

II Guidelines for Quality Assurance of the Official Statistics

(Revised on April 8, 2011. Agreed on at a conference for Director-Generals and Directors of the main statistics departments of the Cabinet Office and each ministry)

1. Background and Circumstances

The concept of quality in statistics was applied to the management of statistical accuracy from data collection through aggregation until the 1970s, similar in nature to quality management in factories. However, in the 1980s this concept started to include views on user satisfaction levels, and has come to be applied in a more comprehensive manner, having expanded from relating to one subject to the whole system. Canada introduced this broader concept of quality as a goal promptly and prepared guidelines in 1985.

The framework related to the quality of statistics has been examined since the 1990s, mainly by EU nations, and was developed in some nations in around the year 2000. International organizations such as the EU, OECD and IMF also developed similar frameworks. Some frameworks adopt standards to aim for regarding statistics, such as validity, accuracy and timeliness, and express specific check items and checking points related uniquely to statistics. Such frameworks can be used as guideline for evaluation, or can be included in evaluation processes.

In Japan, the “Master Plan Concerning the Development of Official Statistics” (approved by the Cabinet decision on March 13, 2009; hereafter referred as the “Master Plan”) states that, from the perspective of increasing and maintaining the quality of official statistics, continued reexaminations of existing statistics and streamlining of the methods for producing statistics will be promoted, while taking heed of the alleviation of burdens of reports and the maintenance and improvement of the quality of statistics, etc. To be specific, the Master Plan suggests the development of guidelines for self-evaluation related to the quality of statistics including a “Common Style for Quality Indication of Statistics.”

Following the move, the government made the “Guidelines for Quality Assurance of the Official Statistics” (agreed on at a conference for director-generals and directors of the main statistics departments of the Cabinet Office and each ministry on March 31, 2010, and revised on April 8, 2011; hereafter referred to as “the Guidelines”) and has engaged in activities related to the quality assurance of official statistics.

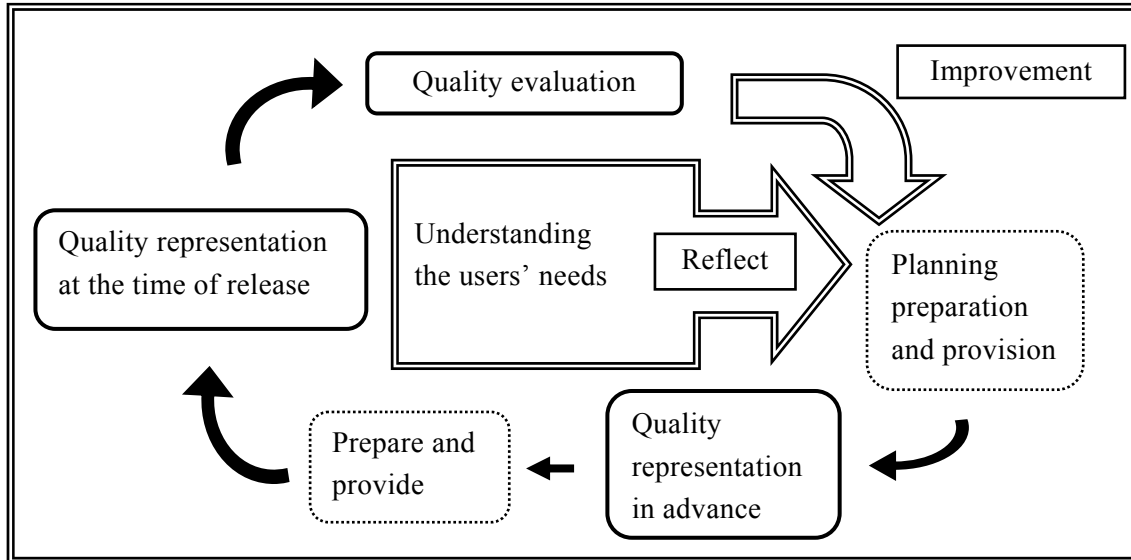
2. Objectives

The Master Plan addresses the point that no matter how accurately and promptly we prepare statistics, if they are not used they have no value. Therefore, in this sense, the fundamental principle of the Master Plan regards ensuring the value of statistics (in other words, how to prepare statistics that meet requirements appropriately).

With consideration given to the principles of the Master Plan, the Guidelines include quality assurance measures for official statistics through systematic activities by the Cabinet Office and each ministry. The Guidelines aim to assist in continuously making progress on autonomous improvement in its effort for better quality representation and evaluation for the preparation and provision of official statistics (which correspond to user needs), as shown in the illustration below.

[Illustration: Concept of Quality Assurance]

Quality Assurance of the Official Statistics
=> **Securing Statistics and Improving Value and Reliability**



Having said this, the Guidelines are simply a standard guide for the improvement of quality assurance, and eventually, upon consideration of the characteristics of statistics and resources, efforts made toward quality assurance should progress depending on the decision of the Cabinet Office and relevant ministries in charge of statistics. However, to win the trust of the public, it would be ideal to promote integrated efforts as much as possible. Regarding effective measures not provided in the Guidelines, we will try to share information in the “Quality Assurance Working Group” of official statistics and discuss the possibility of making such measures common among the Cabinet Office and relevant ministries.

3. Implementation Methods

A. Implementation System

In implementing measures related to quality assurance, it would be ideal for the Cabinet Office and each ministry to employ a system that secures objectivity as much as possible (e.g. the division in charge of objectivity (i.e. the management/coordination section of certain official statistics) and the division in charge of technical specialty (i.e. the preparation section of the statistics, checking together or the management/coordination section running a secondary check) to work on their quality assurance.

It also seems that it would be effective to utilize the existing study group meeting for the review and examination of the said statistics and have discussions about quality assurance. Either way, the Cabinet Office and relevant ministries need to keep in mind that quality assurance requires continuous effort and consideration of the resources available in each organization, building the system promptly and reviewing it as required.

B. Methods of Quality Indication

The Cabinet Office and ministries shall make a checklist using the “Checklist of Quality Indication Items” based on Appendix 2 “Quality Representation Items for Official Statistics” in the Guidelines as a basis, then examine and determine the contents necessary for presentation.

Furthermore, the Cabinet Office and ministries shall demonstrate their evaluation regarding the users’ needs and the characteristics of the statistics by i) setting links to the related items, ii) setting a Q&A section on the website, iii) indicating the references clearly, etc., and by examining contents to present efficiently and precisely.

Moreover, when the Cabinet Office and ministries exercise their quality indication, they will release it in roughly two steps: first, they will release the summary, planned release date and references before releasing the results (at the planning phase of the statistics), and second, they will release a summary of the statistical results upon availability. Information on corrections shall be provided without delay.

C. How to Implement Quality Evaluation

The Cabinet Office and ministries decide what to evaluate after making a checklist using the “Checklist of Quality Evaluation Items” developed based on the “Quality Evaluation Items for Official Statistics” in Appendix 3 of the Guidelines and complete necessary examination on the content of the evaluation.

During the course of decision-making, those organizations need to pay attention to the causal relationship that if you try to pursue one target excessively, others will be sacrificed. Examples of targets can be seen in the elements listed in Appendix 1 in the Guidelines, such as “suitability to needs” and “efficiency” or “accuracy” and “timeliness.”

Therefore, when the Cabinet Office and ministries implement evaluations, they should consider each element and eventually examine necessary improvements comprehensively so that each element listed above is maintained and achieved thoroughly.

Evaluation is implemented at the planning stage as well as after the preparation/release of the statistics. Considering the relationship of evaluation with the timing of examination for approval by the Director-General for Policy Planning (Statistical Standards), MIC, it seems effective to implement it at the planning stage. Either way, the Cabinet Office and ministries shall decide the timing of evaluation while taking into consideration resources and related administrative procedures.

D. Planned Promotion

The Cabinet Office and ministries shall strive to draw up implementation plans in relation to quality representation and quality evaluation through use of a “Form of Quality Evaluation of Official Statistics Implementation Plan” as a basis (with regards to the fundamental statistics and general statistics they manage).

In addition, regarding this implementation plan, a rolling system (continuous cycle of review and revision) shall be employed as required, in order to satisfy the aim of providing the continued quality assurance of official statistics.

4. Others

A. Relationship with the “Optimization Plan of the Operations and Systems for Statistical Survey Operations”

The Cabinet Office and ministries have been promoting the quality representation of official statistics through “the Plan for Operations and System Optimization of Statistical Survey Operations, etc.” (decision made at a liaison meeting among chief information officers (CIO) of each office and ministry on March 31, 2006 , developed to provide statistical data that are convenient and easy to use for the public, and to bring the statistical information systems of the Cabinet Office and ministries together.

Therefore, the effort of quality representation as a part of quality assurance needs to be enriched further while maintaining consistency with the said plan.

B. Relationship with the Examination for Approval by the Office of Director-General for Policy Planning (Statistical Standards), MIC

Regarding “Quality Evaluation Items” and the “Checklist of Quality Evaluation Items” in Appendix 2, they should also be utilized for an examination for approval, based on Article 9 and 19 of the Statistics Act. Based on the fact that fundamental statistical surveys and general statistical surveys have an impact on the rights and obligations of the public, such an examination evaluates the implementation plan of the survey in advance and determines its rationale and validity, etc. objectively. Such items should be utilized by the Director-General for Policy Planning (Statistical Standards), MIC and are set up to be consistent with the viewpoints of examination published in the “Guidelines of Administrative Procedure Regarding the Procedures of Application for Approval Pertaining to Fundamental Statistical Survey and General Statistical Survey”.

Guidelines for “Quality Assurance” of the Official Statistics

1. Purpose

"The quality of official statistics" is a concept built on the compatibility of users' needs, the timeliness of dissemination, and the interpretability of the statistics data as well as accuracy.

We devise these guidelines as a standard guidance to promote the practices of “Quality Assurance,” which aim at improving the usefulness and the reliability of the official statistics through compilation and dissemination as well as through indication, evaluation and improvement of the statistics quality in the administrative organs (*).

(*) The administrative organs correspond to the ones prescribed in the Article 2 (1) of the Statistics Act (Act No. 53 of 2007; hereafter referred to as "The ministries").

2. Background

In these guidelines the phrase "Quality Assurance" of the official statistics refers to the premeditated and systematic application of the quality assurance activities mentioned above. As a concept it differs from other assurances, such as product guarantees, which promise to repair and/or compensate for damages when there is a defect in the product.

In the first place, the “Quality Assurance” movement has been promoted in industries and related academic societies since the 1970's. It includes activities which

- (1) establish the process of grasping the needs and providing goods and services effectively,
- (2) evaluate and grasp the compatibility of the needs on a continuous basis, and make improvements to those goods and services,
- (3) provide reliance and a sense of security concerning those goods and services.

(Source: “Guidebook on the new quality guarantee (new edition)” edited by Japanese Quality Management Society)

The way of thinking about the statistics quality in "the Master Plan Concerning the Development of Official Statistics (*)" is based on these same ideas of "Quality Assurance." Specifically, the Master Plan prescribes the policies for reexamining and streamlining the statistics through the continuous grasp and use of the statistics needs as well as through the evaluation of the statistics. It also promotes reexamining and streamlining of the official statistics through self-evaluation of the quality and an objective evaluation of the results. The aim is a reduction of both the respondents' burdens and the maintenance as well as the improvement in statistics quality.

In these situations, it is necessary for the ministries to stimulate the adaption of the quality assurance guidelines for the official statistics.

(*) It was decided by the Cabinet on the 13th of March in 2009 and is hereafter referred to as “the Master Plan.”

3. Principles

- (1) The quality of official statistics

The quality of the official statistics is determined by various factors, such as

- (i) "Accuracy," meaning that the official statistics most accurately show the state of society and the economy,
- (ii) "Needs compatibility," meaning that the official statistics meet the users' needs as well as possible,
- (iii) "Timeliness," meaning that the produced official statistics are disseminated promptly in accordance with the users' needs and purposes.

These guidelines assume that the quality of the official statistics is determined by the elements which are defined in attached sheet 1, and the guidelines regard these elements as the indexes of the quality indication and the quality evaluation. Concerning these quality elements, these guidelines set up certain universal elements which are adopted by many countries and the international institutions as major elements. It also sets up supplementary elements, which are thought to be necessary for the quality assurance.

(2) The quality assurance of official statistics

The ministries improve the quality indications of the official statistics under their control in accordance with the methodology stipulated in section 5 (depicted below). They also carry out self-evaluation of the quality and utilize the evaluation results by regularly making improvements to the official statistics.

The ministries regard "needs compatibility" as the core element and pay attention to the relevance between each element because public statistics are an important part of the information infrastructure for the people. Therefore it is important to compile them based on the people's needs.

In addition, these guidelines are established as a standard guide to the ministries' policies and, therefore, will not prevent the ministries from implementing the current measures and the effective planned measures based on the characteristics of each type of statistics.

(3) Guidelines review

These guidelines will be constantly reviewed based on

- (i) results of the approaches by the ministries,
- (ii) results of research by the related academic societies, and
- (iii) international trends of the approaches.

4. Coverage

These guidelines cover fundamental statistics (*1) and general statistics (*2).

(*1) Fundamental statistics are prescribed in Article 2 (4) of the Act.

(*2) General statistics are compiled based on the general statistical surveys which are prescribed in Article 2 (7) of the Act.

In view of the importance, the ministries give priority to the fundamental statistics in their approaches.

In addition, the ministries shall make any feasible improvement to official statistics that are neither fundamental statistics nor general statistics according to these guidelines.

5. Implementation methods

(1) Implementation system

The ministries invest in the quality assurance of the official statistics through systems which can secure both the objectivity and the specialty concerning the target statistics.

(2) Indication of the quality

The ministries improve the indications of statistics quality under their control based on "the quality indication matters of the official statistics" as per attached sheet 2, while paying attention to consistency with "The Optimization of Operations and Systems for Statistical Work," which was decided by the ministries chief information officer liaison conference. In addition, the ministries perform regular reviews of the contents of the quality indication.

(3) Evaluation of the quality

The ministries carry out regular self-evaluations of the quality of the official statistics under their control based on "the quality evaluation matters of official statistics" as per attached sheet 3.

The ministries perform not only evaluations of each quality element but also those from a comprehensive viewpoint while paying attention to the trade-offs between the elements. In addition, the ministries disseminate summaries of the results from the standpoint of securing objectivity and transparency.

The Ministry of Internal Affairs and Communications (the Director-General for Policy Planning) makes use of the results of the evaluations for the approval examination based on Article 9 and Article 19 of the Statistics Act and tries to reduce the burdens on the ministries.

In addition, the ministries will assess the validity of the introduction via a peer review process (mutual evaluations with other ministries) and third party evaluation through further consideration.

6. Systematic implementation

The ministries draw up execution plans for quality assurance in the fundamental statistics and the general statistics and try to disseminate the summaries.

In addition, the desirable interval between these execution plans is around five years, but they should be decided in relation to the status of the ministries' data compiling plans.

7. Others

(1) Information sharing and discussions among the ministries

The ministries continue information sharing and discussions in "the working group on the quality evaluation of statistics" in order to make progress in the field of quality assurance of the official statistics and to perform a review of the guidelines based on 3 (3) mentioned above.

(2) Range of the possession of statistics information before the dissemination date

Leaking the contents of official statistics before the dissemination date would betray the peoples' trust in the overall official statistics.

Therefore, the ministries determine the range of the shared statistics information before the dissemination date by the internal regulations in accordance with the guidance about the range and the procedure for the shared statistics information before the dissemination date (*) and disseminate such information.

(* The guidance was decided by the Director-General for Policy Planning (Statistical Standards) of the Ministry of Internal Affairs and Communications on the 12th of May in 2010.

Attached sheet 1

The Quality of Official Statistics: Elements and Definitions

Elements		Definitions
Main Elements	Relevance	The relevance of official statistics, as fundamental public information to be widely and effectively used by a variety of social entities, reflects the degree to which they meet users' needs. The users are the public, national and local governments, researchers, economists, and others.
	Accuracy	The accuracy of official statistics is the degree to which they correctly describe social and economic values or conditions.
	Timeliness	The timeliness of official statistics refers to whether they are published or made available in time to be useful for users' objectives.
	Interpretability /Clarity	The interpretability/clarity of official statistics reflects the availability of necessary information which users can appropriately understand and effectively use. The information is on methods/procedures for data collection, processing, storage and publication.
Sub-Elements	Integrity	The integrity of official statistics reflects the reliability and/or accuracy of statistics and statistics producing agencies. The integrity can be ensured by providing information on methods/procedures for data collection, processing, storage and publication, all of which are determined based on expertise and professionalism.
	Coherence /Comparability	The coherence/comparability of official statistics reflects the degree of coherence or consistency in concepts, definitions, and classifications among different statistics so that users can compare these statistics between regions and over time.
	Accessibility	The accessibility of official statistics reflects the degree to which both the data and basic information is made easily available to respond to users' needs.
	Effectiveness	The cost effectiveness of official statistics reflects the degree to which they are produced by appropriate sources and methods in view of the cost and burden on respondents.

Attached sheet 2

Quality Indication Matters of the Official Statistics

I. Statistical Surveys

Common menu		Common publishing item		Content of publishing	Specific example	
1	Outline of statistical surveys <Prior>	(1)	Purpose of statistical surveys	Description of the purpose of the statistical survey.	i	Approval of the surveys purpose under Article 9 or Article 19 of the Statistics Act
					ii	Purpose and position of the statistical research under the Master Plan
					iii	International standards and recommendations
		(2)	History of statistical surveys	Description of details, transition, history, etc. of the statistical survey.	i	Details, transition, and history of the statistical survey
					ii	Name of the statistical survey and information on statistics concerned, statistical surveys when statistics have been modified in the past (unification and/or reorganization) (post link here?).
		(3)	Basic law of statistical surveys	Description of the basic law that underlies the statistical research.	i	Distinction of basic statistical research and general statistical research according to the Statistics Act
					ii	Fundamental laws other than the statistical method (in some cases)
		(4)	Object of statistical surveys	Description of range of the objects and the number people surveyed.	i	Range of the survey.
					ii	Persons reported on
					iii	Usage of business register
					iv	Presence of repetition-correcting procedures
					v	Use or nonuse of the administrative recorded information as business register (In some cases, outline of administrative record information)
		(5)	Sampling method	Description of the sampling method in the sampling survey.	i	Sampling method
					ii	Sampling rate
					iii	Target accuracy
		(6)	Matters for statistical surveys	Description of the topics researched in the statistical survey.	i	Topics researched
					ii	Purpose for research
		(7)	Questionnaire	Picture file, etc. of the questionnaire are attached.	i	As required under the Statistics Act pictures of questionnaires are published in the order of the surveys' execution.
					ii	Picture file of the questionnaire (sample)
					iii	How to fill in the questionnaire
		(8)	Time of statistical surveys	Description of statistical surveys date and specific statistical surveys period.	i	Statistical surveys date or period
ii	Questionnaire distribution and collection period					
(9)	Survey methodology	Description of the survey procedure and the surveying technique, etc. of the statistical survey.	i	Flow of procedure and execution of survey		
			ii	Surveying technique		
			iii	Administrative record information used as substitution and supplementation during research		

Common menu		Common publishing item		Content of publishing	Concrete example	
1	Outline of statistical surveys <Prior>	(9)	Survey methodology	Description of the survey procedure and the surveying technique, etc. of the statistical survey.	iv	Outline of specifications, details of the quote, and contract (only when employing a private contractor).
					v	Topics researched when conducting a survey under Article 15 of the Statistics act.
					vi	Processing standards, etc. regarding legal clerical work.
					vii	Measures taken for privacy protection
		(10)	(Others)	Besides the above-mentioned, other items can be published depending on the characteristics of the statistical survey.	i	Range of information sharing before date of publication
					ii	Outline of discussion on Statistical Commission (including departmental meetings) (even a link is possible).
					iii	Outline of discussion in a research society concerning implementation of statistical research concerned (even a link is possible).
					iv	In the case of an amendment to matters stated in (1) to (9), the purpose and content of the amendment
2	Results of statistical surveys <When results are made public>	(1)	Explanation of terms	Descriptions of the definitions and explanations of the main terms.	i	Definition and explanation of terms
		(2)	Outline of results	Description of the outline of the results	i	Outline of results
		(3)	Total and estimate method	Description of the method of estimating the data value in the sampling survey.	i	Procedure for total process: outline of specifications, details of the quotation (only when a private contractor has been used)
					ii	Estimation method
					iii	Data sampling and tabulation methodology
		(4)	Attention in use	Description of points that the user should be aware of, e.g. structural factors can cause differences between similar data in regards to accuracy, margin of error, etc.	i	Statistical standard used
					ii	Seasonal adjusted information
					iii	Information on accuracy of results (recovery percentage, valid response rate, computational method, etc.)
					iv	Information about the difference between preliminary and final results
					v	Notes when comparing with other statistics (difference, etc. of definitions)
vi	Notes on other various chapters of the table					
(5)	Correction information	When a correction is implemented in the data after initial publication, publication of correction information, such as a table of errata.	i	Correction information		

Common menu		Common publishing item		Content of publishing	Concrete example	
2	Results of statistical surveys <When results are made public>	(6)	Statistical table list	Publication of the list of the spread sheet, etc. linked with the statistical table management system.	i	Statistical table list
					ii	Other published/unpublished reports
		(7)	Profit use case	Publication of results of for profit use of previous survey results. Publication of estimated profit use for present survey.	i	Profit use case
					(8)	(Others)
		ii	Comparison with past results			
		i	Information about correct/incorrect usage, i.e. which parties are entrusted to produce statistics?			
3	Schedule for the announcement <Prior>		The schedule for the publication of statistics is published at the latest three months before the publication day itself. The schedule is updated whenever it changes	i	Schedule for publications	
				ii	Information on statistics which are not made public	
				ii	Method of publication (medium, distribution place, charge, etc.)	
				i		
				i	Range of information available before date of official publication (post link here?).	
v						
4	Q&A <At the right time>		Description of FAQ concerning the statistical survey.	i	Q&A	
5	Inquiries <Prior>		Description of the department name and the telephone number, etc. of those contact persons users with questions should contact.	i	Department name	
				ii	Telephone number	
6	(Information in the past) <At the right time>		Previously published information is properly marked with the survey number and year.	i	Past offer information (post link here?).	
7	(Others) <At the right time>		Besides the above mentioned, publication in pamphlets and posters of pictures showing the characteristics of various statistical survey forms. The timing of publication is dependent on the schedule of the various statistical surveys.	i	Slogans, posters, and pamphlets, etc.	
				ii	Research papers	
				ii	Introduction of the medium in which information about statistical surveys is published	
				i		
				i	Information in foreign language	
v	Storage method of survey results (magnetic media, electronic media, etc.)					

II. Statistics that do not depend on statistical surveys

Common menu		Common publishing item		Content of publishing	Concrete example			
1	Outline of statistical surveys <Prior>	(1)	Purpose of statistics	Description of the purpose of the statistical survey.	i	Purpose of statistics		
					ii	Purpose and position of the statistical research under the Master Plan		
					iii	International standards and recommendations		
		(2)	History of statistical surveys	Description of details, transition, history, etc. of the statistical survey.	i	Details, transition, and history of the statistical survey		
					ii	Name of the statistical survey and information on statistics concerned, statistical surveys when statistics have been modified in the past (unification and/or reorganization)(post link here?).		
		(3)	Method of making statistics	Description of the method of producing statistics.	i	Method of making statistics		
					ii	Procedure for repetition corrective action		
					iii	Procedure for use of administrative record information (in some cases, outline of administrative record information)		
					iv	Outline of specifications, details of the quote, and contract (only when employing a private contractor).		
		(4)	(Others)	Besides the above-mentioned, other items can be published depending on the characteristics of the statistical survey.	i	Outline of discussion of Statistical Commission (departmental meeting is included) (even a link is possible).		
					ii	Outline of discussion in a research society concerning production of statistics concerned (even a link is possible).		
		2	Final results or preliminary results <When results are made public>	(1)	Explanation of terms	Descriptions of the definitions and explanations of the main terms.	i	Definitions and explanations of terms
				(2)	Outline of results	Description of the outline of the results	i	Outline of results
				(3)	Attention in use	Description of points that the user should be aware of, e.g. structural factors can cause differences between similar data in regards to accuracy, margin of error, etc.	i	Statistical standard used
ii	Seasonal adjustment information							
iii	Information about the difference between preliminary and final results							
iv	Information on the characteristics of results due to different methods of production.							
v	Notes when comparing with other statistics (differences of definitions, etc.)							
vi	Notes on other various chapters of the table							
(4)	Correction information	When a correction is implemented in the data after initial publication, publication of correction information, such as a table of errata.	i	Correction information				

Common menu		Common publishing item		Content of publishing	Concrete example	
2	Final results or preliminary results <When results are made public>	(5)	Statistics	Publication of the list of the spread sheet, etc. linked to the statistical table management system.	i	Statistical table list
					ii	Other published/unpublished reports
		(6)	Profit use case	Publication of results of for profit use of previous survey results. Publication of estimated profit use for present survey.	i	Profit use case
		(7)	(Others)	According to the characteristics, etc. of each statistical survey, optional items are properly published in an optional position in addition to above-mentioned items.	i	International comparison of results, Comparison with past results.
3	Schedule for the announcement <Prior>			Besides the above-mentioned, other items can be published depending on the characteristics of the statistical survey.	i	Announcement schedule
					ii	Information on statistics which are not made public
					iii	Method of publication (medium, distribution place, and fee, etc.)
					iv	Range of information available before date of official publication (post link here?).
4	Inquiries <Prior>			Description of the department name, telephone number, etc. of those contact persons users with questions should contact.	i	Department name
					ii	Telephone number
5	(Information in the past) <At the right time>			Previously published information is properly marked with the survey number and year.	i	Past offer information (post link here?).
6	(others) <At the right time>			Besides the above mentioned, publication in pamphlets and posters showing the characteristics of various statistical survey forms. The timing of publication is dependent on the schedule of the various statistical surveys.	i	Slogans, posters, pamphlets, etc.
					ii	Research papers
					iii	Introduction of the medium in which information about statistical surveys is published
					iv	Information in foreign language

Quality Assessment Matter of Public Statistics

	Elements	Viewpoint	Assessment matter
Main Elements	Relevance	<ul style="list-style-type: none"> Understand user's needs as completely and adequately as possible, and make statistics according to the user requests. Make statistics regarding information that is indispensable for policymaking. Collect information necessary for a statistical analysis without excesses or deficiencies. 	<ul style="list-style-type: none"> Is it necessary to produce statistical data? Are measures taken to understand user's needs? Are users needs appropriately reflected? Is there a rationality process in place for matters such as statistical surveys and the statistical surveys cycles? Is a review conducted corresponding to the change in socioeconomic circumstances, etc.?
	Accuracy	<ul style="list-style-type: none"> The final value of the statistics should be as close to the true value as possible. The approximation process of the specimen design (population information, range of the object, and sampling error, etc.) and the results must be appropriately accurate. The statistics should be made in such a way that sampling errors, etc. become as small as possible. 	<ul style="list-style-type: none"> Is the design of the statistical survey appropriately based on statistical theory, etc.? Is the execution of the statistical survey done accurately and appropriately? Are the definitions of the statistical standards and the terms used suitable? Is the setting of the statistical surveys system suitable?
	Timeliness	<ul style="list-style-type: none"> After ensuring that the necessary quality has been achieved the statistics should be made public in a timely manner. Publication of statistics should follow a schedule that has been published in advance. 	<ul style="list-style-type: none"> Is the schedule suitable for the announced date and purpose of the statistics? Is the schedule for the announcement, etc. made public as early as possible? Before making public a delay in the publication schedule, are all options to avoid the delay exhausted?
	Interpretability /Clarity	<ul style="list-style-type: none"> Information on the process of producing statistics and on points of attention, etc. for the use of statistics information must be clarified. An appropriate explanation must be given regarding the final value so that statistics might not be misinterpreted. 	<ul style="list-style-type: none"> Are the estimate method, matters for statistical surveys of the object population, the specimen design (sampling method, sampling fraction, and precision aimed at), the resulting numerical values, explanations of the method of executing the statistical surveys, etc. assessed? When the statistical standard used is different from the standard statistical method or different from international standards, etc., is the difference explained? When producing statistics, the metadata and how to use raw data should be paid attention to. Has this process been properly explained? Are the ways to utilize the results of the statistical tables, as well as the main results, well known amongst the general public?

	Elements	Viewpoint	Assessment matter
Sub Elements	Integrity	<ul style="list-style-type: none"> ● Statistical information relating to the preparation process (statistical data collection, processing, storage procedures, methods of publication), has to be clarified. ● Major changes, such as changes to statistical methodology or changes related to source data, have to be clarified. ● Access to official statistics should be limited to the minimum range until they are released to the public. The procedure for accessing statistics, and such range of clearance, should be clarified. ● Adequate procedures should be implemented to ensure privacy protection. 	<ul style="list-style-type: none"> ● Are the sample design (sampling method, sampling rate, and precision aimed at), the methods of estimating the resulting numerical values, and the methods of executing the statistical surveys made public? ● When important changes take place, such as changes concerning methodology or the source of information of the statistics, is the discussion process made public? ● Are the measures that are being taken to preserve the anonymity of the statistical data, as well as the identity of the people handling the data, being made public? ● Are the privacy protection measures in place adequate? ● Is questionnaire information appropriately managed? ● Is the objectivity of statistics secured?
	Coherence / Comparability	<ul style="list-style-type: none"> ● When two or more related statistics items are produced, they must be based on a common concept, definition, classification, etc. ● Comparison between time series and regions must be possible. ● When making statistics, elements that affect the statistics, such as concepts, definitions, ranges, and classifications, are to conform to standards based on Statistics Act, international standards and policies, or desirable practices. 	<ul style="list-style-type: none"> ● When the statistical standard used is different from a standard based on the Statistics Act, an international standard, etc., is the difference acceptable? ● When the statistics method, the source, etc. are changed, is the change acceptable? ● If there is a discrepancy with past results, is the reason acceptable?
	Accessibility	<ul style="list-style-type: none"> ● Methods of accessing statistical data should be clearly clarified and well known. ● Statistical data should be provided using the methods that users request ● Information gained from the census and other surveys should serve the secondary goal of being usable for research purposes. 	<ul style="list-style-type: none"> ● Is there a significant time lag between the time of publishing statistics and the dissemination to the user (via e-Stat, etc.)? ● Is a list of accessible information made public? ● Is a customer service counter/helpdesk set up? ● Is secondary use of statistics encouraged?
	Effectiveness	<ul style="list-style-type: none"> ● Procedures that can be automated (for instance, data capture, coding, and confirmation) must be automated as much as possible. ● Administrative records must be utilized as much as possible when producing statistics. ● The burden on the person writing the publications must be considered when making statistics. 	<ul style="list-style-type: none"> ● Are statistics gathered by a more appropriate method, after it has been ascertained that the same level of quality can be achieved? ● Is utilization of other questionnaire information and administrative record information aimed at? ● Is the respondent's burden considered?