

(7) In the case where the Agency is a Ministry with supervised entities that produce statistics, the following is written: "The Ministry... with its supervised entities that produce statistics".

tronic form, takes the necessary measures, as appropriate, with full responsibility, so that these data are not accessible to third parties. When the above data are no longer necessary to the Agency for the production of statistics, are destroyed or deleted, as appropriate, by its staff, with full responsibility, so as to make impossible the recovery of all or part of the data by any third party using any reasonable means. Both during and after the performance of their official duties, in perpetuity, the staff of the Agency do not publish, or otherwise disseminate, the results of the statistical survey/work to which these data refer and which may lead, directly or indirectly, to the disclosure of personal data.

- The Agency takes regulatory, administrative, technical and organisational measures to ensure physical and logical protection of secret and confidential data. It also implements measures to safeguard the security and integrity of statistical databases.
- The statistics compiled by the Agency, on the basis of the collected primary data, are published in such a way so as to prevent the direct or indirect identification of the surveyed statistical units which provided the data or to which the data relate.
- Statistical data of any statistical survey/work of the Agency, before its completion and publication of its results, are treated as confidential and are not disseminated to third parties.
- The Agency sees to the accessibility of researchers to statistical data for scientific purposes, taking due account of technological developments and best practices within the ESS, without compromising the high level of protection of these data. The granting researchers access to confidential data for scientific purposes takes place under the terms and conditions that are mentioned in the Greek Statistical Law and further specified in the Regulation on the Statistical Obligations of the ELSS Agencies, as in force.
- The staff of the Agency is informed on their obligations with regard to the observance of statistical confidentiality in the various stages of statistical production, from the collection of primary data to the dissemination of statistics, as well as to the envisaged sanctions in case of breach of statistical confidentiality, as these are mentioned in the Greek Statistical Law and further specified in the Regulation on the Statistical Obligations of the ELSS Agencies, as in force.

ANNEX III: TEMPLATE FOR THE QUALITY REPORT

Single Integrated Metadata Structure (SIMS v2.0)

(User oriented)

Country: Greece

Name: *Write the statistical survey/work*

1. Contact	
1.1 Contact organisation	<i>Write the ELSS agency – hereinafter "the Agency". In the case where the statistical survey/work is conducted by a supervised entity of the Agency, write also the supervised entity.</i>
1.2 Contact organisation unit	<i>Write the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.3 Contact person name	<i>Write the full name of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.4 Contact person function	<i>Write the post of the person in charge in the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.5 Contact postal address	<i>Write the postal address of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.6 Contact e-mail address	<i>Write the e-mail address of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.7 Contact phone number	<i>Write the phone number of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.8 Contact fax number	<i>Write the fax number of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
2. Metadata update	
2.1 Metadata last certified	<i>Write the date on which the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work confirmed that the metadata of the statistical survey/work are updated.</i>
2.2 Metadata last posted	<i>Write the date of the more recent uploading of the metadata of the statistical survey/work on the Agency's website.</i>
2.3 Metadata last updated	<i>Write the date of the more recent updating of the metadata of the statistical survey/work.</i>

3. Statistical presentation
3.1 Data description
<i>Provide the list of statistical products (statistics) of the statistical survey/work.</i>
3.2 Classification system
<i>Write all international and national classifications and nomenclatures that are used for the produced statistics of the statistical survey/work, with reference to links, where exist.</i>
3.3 Sector coverage
<i>Write the economic or other sectors that are covered by the produced statistics of the statistical survey/work (e.g., branches of economic activity, etc.).</i>
3.4 Statistical concepts and definitions
<i>Describe in summary the key variables of the statistical survey/work, provide their definitions and write any deviations of them from European or international standards.</i>
3.5 Statistical unit
<i>Write the observation units of the statistical survey/work (e.g., enterprise, local unit, private household, etc.) for which the collection of data is sought and for which statistics are produced.</i>
3.6 Statistical population
<i>Describe the target population of the statistical survey/work for which data are collected and to which the produced statistics of the statistical survey/work refer.</i>
3.7 Reference area
<i>Write the geographical levels (e.g., Whole Country, Region, Municipality, etc.) at which the produced statistics of the statistical survey/work are available.</i>
3.8 Time coverage
<i>Write the time periods for which statistics of the statistical survey/work are available.</i>
3.9 Base period
<i>The time period that is used as the base period of an index number (where the index number equals to 100.0) or to which a time series of the produced statistics of the statistical survey/work refer.</i>
4. Unit of measure
<i>Write the units of measure of the produced statistics of the statistical survey/work (e.g., number of persons employed expressed in units, turnover in thousand euro, etc.).</i>
5. Reference period
<i>The time period (or the point of time) to which the produced statistics of the statistical survey/work refer (e.g., day, month, quarter, semester, calendar year, financial year, etc.).</i>

6. Institutional mandate
6.1 Legal acts and other agreements
<i>Write the legal framework (national and European) that governs the conduct of the statistical survey/work and the production of its statistics. Include in the legal framework, in any case, the Statistical Law 3832/2010, the CoP and the Regulation on the Statistical Obligations of the ELSS Agencies, as in force. Especially for the European statistics, include the European Regulation 223/2009, as in force. Write relevant links, where exist.</i>
6.2 Data sharing
<i>Write any agreements (e.g., memoranda of cooperation), or applied procedures concerning the common use or sharing of data of the statistical survey/work with other producers of statistics.</i>
7. Confidentiality
7.1 Confidentiality – policy
<i>Write the link for the general Statistical Confidentiality Policy of the Agency.</i>
7.2 Confidentiality – data treatment
<i>Describe the procedures applied to ensure the observance of statistical confidentiality, as regards the microdata or tabular data of the statistical survey/work.</i>
8. Release policy
8.1 Release calendar
<i>Describe the dissemination policy that is implemented by the Agency for the produced statistics of the statistical survey/work. Mention if and where the publication of the above statistics is preannounced (e.g., preannouncement in the annual statistical work programme of the Agency, in the release calendar of the produced statistics of the Agency, etc.).</i>
8.2 Release calendar access
<i>Write the link for the release calendar of the produced statistics of the Agency.</i>
8.3 User access
<i>Write the link for the general Statistical Dissemination Policy of the Agency.</i>
9. Frequency of dissemination
<i>Write the frequency of dissemination of the statistics of the statistical survey/work (e.g., monthly, quarterly, annual, etc.).</i>
10. Accessibility and clarity
10.1 News release
<i>Write the compiled Press Releases concerning the produced statistics of the statistical survey/work.</i>

10.2 Publications
<p><i>Write the compiled publications concerning the produced statistics of the statistical survey/work. If electronic publications exist, write the relevant links.</i></p>
10.3 On-line database
<p><i>Write the on-line databases from which the produced statistics of the statistical survey/work are accessible.</i></p> <p><u>10.3.1 Data tables – consultations</u></p> <p><i>Write the produced tables containing the results of the statistical survey/work and the number of visits of users on the website for them during a calendar year.</i></p> <p><i><u>Relevant indicator:</u> $I_1=A$, where A is the number of visits of unique users on the website for the tables containing the results of the statistical survey/work during a calendar year.</i></p>
10.4 Microdata access
<p><i>Write if the access to anonymised microdata or to confidential data for scientific purposes of the statistical survey/work is feasible and with what procedure. If anonymisation criteria of microdata are applied, write them. Also, in case of provision of confidential data for scientific purposes of the statistical survey/work, the conditions of provision and the procedure applied should be in line with the provisions of Article 8(6) of the Regulation on the Statistical Obligations of the ELSS Agencies.</i></p>
10.5 Other
<p><i>Write if tailor-made statistics of the statistical survey/work are disseminated and the applied pricing policy, with reference to the relevant link, if exists. Write, also, if the produced statistics of the statistical survey/work are used by other organisation units of the Agency.</i></p> <p><u>10.5.1 Metadata – consultations</u></p> <p><i>Write the number of visits of users on the website for the metadata of the statistical survey/work (or for the quality reports) during a calendar year.</i></p> <p><i><u>Relevant indicator:</u> $I_2=A$, where A is the number of visits of unique users on the website for the metadata (or the quality reports) of the statistical survey/work during a calendar year.</i></p>
10.6 Documentation on methodology
<p><i>Write the methodological reports or the methodological manuals concerning the statistical survey/work, with reference to the relevant links, if exist.</i></p> <p><u>10.6.1 Metadata completeness – rate</u></p> <p><i>Write the percentage of the number of available/provided metadata of the statistical survey/work in relation to the total number of its metadata. There are 3 types of metadata, which are described, in accordance with the sections of SIMS v2.0 structure: a) metadata for the statistical products (sections 2, 3, 4, 7.1, 8, 9), b) metadata for the statistical processes (sections 5, 6, 7.2, 17, 18) and c) metadata for the quality (sections 10 – 16).</i></p> <p><i>The calculations are made separately for each one of the 3 above types.</i></p> <p><i><u>Relevant indicator:</u> $I_3=100A/B$, where A is the number of available/provided metadata of the statistical survey/work and B is the total number of its metadata.</i></p>

10.7 Quality documentation
<i>Write the documents on the quality management and assessment (quality report of the statistical survey/work, quality guidelines, internal circulars, etc.) that the Agency has compiled, with reference to the relevant links, where exist.</i>
11. Quality management
11.1 Quality assurance
<i>Describe in summary the quality assurance framework that is used in the Agency and how this is implemented in the case of the statistical survey/work (e.g., set-up of a group for the supervision and management of the quality of the produced statistics, conduct of self-assessments on compliance with the CoP, technical support of the Agency by experts, participation of Agency's staff in seminars on specialised statistical topics, etc.).</i>
11.2 Quality assessment
<i>Summarise the strengths and deficiencies of the produced statistics of the statistical survey/work in relation to the evaluation criteria of their quality, such as relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability (see Article 12(1) of Regulation (EC) 223/2009, as amended by Regulation 2015/759). Write, also, any planned improvements of the quality of the above statistics.</i>
12. Relevance
12.1 User needs
<i>Write the main users of the produced statistics of the statistical survey/work, the uses of those statistics, the needs of users that have not been satisfied and actions that have been undertaken for the satisfaction of these needs.</i>
12.2 User satisfaction
<i>Write the actions of the Agency for the systematic recording of the views of users on the produced statistics of the statistical survey/work (e.g., conduct of a user satisfaction survey, organisation of user conferences, etc.).</i>
12.3 Data completeness
<i>Write the degree of completeness (as percentage) of the available/provided statistics of the statistical survey/work in relation to the statistics that are provided for in the legal framework governing the conduct of the statistical survey/work or in relation to the statistics of the statistical survey/work that are theoretically relevant/useful for the users.</i>
<i><u>Relevant indicator for the producers of statistics:</u> $I_4=100A/B$, where A is the number of the available/provided statistics and B is the number of statistics that are provided for in the legal framework governing the conduct of the statistical survey/work.</i>
<i><u>Relevant indicator for the users of statistics:</u> $I_5=100A/B$, where A is the number of the available/provided statistics and B is the number of statistics of the statistical survey/work that are theoretically relevant/useful for the users.</i>

13. Accuracy and reliability

13.1 Overall accuracy

"Accuracy" is defined as the closeness of the estimate of a variable to its exact unknown value. In rare cases, the estimate of the variable equals its actual value, due to errors entered into the estimation procedure. These errors arise in every phase of the statistical survey/work. The main sources of random and systematic errors in the produced statistics of the statistical survey/work and the implications of the above errors in the produced estimates are described in this section. "Random errors" are those that are changed in an unforeseen manner between successive measurements of the same magnitude. "Systematic errors" are those that remain stable between successive measurements of the same magnitude.

13.2 Sampling error

In the case of a sample survey, write the sampling errors of the produced estimates. "Sampling error" is the difference between the value of a variable in the population and the estimate of this variable derived from the sample.

The sampling error can be expressed as:

- a) coefficient of variation (CV): the coefficient of variation of the estimate \hat{h} of a variable h equals the quotient of the square root of the estimated variance of the estimate, $Ve(\hat{h})$, to the estimate \hat{h} ;
- b) symmetric confidence interval, of the form $[\hat{h}-ta, \hat{h}+ta]$, within which the actual value of the variable h is located, where a is the square root of the estimated variance of the estimate, $Ve(\hat{h})$, and t is a parameter that depends on the distribution of \hat{h} and on the level of confidence (e.g., 95%).

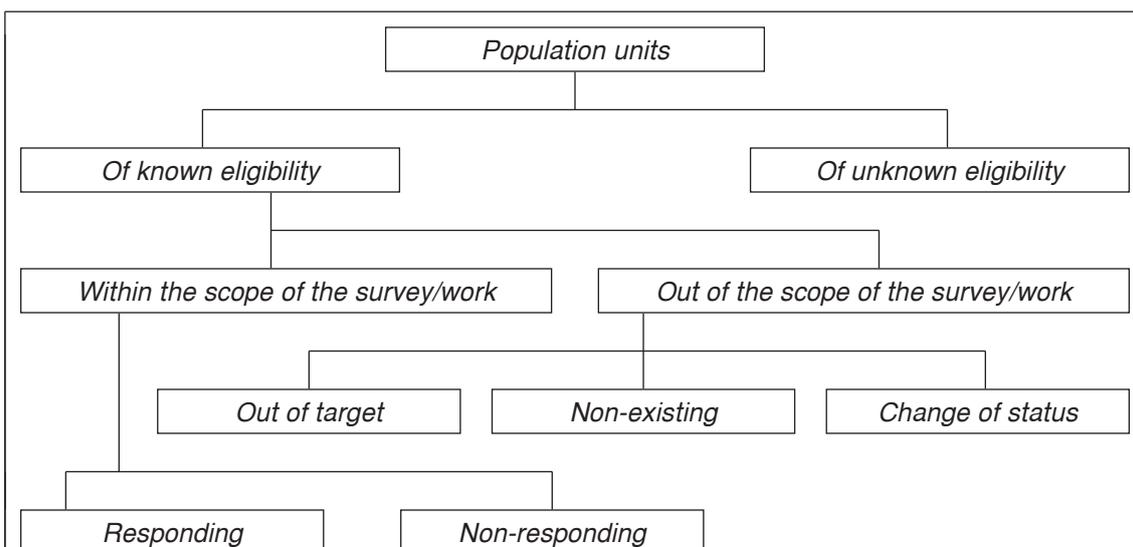
13.3 Non-sampling error

Provide a quantitative assessment of the non-sampling errors and of the non-response rates.

a) Unit non-response

Write the percentage of the eligible (within the scope of the statistical survey/work) population units from which no information was gathered, in relation to the total number of the eligible population units.

Relevant indicator: $I_6 = 100 - 100A / (A + B + aC / 100)$, where A is the number of the eligible population units from which information was gathered, B is the number of the eligible population units from which no information was gathered, C is the number of the population units with unknown eligibility for the statistical survey/work and a the percentage of the population units of unknown eligibility that it is estimated to be in fact eligible for the statistical survey/work ($a = 100$, unless there is strong evidence at Country level for a different assumption).



b) Item non-response

Write the percentage of the eligible (within the scope of the statistical survey/work) population units that should reply to a specific question of the questionnaire of the statistical survey (or to provide information on a specific variable) and did not respond, in relation to the total number of the eligible population units that are required to reply to the specific question (or to provide information on the specific variable).

Relevant indicator: $I7 = 100 - 100A / (A + B)$, where A is the number of the eligible population units that meet the requirement of replying to a specific question of the questionnaire of the statistical survey/work (or of providing information on a specific variable) and B is the number of the eligible population units that did not meet the above requirement, while they should.

13.3.1 Coverage error

Provide information on the coverage of the register or frame used for the conduct of the statistical survey/work (reference period, frequency of updating the register/frame, eventual discrepancies between the units of the register/frame and the units of the target population, quantitative assessment of the overcoverage or undercoverage of the register/frame), as well as on the actions undertaken for the treatment of overcoverage/undercoverage.

13.3.1.1 Overcoverage rate

Write the percentage of the units of the register/frame that do not belong to the target population.

Relevant indicator: $I8 = 100(A + (100 - a)C / 100) / (A + B + C)$, where A is the number of units of the register/frame that are out of the scope of the statistical survey/work, B is the number of units of the register/frame that are within the scope of the statistical survey/work, C is the number of units of the register/frame that are of unknown eligibility (it is not known if they belong to the target population) and a is the percentage of the population units of unknown eligibility that it is estimated to be in fact eligible for the statistical survey/work (a=100, unless there is strong evidence at Country level for a different assumption).

Examples:

1. The Table below shows the results of a survey that was conducted through the internet in a sample of 6,000 enterprises belonging to the branches 10 – 33 of the European classification of economic activities NACE Rev.2, with mean annual employment 49 – 250 employed persons:

Result	Number	Category
Completed questionnaires	3,852	Responding
Refusals	167	Non-responding
No response	1,636	Of unknown eligibility
Change of economic activity	261	Out of the scope of the survey (Change of status)
Employment < 49 employed persons	72	Out of the scope of the survey (Out of target))
Non-usable questionnaires	12	Non-responding (other reasons)
Total	6,000	

Let a be the percentage of the population units of unknown eligibility that it is estimated to be in fact eligible for the statistical survey/work.

A) If $a=100$:

Unit non-response: $l_6=100-100 \times 3,852 / (3,852 + 167 + 12 + 100 \times 1,636 / 100) = 32.03\%$.

Overcoverage rate: $l_8=100 \times (261 + 72 + (100 - 100) \times 1,636 / 100) / 6,000 = 5.55\%$.

B) If $a=0$:

Unit non-response: $l_6=100-100 \times 3,852 / (3,852 + 167 + 12) = 4.44\%$.

Overcoverage rate: $l_8=100 \times (261 + 72 + (100 - 0) \times 1,636 / 100) / 6,000 = 32.82\%$.

2. The Table below shows the replies of 20 individuals to 2 questions of a questionnaire that concern the employment:

Age	Employed/ Non-employed	Profession	Obligation of replying
31	Yes	Teacher	Yes
45	Yes	Lawyer	Yes
56	Yes	Doctor	Yes
43	No		Yes
8			No
29	No		Yes
46	Yes	Public servant	Yes
53	Yes	Farmer	Yes
50			Yes
20	No		Yes
7			No
15	Yes	Farmer	Yes
8			No
49	Yes		Yes
41	Yes		Yes
54	No		Yes
67	No		Yes
13			No
28			Yes
33	Yes	Professor	Yes

– Item non-response, for the variable "Employed/Non-employed":
 $I_7 = 100 - 100 \times 14 / (14 + 2) = 12.50\%$.

– Item non-response, for the variable "Profession":
 $I_7 = 100 - 100 \times 7 / (7 + 2) = 22.22\%$.

13.3.1.2 Common units (proportion)

Write the percentage of common units covered by the statistical survey/work and the administrative sources in relation to the total number of units that are covered solely by the statistical survey/work.

Relevant indicator: $I_9 = 100A/B$, where A is the number of common units covered by the statistical survey/work and the administrative sources and B is the number of units that are covered solely by the statistical survey/work.

13.3.2 Measurement error

Write the main sources of measurement errors, as well as the actions undertaken to correct them (e.g., testing of the questionnaire before the conduct of the statistical survey/work, training of interviewers (surveyors in the field) who fill in the questionnaires, comparisons of the statistical survey/work data to similar data of other sources, etc.).

13.3.3 Processing error

Write the main sources of the errors made during the data processing of the statistical survey/work, such as the errors of linking the data to data of other sources, the coding errors, etc.

13.3.4 Model assumption error

In the case where statistical models are used for the production of estimates of the variables of the statistical survey/work, provide an assessment of the validity of the models.

14. Timeliness and punctuality

14.1 Timeliness

Write the time elapsed between the reference period of statistics of the statistical survey/work and the time of publication of its results.

Relevant indicator: $I_{10} = t_p - t_r$, where t_p is the date of publication of the results of the statistical survey/work and t_r is the last day (date) of the reference period of statistics. In the case of an initial publication of provisional results and a later publication of final results, respective indicators are calculated.

14.2 Punctuality

Write the percentage of statistics of the statistical survey/work that were published in accordance with the scheduled publication dates in the release calendar in relation to the set of statistics under publication of the statistical survey/work that are included in the above release calendar, as well as the actions undertaken for the publication of all statistics in the scheduled times.

Relevant indicator: $I_{11} = 100 / (A + B)$, where A is the number of statistics of the statistical survey/work that were published in accordance with the scheduled publication dates in the release calendar and B is the number of statistics of the statistical survey/work that were published in later dates of those scheduled in the release calendar or their publication was annulled.

15. Coherence and comparability

15.1 Comparability – geographical

Write the degree of comparability of the produced statistics of the statistical survey/work between countries or regions and the reasons of non-comparability (e.g., discrepancies from ESS concepts and definitions).

15.1.1 Asymmetry for mirror flows statistics – coefficient

In the case where the produced statistics of the statistical survey/work are mirror statistics (e.g., declared by Greece exports of citrus fruits of Greece to Germany in 2017 and declared by Germany imports of citrus fruits of Germany from Greece in the same year), write the deviations of the mirror statistics as the quotient of their difference (or their absolute difference) to their mean value.

Relevant indicators:

a) In the case of two countries A and B:

$I_{12} = 2(OF_{AB} - mIF_{AB}) / (OF_{AB} + mIF_{AB})$, where OF_{AB} is the outbound flow of statistics from country A to country B and mIF_{AB} the mirror inbound flow of statistics.

$I_{13} = 2(OF_{BA} - mIF_{BA}) / (OF_{BA} + mIF_{BA})$, where OF_{BA} is the outbound flow of statistics from country B to country A and mIF_{BA} the mirror inbound flow of statistics.

$I_{14} = 2(|OF_{AB} - mIF_{AB}| + |OF_{BA} - mIF_{BA}|) / (OF_{AB} + mIF_{AB} + OF_{BA} + mIF_{BA})$, where $|a|$ denotes the absolute value of a .

b) In the case of more countries A_i and B_j :

$I_{15} = 2(\sum_i \sum_j |OF_{A_i B_j} - mIF_{A_i B_j}|) / (\sum_i \sum_j (OF_{A_i B_j} + mIF_{A_i B_j}))$, where \sum_i denotes the sum for all i , and \sum_j denotes the sum for all j .

15.2 Comparability over time

Write the degree of comparability over time of the produced statistics of the statistical survey/work, noting the changes that have occurred in the metadata or in the process of conducting the statistical survey/work and have an impact on the continuity of the time series of statistics. Describe the reasons for the existence of these reference periods and their treatment.

For the measurement of the comparability over time of the produced statistics of the statistical survey/work, the reference periods of their time series are numbered and the number of reference periods from the last break of the time series is calculated.

Relevant indicator: $I_{16} = AL - AF + 1$, where AL is the number of the most recent reference period of the published statistics of the statistical survey/work and AF is the number of the first reference period for which comparable statistics of the statistical survey/work exist.

15.3 Coherence – cross domain

Describe the differences of the produced statistics of the statistical survey/work with other relevant statistics (e.g., main differences in concepts and definitions, in the statistical units, in the classifications used, in the reference period, etc.).

15.3.1 Coherence – sub-annual and annual statistics

Write any coherence problems of the results of the statistical survey/work that are produced with different frequencies. In case of lack of coherence describe the reasons.

15.3.2 Coherence – National Accounts

Write any coherence problems of the produced statistics of the statistical survey/work with National Accounts

15.4 Coherence – internal

Write any coherence problems of the results of the statistical survey/work, due to, for example, the use of data from different sources.

16. Cost and burden

Provide a summary of the cost for producing the statistics of the statistical survey/work, as well as the actions undertaken for increasing the cost effectiveness of statistical production (e.g., use of information and communication technologies, etc.). Provide, also, an estimate of the response burden, usually measured in hours or man-hours (e.g., time required for the completion of the questionnaire of the statistical survey/work or for the provision of its data), as well as the actions undertaken to reduce the above burden.

17. Data revision

17.1 Revision – policy

Write the link of the website of the Agency at which the Agency's Revision Policy is available.

17.2 Revision – practice

Write the planned revisions of the statistics of the statistical survey/work. Describe the main reasons for these revisions (e.g., change of the base year of statistical indices, filling-in/collection of additional data of the statistical survey/work, use of new data sources, application of new methods for data collection, etc.). Provide, also, a quantitative assessment on the average size of revisions, through the following indicators:

Relevant indicators:

$I_{17} = \sum_t |X_{Rt} - X_{It}| / n$ where X_{Rt} and X_{It} are a later published estimate and an earlier published estimate, respectively, of a statistics of the statistical survey/work for the reference period t ($t=1,2,\dots,n$), \sum_t denotes the sum for all t , n is the number of reference periods in the time series and $|X_{Rt} - X_{It}|$ denotes the absolute value of $X_{Rt} - X_{It}$.

The number of reference periods n is recommended to be greater than or equal to 20 for quarterly estimates and greater than 30 for monthly estimates. The indicator is not recommended for annual estimates.

Alternatively, the following indicators are used:

$I_{18} = \sum_t |X_{Rt} - X_{It}| / \sum_t X_{It}$.

$I_{19} = \sum_t (X_{Rt} - X_{It}) / n$.

The Organisation for Economic Cooperation and Development suggests the comparison of the following published estimates:

Monthly estimates		Quarterly estimates	
Later	Earlier	Later	Earlier
After 2 months	First	After 5 months	First
After 3 months	First	After 1 year	After 5 months
After 3 months	After 2 months	After 1 year	First
After 1 year	First	After 2 years	First
After 2 years	First	Last available	First
Last available	First	After 2 years	After 1 year
After 2 years	After 1 year		

18. Statistical processing

18.1 Source data

Write the sources of the data used for producing the statistics (statistical survey, administrative sources, combination of statistical survey and administrative sources, etc.). In the case where the statistical survey is a sample survey, provide characteristics of the sample (e.g., sample size, type of sample design, etc.). In the case where administrative registers are used, provide information on the registers.

18.2 Frequency of data collection

Write the frequency with which the data of the statistical survey/work are collected (e.g., monthly, quarterly, annually, etc.).

18.3 Data collection

Write the method used for the collection of the data of the statistical survey/work (e.g., conduct of interview with the use of a questionnaire, collection through a posted questionnaire, conduct of a telephone survey, collection with the use of electronic questionnaire, web application, etc.). In the case where a questionnaire is used, write the link, if exists, at which the questionnaire is available.

18.4 Data validation

Describe the procedures for checking and validating the data used and the produced statistics of the statistical survey/work.

18.5 Data compilation

Describe the methodology applied for producing the statistics (e.g., calculation of extrapolation factors, in the case of a sample statistical survey, non-response adjustment, etc.).

18.5.1 Imputation rate

Write the ratio of the number of imputed values to the total number of values for each variable of the statistical survey/work.

Relevant indicator: $I_{20} = A/(A+B)$, where A and B are the number of assigned values and the number of observed values, respectively, of a variable of the statistical survey/work.

18.6 Adjustment

Describe the time series of the produced statistics of the statistical survey/work that are adjusted to conform to national or international standards, as well as the type of adjustment (e.g., seasonal adjustment, calendar adjustment, etc.). Describe, also, the procedure of detecting and correcting outliers in the data of the statistical survey/work, as well as the software used for the above adjustments/corrections.

18.6.1 Seasonal adjustment

In the case of seasonally adjusting the produced statistics of the statistical survey/work, describe, in summary, the method used.

19. Comment

Attach any supplementary texts concerning the produced statistics or the metadata of the statistical survey/work.

ANNEX IV: TEMPLATE FOR THE DOCUMENTATION OF STATISTICAL PROCESSES

Documentation of Statistical Processes

Name of statistical process:

Write the name of the statistical survey/work.

Code of the statistical process:

Write the code of the statistical survey/work.

1. Contact	
1.1 Contact organisation	<i>Write the ELSS agency – hereinafter "the Agency". In the case where the statistical survey/work is conducted by a supervised entity of the Agency, write also the supervised entity.</i>
1.2 Contact organisation unit	<i>Write the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.3 Contact person name	<i>Write the full name of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.4 Contact person function	<i>Write the post of the person in charge in the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.5 Contact postal address	<i>Write the postal address of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.6 Contact e-mail address	<i>Write the e-mail address of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.7 Contact phone number	<i>Write the phone number of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
1.8 Contact fax number	<i>Write the fax number of the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work.</i>
2. Documentation update	
2.1 Documentation last certified	<i>Write the date on which the person in charge of the organisation unit that is responsible for the conduct of the statistical survey/work confirmed that the documentation of the statistical survey/work is updated.</i>

3. Specification of needs	
3.1 Legal basis governing the conduct of the statistical process	<i>Write the legal framework (national and European) that governs the conduct of the statistical survey/work and the production of its statistics. Include in the legal framework, in any case, the Statistical Law 3832/2010, the CoP and the Regulation on the Statistical Obligations of the ELSS Agencies, as in force. Especially for the European statistics, include the European Regulation 223/2009, as in force. Where relevant links exist, write them.</i>
3.2 Aim of the statistical process	<i>Describe, in summary, the aim of the statistical survey/work.</i>
3.3 List of the main users of the produced statistics from the statistical process	<i>Write the main users of the produced statistics of the statistical survey/work.</i>
3.4 List of the main uses of the produced statistics by the users	<i>Write the main uses of those statistics by the users.</i>
3.5 User needs on statistical information that have not been satisfied and actions for satisfying these needs	<i>Write the user needs that have not been satisfied and the actions undertaken by the Agency for satisfying these needs.</i>
4. Designing of the statistical process	
4.1 Target population – Sampling frame (for sample surveys)	<i>Describe the target population of the statistical survey/work, for which data are collected and to which the produced statistics of the statistical survey/work refer. In the case of a sample statistical survey, describe the sampling frame from which the sample is selected.</i>
4.2 Surveyed unit(s)	<i>Write the surveyed units that provide the data or from which the data are collected.</i>
4.3 Statistical unit(s)	<i>Write the observation units of the statistical survey/work (e.g., enterprise, local unit, private household, etc.), for which the collection of data is sought and for which statistics are produced. In most cases the statistical units coincide to the surveyed units.</i>
4.4 Metadata of the statistical process (concepts, definitions, classifications)	<i>Write, with reference to links, where exist, all the international and national classifications and nomenclatures used for the produced statistics of the statistical survey/work. Write, also, the concepts used, with their definitions. If a quality report of the statistical survey/work has been compiled, reference is made to the relevant link. Especially for the variables of the statistical survey/work, fill in the Table of Section 4.5.</i>

4.5 List of variables					
S/N	Name	Definition	Data source used	Lower level:	
				Of geographical classification	Of other classification
(1)	(2)	(3)	(4)	(5)	(6)
<p><i>Fill in the above Table for all the variables of the statistical survey/work. For each variable write its name in column (2), provide its definition (or refer to a relevant link) in column (3) and write the data source (or data sources) used for its calculation in column (4). In columns (5) and (6) write the lower level of geographical classification (e.g., Municipality) or of other classification (e.g., 4-digit code of the statistical classification of economic activities), respectively, at which data of the variable are available.</i></p>					
4.6 Manuals on the designing of the statistical process					
<p><i>Write all the existing manuals concerning the designing of the statistical survey/work, with reference to relevant links, if exist.</i></p>					
4.7 Methodology of the statistical process – Sample design (for sample surveys)					
<p><i>Describe the methodology of conducting the statistical survey/work, with reference to relevant links, if exist. In the case of a sample statistical survey, describe the sample design, on the basis of which the sample is selected.</i></p>					
4.8 Mode of data collection (survey administered by an interviewer, self-administered survey, administrative sources/registers, combination of the above modes)					
<p><i>Write the mode of data collection of the statistical survey/work (e.g., conduct of interview with the use of a questionnaire, collection through a posted questionnaire, conduct of a telephone survey, collection with the use of electronic questionnaire or web application, collection of administrative or other sources, combination of the above modes, etc.).</i></p>					
4.9 Data collection tools					
<p><i>Write the means for the data collection of the statistical survey/work. In the case where a questionnaire is used, write the link, if exists, at which the questionnaire is available. Write any agreements (e.g., memoranda of cooperation) with other agencies concerning the data collection of the statistical survey/work, with reference to relevant links, if exist.</i></p>					
4.10 Logical and automated checks of the data					
<p><i>Describe the logical and automated checks that are applied to the data of the statistical survey/work for the production of its statistics, with reference to relevant links, if exist.</i></p>					
4.11 Algorithms for calculating the variables from the data					
<p><i>In the case where the variables of the statistical survey/work do not arise directly from its data, describe the algorithms that are applied for calculating the variables.</i></p>					
4.12 Procedures for checking the functionality of the questionnaires					
<p><i>Describe the procedures for checking the functionality of the questionnaires of the statistical survey/work (e.g., conduct of a pilot survey in a small sample of surveyed units).</i></p>					

5. Data collection
5.1 Data sources (within and outside of the Agency)
<i>Write the sources of the data used for producing the statistics (statistical survey, administrative sources, combination of statistical survey and administrative sources, etc.). In the case where the statistical survey is a sample survey, provide characteristics of the sample (e.g., sample size, type of sample design, etc.). In the case where administrative registers are used, provide information on the registers.</i>
5.2 Surveyors for the data collection
<i>In the case where surveyors are used for the data collection of the statistical survey/work, mention the kind of surveyors (e.g., private collaborators, statistical correspondents, employees, etc.) and their number.</i>
5.3 Selection and training of surveyors
<i>Describe, in summary, the way of selecting and training the surveyors for the data collection of the statistical survey/work.</i>
5.4 Instructions to surveyors – Help desk for surveyors
<i>Write the instructions that are provided to the surveyors for the data collection of the statistical survey/work, with reference to relevant links, if exist. In the case where a help desk for surveyors has been created in the Agency, provide a short description of it.</i>
5.5 Checking of the surveyors' work
<i>Describe the procedures for checking the work of the surveyors who are used for the data collection of the statistical survey/work.</i>
5.6 Procedures for preventing the non-response
<i>Describe the procedures for preventing the non-response of the surveyed units (e.g., informing the surveyed units on the aim of the statistical survey/work, sending reminder letters, etc.).</i>
5.7 Checking of the data completeness
<i>Describe the procedures applied for checking the completeness of the collected data of the statistical survey/work, with reference to relevant links, if exist.</i>
5.8 Procedures for improving the data completeness
<i>Describe the procedures applied for improving the completeness of the collected data of the statistical survey/work (e.g., communication with the surveyed units, etc.).</i>
6. Data processing
6.1 Data coding
<i>In the cases where coding of the data of the statistical survey/work takes place, describe the relevant procedure and provide the correspondence tables of the codes used, as well as the existing coding guidelines, with reference to relevant links, if exist.</i>
6.2 Conversion of data into computer-readable form
<i>In the cases where the data of the statistical survey/work are converted into computer-readable form, describe the relevant procedure.</i>

6.3 Checks of data correctness and consistency
<i>Describe in detail the logical checks (automated and non-automated checks) that are applied to ensure the correctness and consistency of the data, with reference to relevant links, if exist.</i>
6.4 Procedures for replacing missing values (imputation)
<i>Describe the procedures applied for replacing missing values of the variables of the statistical survey/work, with reference to relevant links, if exist.</i>
7. Quality assessment of the statistical product
7.1 Procedures for assessing the usefulness/relevance of the statistical product for the users
<i>Write the actions of the Agency for the systematic recording of the views of users on the produced statistics of the statistical survey/work (e.g., conduct of a user satisfaction survey, organisation of user conferences, etc.), as well as the procedures applied for assessing the usefulness/relevance of the statistical product for the users.</i>
7.2 Procedures and measures for assessing the accuracy of the statistical product
<i>Describe the sources of errors in the produced statistics of the statistical survey/work and the measures (indicators) that are used for assessing the accuracy of statistics, with reference to the relevant section of the quality report of the statistical survey/work</i>
7.3 Timeliness of the statistical product
<i>Write the measures (indicators) that are used for assessing the timeliness of the produced statistics, with reference to the relevant section of the quality report of the statistical survey/work.</i>
7.4 Punctuality
<i>Write the measures (indicators) that are used for assessing the punctuality of the produced statistics, with reference to the relevant section of the quality report of the statistical survey/work.</i>
7.5 Procedures and measures for assessing the comparability (geographical and over time) of the statistical product
<i>Write the measures (indicators) that are used for assessing the geographical comparability and comparability over time of the produced statistics, with reference to the relevant section of the quality report of the statistical survey/work.</i>
7.6 Procedures for assessing the coherence of the statistical product
<i>Describe the procedures applied for assessing the coherence of the produced statistics.</i>
7.7 Procedures for hiding cells with confidential data in the produced statistical tables
<i>Describe the procedures applied to ensure the observance of statistical confidentiality in tabular results of the statistical survey/work. Moreover, write any software used for the above purpose (e.g., tau-Argus).</i>

8. Dissemination of statistical product
8.1 Preliminary results – Provisional results – Planned revisions
<i>If there is an obligation to produce and disseminate preliminary and/or provisional results of the statistical survey/work, write the relevant legal framework, the variables included in the results and the time of disseminating the results. Moreover, in case of planned revisions of the statistics of the statistical survey/work, describe the main reasons for these revisions (e.g., change of the base year of statistical indices, filling-in/collection of additional data of the statistical survey/work, use of new data sources, application of new methods for data collection, etc.), as well as the indicators used for assessing the average size of revisions, with reference to the relevant section of the quality report of the statistical survey/work.</i>
8.2 Press Release, statistical tables and time series of the produced statistics
<i>Write the compiled Press Releases and the produced publications (in paper and/or in electronic form) pertaining to the produced statistics of the statistical survey/work. Reference is made to relevant links, if exist. Moreover, provide the compiled statistical tables and time series of the produced statistics of the statistical survey/work, with reference to relevant links, if exist.</i>
8.3 Metadata and quality reports of the statistical process, in accordance with existing in the ESS standards of presentation
<i>Reference is made to the metadata and the quality report of the statistical survey/work.</i>
8.4 Public Use Files and Scientific Use Files
<i>In the case where standardised Public Use Files (PUFs) have been compiled from the microdata of the statistical survey/work, write the applied anonymisation criteria and the reference periods of the microdata. Write, also, their accompanying files in which clarifications on the variables included in the PUFs are provided, with reference to the relevant links where the PUFs are available, if exist. In the case where standardised Scientific Use Files (SUFs) have been compiled from the microdata of the statistical survey/work, write the applied anonymisation criteria and the reference periods of the microdata. Write, also, their accompanying files in which clarifications on the variables included in the SUFs are provided, as well as the conditions of granting access to the SUFs.</i>
8.5 Procedures for promoting (marketing) the statistical product
<i>Describe the procedures applied to promote the produced statistics of the statistical survey/work (e.g., organisation of one-day conferences aiming at informing the users on the possibilities of using the statistics, etc.).</i>
8.6 Archiving of statistical data and metadata – Databases
<i>Describe the procedures applied to archive the statistics and metadata of the statistical survey/work. If relevant databases have been created, provide information on their content, technical characteristics, frequency of updating and conditions of access. In the case where on-line databases exist, write the relevant links.</i>

9. Evaluation of the statistical process
9.1 Estimation of the cost – effectiveness of the statistical process
<i>Describe the estimation procedure of the effectiveness of cost of the statistical survey/work, by using the indicators that are calculated for assessing the degree of reliability of the produced statistics (indicators of Section 13 of the quality report of the statistical survey/work), in combination with the estimated total cost of the statistical survey/work. Reference is made to relevant links, if exist.</i>
9.2 Estimation of the burden of the statistical process
<i>Describe the estimation procedure of the burden of the surveyed units, with reference to relevant links, if exist.</i>
9.3 Report of the last evaluation of the statistical process
<i>Write the year in which the method and the mode of conduct of the statistical survey/work was evaluated for last time, as well as the conclusions of the evaluation, with reference to relevant links, if exist.</i>
9.4 Action plan for improving the quality of the produced statistics
<i>If actions for improving the quality of the produced statistics have been decided since the last evaluation of the statistical survey/work, write those actions, with reference to relevant links , if exist, as well as the degree of implementation of these actions.</i>

