Final Report

Proposed model/system of monitoring, assessment[1] and reporting statistics quality of the State Statistics System……in a systematic, periodical and transparent manner.

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Richard Roberts,

International Consultant

[1] The word ”evaluation” was used in the Terms of Reference. In the review of national and international practices the word “assessment” was generally used. The word “assessment” is in recent and current use in the GSO. The word “assessment” has been adopted in this report in the context of the recommendations for Vietnam in consultation with Mr. Nguyen Van Doan, consistent with the role of the Institute for Statistical Studies to provide technical inputs information and staff support. The word evaluation is used occasionally in the report in references to other work and in historical contexts as appropriate.

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List of Abbreviations

ABS	Australian Bureau of Statistics
ABS DQF	Australian Bureau of Statistics Data Quality Framework
CSS	Centralized Statistical System
ESCoP	European Statistics Code of Practice
EUROSTAT	Statistical Office of the European Communities
GDP	Gross Domestic Product
GRDP	Gross Regional Domestic Product
GSBPM	Generic Statistical Business Process Model
GSO	General Statistics Office
IMF	International Monetary Fund
IMF DQAF	International Monetary Fund Data Quality Assessment Framework
ISO	International Organization for Standardization
ISS	Institute for Statistical Studies
LFS	Labour Force Survey
MAs	Ministries and Agencies
NSO	National Statistical Office
OECD	Organization for Economic Development
SURS	Statistical Office of the Republic of Slovenia
UK SQF	United Kingdom Statistics Quality Framework
UN NQAF	United Nations Generic National Quality Assurance Framework
UNSD	United Nations Statistics Division
VSDS	Vietnam Statistical Development Strategy 2011 – 2020 and Vision to 2030
VSS	Vietnam Statistical System

I Introduction[2]

There is widespread agreement nationally and internationally that statistics provide a tool to provide information for policy making processes in order to improve the relevance, efficiency and performance of the policies. Many Governments are moving from "opinion-based policies" to "evidence-based policies"[3].Vietnam is moving positively towards using statistics as evidence in making policies, laws and monitoring and evaluating the implementation of these policies and laws. It can be said that the importance and quality of statistical information have not been paid much attention before by different groups of people in different forums, including National Assembly meeting sessions. Statistical information has not been used much in the Government's reports in the meetings before[4] but today statistics are increasingly playing an important role in different domains of the social life, especially in policy making and monitoring and evaluation of policy performance and movement towards an evidence-based democratic society.

In order to meet the high requirements placed on statistical figures by the National Assembly, Government and other data usersthe Vietnam Statistical System (VSS)[5] has made fundamental changes and reforms in recent years,including:

(a)legal environment for statistical activities has been increasingly improved and synchronized;

(b) state statistical information provision and sharing mechanism has been made specific and transparent;

(c) statistical methodology and technical processes in each domain and statistical processhave been updated to international standards;

(d) advanced information and communications technologyhas been developed and applied to support statistical data collection, archiving and dissemination;

[2] This Introduction is based on a Note prepared by Nguyen Van Doan, Director, Institute of Statistical Studies, GSO, December, 2015

[3]Marco Segone and Nicolas Pron "Role of Statistics in policy making"

4Excluding figures in part 2 (purpose, tasks and solutions to socio-economic development 2014-2015), there are 73 figures, in part 1 of the report (socio-economic situation), if include 241 figures in 56 explanations attached, 314 figures used. Source: Chinhphu.vn.

[5]The VSS includes (i) the Centralized Statistical System and its statistical units (the General Statistics Office, the General Statistics Office's departments, provincial statistical departments, and district statistical offices); and (ii) the ministerial and agency statistical organizations (for example, the statistical organization of the Ministry of Finance is the Department of Financial Informatics and Statistics and the statistical units under the Department of Financial Informatics and Statistics are statistical divisions of the General Department of *Taxation,* General Department of *Vietnam Customs,* General *Department* of State Reserves, and the State Treasury; agencies include the People's Supreme Court , the People's Supreme Prosecutorate, and others)".

(e) awareness of statistics has been raised and statistical knowledge and legislation are paid much more attention;and

(f) Vietnam Statistical Development Strategy 2011 – 2020 and Vision to 2030[6](VSDS) pointed out solutions and action plans to improve quality and efficiency of statistical activities.

In particular, the Statistics Law (revised, 2015)[7]has many new breakthrough contents such as:

(a) expanding the scope of coverage to include every statistical activity including state statistical activities and statistical activities outside state statistical activities;

(b) specifying the List of National Statistical Indicators consisting of 186 indicators covering all aspects of socio-economic lifeon the basis of the 17 goals and 169 targets on the United Nations Sustainable Development Goals (SDGs) for the period2016-2030;

(c) stipulating a statistical information release calendar as basis for improved transparency and commitment of the General Statistics Office (GSO) to organizations and individuals using statistical information;

(d) emphasizing and improving statistical quality by adding and improving many regulations on the national statistical indicator system, sectoral statistical indicator system, provincial, district and commune statistical indicator systems; and

(e) vesting authority in the GSO to verify methodology and quality of sectoral statistics.

In spite of such breakthrough renovations and reforms, the quality of Vietnam statistics has not met the increasing demands of data users[8]inside and outside the country. At present, statistical quality is an important issue in different forums. There have been more and more Parliament members asking questions about statistics, even doubting some statistical figures[9].The Statistical Methodology Index for Vietnam calculated by the World Bank[10] – one of the available

[6]Approved by Prime Minister in Decision No 1803/QĐ-TTg dated 18/10/2011.

[7]Approved by National Assembly on 23/11/2015

[8]Data user's survey 2012 showed that only 30% of surveyed persons are satisfied with statistics provided by GSO.

[9] Some Parliament members "criticize" statistics:

- Mr. Nguyễn Văn Giàu (Chairman of National Assembly Economic Committee)thinks that: "If data discrepancy is not addressed, it will affect seriously to the economy, society's trust on statistics sector in the country" (http://www.thesaigontimes.vn)
- Mr. Nguyễn Văn Nên (Chairman of Government Office) said "The Government requests statistics not "to embellish", it must reflect accurately. There are no reasons to explain about publishing inaccurate statistics. It is impossible to have statistics reflecting situation of do less but say more…" (http://tinnhanhchungkhoan.vn/dau-tu)

Mr.Nguyễn Sinh Hùng(Chairman of National Assembly)indicates clearly:"Our approach to calculate GDP is very vague that causes confusion. GDP is the most important statistical figure of the country but inaccurate" "Indicator is not accurate, how can we direct the country?". "There is one report on socio-economic situation showing that GDP increases, but when Parliament Member asked what GDP was, the staff explained that GDP referred to Rice, Oil and Fertilizer. All participants in the conference clapped"(http://giaoduc.net.vn).

[10] http://blogs.worldbank.org/opendata/data-group-launches-newly-revamped-statistical-capacity-indicator-website

criteria to reflect statistical quality-, ranks Vietnam at the low-middle level in comparison with the world and the region.

Data discrepancies in some key indicators have not been resolved so thatdisputes on statistical quality among data producers is still an issue for statistics in Vietnam. This situation occurs in both statistics producers themselves in the Centralized Statistical System (CSS)[11] (for instance, theGross Domestic Product (GDP) growth rate of the country as a whole is lower than the Gross Regional Domestic Product (GRDP) growth rate of each province, city, and there are differences in statistics between GSO and statistics organizations in ministries and agencies (MAs); (e.g, poor household rate, trained employee rate). Data users still face difficulties in accessing statistical data sources; user trust in statistical information has not been improved.

One of main reasons of the above situation is due to not establishing any official quality management systems in the VSScovering monitoring, assessment and reporting statistical quality in a systematic, periodical and transparent manner. Consequently such a system hasnow been developed for adoption and implementation. It includes standards, tools, and processes to monitor, evaluateand report statistical quality. This system will provide consistent, comparable and accountable information on assessment as well as identify strengths, weaknesses, and "bottle necks" holding back statistical quality enhancement; identifying challenges, lessons learnt and solutions to continuously improve statistical quality. This system will help generate a quality culture among producers of statistics which is a core value of the VSS and determines the reputation of the statistical agencies.The system will help data users understand more about quality, understand the quality level of particular domains of statistics, and raise their trust in statistics.

The system has been developed by the GSO. The GSO established a team including staff from GSO (Institute of Statistical Studies)(ISS) and national and international consultants. The team reviewed international practice and practices in place in a number of countries and developed compatible practices that take account of the statistical situation in Vietnam. Producers were interviewed to establish what practices they have had in place for quality management in recent years; users were interviewed to get an understanding of their perceptions of the quality of Vietnam's statistics, and their needs in terms of the quality of statistics. The lists of producers and users interviewed are contained in Annex 1.Two workshops were held - Workshop on Assessment of State Statistics Quality: Some recommendations for Vietnam (December 7th, 2015) and Second Workshop on Assessment of State Statistics Quality: Proposed Approach (March 18, 2016). The minutes of the Workshops are presented in Annexes II and III. This process has led to the proposals contained in this Report.

[11]The GSO, the GSO's departments, provincial statistical departments, and district statistical offices.

II Review of the Current Situation Around the World

A lot of work has been done in national statistical offices and international organizations on monitoring, evaluating and reportingthe quality of statistics. The work of theInternational Monetary Fund (IMF), International Organization for Standardization (ISO), Organization for Economic Cooperation and Development (OECD),Statistical Office of the European Communities (EUROSTAT), African Union Commission, and the United Nations Statistics Division (UNSD) was reviewed. Six countries whose work on the subject is well documented on their websites were also reviewed namely Australia, Canada, Japan, Slovenia, South Korea, and the United Kingdom.

A. Quality concepts

1. General quality management concepts

ISO has developed quality systems and standards including (the ISO 9000 family of quality management standards (latest version ISO 9001-2015)[12].ISO 9001 is the international standard that specifies requirements for a quality management system. Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements. ISO has also produced the ISO 20252-2012 standard[13] which sets out requirements in a Quality Management System for organizations conducting market, opinion and social research. These are generally applicable to national statistical offices but have limitations.

2. Quality concepts for national statistics

National and international statistical organizations have developed specialized approaches appropriate for addressing the quality of national statistics. Since the mid-1990s, these organizations have been developing quality management tools ranging from quality concepts, policies and models to detailed sets of quality procedures and indicators. A broad concept of quality of statistics is expressed in a UNSD document as follows:"The term quality is interpreted in a broad sense, encompassing all aspects of how well statistical processes and statistical output fulfill user and stakeholder expectations. Good quality is not just meeting users' needs but also addressing respondent concerns regarding the reporting burden and confidentiality and ensuring institutional environment is impartial, objective, comprising sound methodology and cost-effective procedures." [14]

[12] http://www.iso.org/iso/home/standards/management-standards/iso_9000.htm
[13] https://www.iso.org/obp/ui/#iso:std:iso:20252:ed-2:v1:en
[14]Draft report on Quality Assurance Frameworks for the 41st session of the United Nations Statistical Commission 2010 Version 1. September 2009 – For comments

B. Definitions and standards

1.International organizations

(a) IMF Data Quality Assessment Framework[15]

In the IMF Data Quality Assessment Framework (IMF DQAF) quality-related features of governance of statistical systems, statistical processes, and statistical products are identified. The IMF DQAF provides a structure for assessing existing practices against best practices, including internationally accepted methodologies.

The IMF DQAF covers five dimensions of data quality—Assurances of integrity, Methodological soundness, Accuracy and reliability, Serviceability, and Accessibility. For each dimension, the IMF DQAF identifies elements of good practice and relevant indicators.

(b) European Statistics Code of Practice[16]

The European Statistics Code of Practice (ESCoP) addresses quality including meeting user needs for products, the underlying production processes and the institutional environment which is specific for statistical institutions. It includes five dimensions of quality: Relevance, Accuracy and reliability, Timeliness and punctuality, Coherence and comparability, Accessibility and clarity.

(c) OECD Quality Framework[17]

The OECD Quality Framework and Guidelines for OECD Statistical Activities defines output quality through seven dimensions - Relevance; Accuracy; Credibility; Timeliness; Accessibility; Interpretability; and Coherence. Credibility is an additional dimension, reflecting the key role that user and stakeholder perceptions play in the OECD context. Another factor specifically taken into account in the framework is Cost-efficiency.

(d) African Charter on Statistics[18]

The African Union Commission has issued a Charter on Statistics with one principle devoted to quality of statistics. In this principle,quality has 10 dimensions: Relevance, Sustainability, Data source, Accuracy and reliability, Continuity, Coherence and comparability, Timeliness, Topicality, Specificities, and Awareness-building.

(e) United Nations Generic National Quality Assurance Framework[19]

[15] http://dsbb.imf.org/images/pdfs/dqrs_factsheet.pdf
[16] http://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice
[17] http://www.oecd.org/std/qualityframeworkforoecdstatisticalactivities.htm
[18] http://www.afdb.org/fileadmin/uploads/afdb/Images/Photos/eng-charte.pdf
[19] http://unstats.un.org/unsd/dnss/qualityNQAF/nqaf.aspx

The United Nations Generic National Quality Assurance Framework (UN NQAF) was developed to help countries formulate their own national quality assuranceframeworkorfurtherenhanceanexistingone. It corresponds as much as possible to the ESCoP and the IMF DQAFThe framework has 19 quality assurance guidelinesand identifies"Elements to be Assured" to generate good quality statistics. It incorporates five quality dimensions; Relevance, Accuracy and reliability, Timeliness and punctuality, Accessibility and clarity, and Coherence and comparability,

2. Countries

National statistical offices have developed/ derived quality assurance frameworks for their own use; they are largelycompatible with the international frameworks.

Australia[20]

The Australian Bureau of Statistics (ABS) Data Quality Framework (ABS DQF) has been designed to be used to evaluate statistical collections and products including administrative data. The ABS DQF is a general framework to enable a comprehensive and multi-dimensional evaluation of the quality of a statistical dataset, product or release. The Framework enable data users and providers to:

assess the quality of a data item or a collection of data items, with reference to the user's specific purpose and requirements; and

design a statistical collection or product which is fit for purpose.

The ABS DQF is based on the Statistics Canada Quality Assurance Framework and the European Statistics Code of Practice. The ABS DQF is comprised of seven dimensions of quality, reflecting a broad and inclusive approach to quality definition and evaluation. The seven dimensions of quality are Institutional environment, Relevance, Timeliness, Accuracy, Coherence, Interpretability and Accessibility. It is intended that all seven dimensions should be included for the purpose of quality evaluation and reporting. However, the importance of each dimension may vary depending on the data source and context.

(b) Canada[21]

Statistics Canada's Quality Assurance Framework (2002) provides a single place to record or reference the full range of quality concepts, policies and practices.

This framework provides:(i) a systematic mechanism for ongoing identification and resolution of quality problems, maximizing the interaction between staff across Statistics Canada; (ii) greater transparency to the processes by which quality is assured and reinforces the image of

[20]http://www.abs.gov.au/websitedbs/D3310114.nsf/home/Quality:+The+ABS+Data+Quality+Framework

[21]Statistics Canada's Quality Assurance Framework2002, Catalogueno.12-586-XIE, http://www.statcan.ca/cgi-bin/downpub/freepub.cgi

Statistics Canada as a credible provider of good quality statistics, and (iii) provides a basis for creating and maintaining a quality culture.

The Framework has:

8 guiding principles (Quality is relative, not an absolute; Quality is multidimensional; Every employee has a role to play in assuring quality; Balancing of the dimensions of quality is best achieved through a project team approach; Quality must be built in at each phase of the process; Quality assurance measures must be adapted to the specific program; Users must be informed of data quality; and Quality must be at the forefront of all activities);

6 dimensions of quality (Relevance, Accuracy, Timeliness, Accessibility, Interpretability, and Coherence), and

3 dynamic aspects of quality (Non-Response, Coverage, and Sampling).

(c) Japan[22]

The Bureau of Statistics of Japan applies the UN NQAF) (as described above). The Bureau of Statistics describes its approach to quality of official statistics as follows: "quality is a concept that builds on the compatibility of the users' needs, the timeliness of the dissemination, and the construability of the statistics data as well as the accuracy".
The quality of the official statistics is determined by eight elements, of which four main elements include: Relevance, Accuracy, Timeliness, and Interpretability/Clarity; and four sub-elements include Integrity, Coherence/comparability, Accessibility, and Effectiveness.

(d) Slovenia[23]

Statistical Office of the Republic of Slovenia (SURS) has a quality framework which includes six standard quality dimensions (Relevance, Accuracy, Timeliness and punctuality, Accessibility and clarity, Comparability, and Coherence) and the seventh, a supplementary dimension on costs and burden which follow the ESCoP.

(e) South Korea[24]

Statistics Korea defines quality in terms of how well outputs meet user needs, or whether they are fit for purpose. Six dimensions are used which follow the ESCoP. The six dimensions include Relevance, Accuracy, Timeliness and punctuality, Accessibility and clarity and Comparability and coherence.

(f) United Kingdom[25]

[22]"II Guidelines for Quality Assurance of the Official Statistics" which is available at http://www.soumu.go.jp/main_content/000327437.pdf
[23]Seljak Rudi. Quality Assessment of Statistical Processes and Products at SORS, Statistical Office of the Republic of Slovenia
[24] Statistics Quality Management Handbook http://kostat.go.kr/quality

The United Kingdom Office of National Statistics quality of statistical outputs is defined in terms of how well outputs meet user needs, or whether they are 'fit for purpose'. Five quality dimensions of the ESCoP are recommended to be used, which are: Relevance; Accuracy and reliability; Timeliness and punctuality; Accessibility and clarity; and Coherence and comparability. The Statistics Quality Framework(UK SQF) describes the day-to-day activities that are in place at an organizational level for quality assurance, quality control, quality reporting and quality improvement.

Quality Assurance – describes how we anticipate and avoid problems

Quality Control – describes how we respond to observed problems

Quality Reporting – describes how we inform users of the quality of our statistics

Quality Improvement – describes how we make improvements to statistical quality.

C. Tools for assessment

Tools that are in use for data quality monitoring and assessment nationally and internationally typically include:

- Questionnaires about the statistical production processes, outputs and the statistical institutional and legal framework
- Questionnaires on User Needs and Satisfaction
- Quality Indicators and Elements to be Assured

1.Questionnaires about the statistical production processes, outputs and the statistical institutional and legal framework

Typically questionnaires are in use to assemble information about the statistical production processes, outputs and the statistical institutional and legal framework. The questionnaires allow assembly of information pertaining to the practices and conditions that support production of statistics and have an impact on the quality of statistics.

2. Questionnaires on User Needs and Satisfaction

User surveys include user satisfaction surveys aims at assessing the satisfaction or the perception of the users (of the quality of statistics). Surveys in use include:

- General surveys directed to diverse users of statistical products/services asking for their perception or confidence in statistics overall, and
- Specific surveys directed towards target groups or specific domains of statistics or specific statistical collections.

[25]file:///C:/Users/admin/Downloads/statisticalframework2015_tcm77-412444.pdf

Most developed national statistical offices (NSOs) and many developing NSOs have implemented one kind of user satisfaction study or another, many of them covering statistics in important fields, and addressing quality issues, trust, dissemination and overall assessment.

3. Quality indicators and elements to be assured

There are two kinds of measures for quality monitoring and assessment in general use;Quality indicators and Elements to be Assured. Quality indicators are specific and measurable statistical results that can be used to characterize the quality of statistical processes and outputse.g.response rates and coefficients of variation. Elements to be Assured are practices, procedures, methods, and mechanisms which, when present, contribute to the quality of statistical outputs e.g. following international standards.

Eurostat recommends 16 output quality indicators be used and the UN NQAF proposes more than 300 Elements to be Assured.

D. Process of monitoring, assessment and reporting

1.Monitoring and assessment of quality

The quality monitoring and assessment questionnaires are normally administered by an internal review team or through self-assessment. They can also be administered by an external review team providing what is considered to be a more independent assessment. There is typically a formal process for the review and issuing results. The UK Statistics Authority assessment team systematically reviews the evidence from producers, users and other stakeholders against the Code of Practice. The process includes:

(i) Initial contact between the Assessment Team and producers

(ii) User consultations

(iii) Written evidence for assessment

(iv) Follow-up meeting between the Assessment Team and producers

(v) Draft reports sent to producers for comment

(vi) Assessment Committee and Authority Board review.

Self-assessments of statistical quality (conducted by those who are responsible for the statistical activity) and using assessment questionnaires, are widely used in the European countries. DESAP The European Self Assessment Checklist for Survey Managers[26] (DESAP) is one self-assessment tool in use in Europe for survey managers to apply to the assessment of the

[26] http://unstats.un.org/unsd/dnss/docs-nqaf/Eurostat-desap%20G0-LEG-20031010-EN.pdf

quality of surveys. The UN NQAF has also been supplemented by a Checklist (see footnote 18) that is suitable for and used for self-assessment.

NSOs carry out monitoring, assessment and reporting quality assessment on a regular basis, with frequency dependent on their needs, ranging from annually to every 2-3 years or every 5 years. For example, in response to three critical errors in data released in 2005 and 2006, Statistics Canada undertook a review of quality assurance practices annually in nine key programs.

The quality monitoring and assessment process can also lead to labeling and certification but these are not in wide use among NSOs. The UK Statistics Authority labels statistics (of the Office for National Statistics or ministries) as national statistics if the quality review indicates that the statistics are of sufficient quality to warrant it. Labeling can be a tool for increasing quality of statistics and trust in them.

Some NSOs undertake certification of statistics to improve trust. The Hellenic Statistical Authority (Greece)(Elstat) certifies other national statistics producers according to the ESCoP; Statistics Sweden has recently sought and received certification according to ISO 20252 (quality standard for market, opinion and social research).

2. Reporting on quality

Typically quality reports are issued as a result of the quality monitoring and assessment. The reports provide information on the main quality characteristics of the statistical process and products for their users. Quality reports are normally based on both the Quality Indicators and Elements to be Assured describing these characteristics.

Quality reports usually need to serve the management of the producing organization, the line-level technicians and lower-level managers responsible for the statistical activity, and a range of expert to casual users. Separate stand-alone reports are issued or the summary results are included in the statistical outputs or on the producing-agency website.

Eurostat has developed a Handbook for Quality Reports[27].

E. Organizational arrangements, responsibilities and resources

NSOs usually establish a separate unit as a focal point responsible for quality assessment, which functionswith support from other relevant units. For example, in the United Kingdom the UK Statistics Authority is an independent body operating at arm's length from government as a non-ministerial department, directly accountable to Parliament[28]. The Authority, inter alia, is required to promote and safeguard the quality and comprehensiveness of official statistics, and

[27] ESS Handbook-for-Quality-Reports 2013; ESS Standard for Quality Reports-
[28] https://www.statisticsauthority.gov.uk/about-the-authority/

ensure good practice in relation to official statistics.In Australia, a Methodology and Data Management Division, reporting to a Deputy Australian Statistician has responsibility for quality issues. In Japan a new division was established in the specialized Department of General Issues in order to meet the requirements on statistical quality assurance. In Slovenia, quality related issues are coordinated in the General Methodology and Standards Division, where the position of the quality manager is specified.

Numbers of staff resources specifically assigned to quality assurance in a specialized organizational unit varies among the countries reviewed, with countries reporting as follows; United Kingdom 20, Japan 5, Korea 6. Total manpower involved in quality monitoring, assessment and reporting would exceed these numbers because of involvement of staff from other units in the agency.

F. Education and training

NSOs conduct significant quality training to staff on a periodic basis. This generally includes how to carry out quality assurance and encouraging a culture of continuous improvement and concern about quality.

The he ABShas a suite of three courses to develop skills and knowledge relating to making quality avisible vision. These are Quality Concepts and Frameworks; Managing Statistical Risk; and Reporting Quality in the ABS. These three courses replaced aprevious Data Quality in the ABScourse.

Statistics Canada has conducted a Quality Assurance Learning Exercise: The main objectives of the Exercise were: to bring project teams together to discuss quality assurance practices in their programs; to identify areas where programs are exposed to significant quality risks; to provide a tool for managing risks; and to identify corporate learning and quality issues. The exercise focused on management of accuracy during the implementation and execution phases of the statistical cycle. In total, the exercise brought together over 800 employees from 80 statistical programs,

Quality training programs and tools are being adapted to staff at all levels, roles and work experience, including employees in regional offices. There are training courses at three levels - quality awareness, quality practices and specialized courses – and these are being integrated into a framework that covers and standardizes the presentation of risk management, project management, documentation and quality assurance.

SURS pays a lot attention to education in the area of quality by participating in international (European Statistical Training Program) and internal training which includes presentation of guidelines for quality assurance. Staff who participate in international groups report back about

changes and share knowledge about quality assurance framework of the European Statistical System (ESS).

G.Publishing, advocacy and awareness-raising

In countries the results of assessment reviews, quality reports, methodological explanations, tend to be published in hard copy format and/or placed online either accompanying the statistics themselves or independently of the statistics. For example Statistics Canada's Quality Assurance Framework is published online and SURS publishesqualityreports and methodological explanationson their website.

Increasing awareness about quality and its assessment has been promoted using different means, such as: mass media, via producer and user group structures, websites,and open meetings to discuss user's views about groups of statistics. For example the UK Statistics Authority works at increasing awareness by:

• publicizing the assessment process, and forthcoming assessments via the User Group structure and the Data Archive;Giving more prominence to assessment issues on the Authority's website; and

• holding open meetings to discuss user's views about the groups of statistics to be assessed.

H.Roadmap for introducing the system

In general it has taken some years to put a quality monitoring and assessment system into operation in countries. Some key steps and timelines in some countries include:

In the ABS, a quality framework for assessing model-based estimates was presented to the Methodology Advisory Committee in June 2006; the implementation of Quality Declarations was endorsed in May 2007, and the roll-out began in 2008 to the ABS website. Quality reviews were piloted in 2008

In Statistics Canada, the Compendium of Methods of Error Evaluation in Surveys was produced in 1978, followed by the Quality Guidelines (1985), expansion of the Policy on Informing Users of Data Quality and Methodology (1986), and the first version of a formal Quality Assurance Framework (1997). The Quality Guidelines were subsequently revised in 1987, 1998 and 2003, and 2009. The Quality Assurance Framework was revised in 2002.

SURS started systematic work in the field of quality assessment in 2003; the first quality reports were prepared in 2004 and 2005; the first user-oriented and publicly disseminated reports were prepared in 2006. From then on, SURS has tried to gradually cover more and more statistical areas, preparing each year as many quality reports as feasible.

I. Overall

Great efforts have been made in data quality assessment by both international organizations and NSOs who compile statistics. They have many common characteristics such as quality commitment by data producers, quality definition, quality dimensions, tools for quality assessment, processes of monitoring, assessment and reporting, organizational arrangements and training and publicity and advocacy methods.The quality assessment frameworks and their components as well as the results of quality assessment are being publicly announced, including online. Significant amounts of resources have been assigned over long periods of time to develop, implement and improve the quality monitoring, assessment and reporting systems.

III Experience and Practice Relating to Quality in the Vietnam Statistical System[29]

In order to improve the quality of statistical information for meetinguser needs, the GSO has taken many measures over the last five years, including strengthening examination and inspection of statistics; review and recalculation of GRDP compiled in provinces and cities directly under the Central Government; assessment of statistics quality in some statistical domains; report on assessment of statistical surveys in the period of 2008-2012; conduct of user needs and satisfaction surveys in 2008 and 2013; and other measures including reexamination of the results of some surveys.The MAs have also taken significant steps with their statistics.

A. GSO actions

1. Strengthening examination and inspection of statistics

The statistical inspection system under the CSS is established from the central to local levels with nearly 80 statistical inspectors (as at the end of 2014) including Statistical Legislation and Inspection Department, and 63 Statistical Inspection Divisions under Provincial Statistical Departments. For the last 5 years, the inspection units have conducted 1428 statistical examinations and inspections[30] at more than 2000 units. Statistical inspection primarily focused on the implementation of survey plans and statistical reporting system. During the examination and inspection process, many problems affecting statistics quality have been detected, especially errors at the stage of collecting input information, such as missing many observation units, missing information, and misleading information[31].

2. Review and recalculation of Gross Regional Domestic Product

The difference in GRDP data calculated by the central and local levels has existed for many years with larger and larger gaps since 2012[32].The GSO has developed and implemented the Project "Overcoming the difference of GRDP data between the central and local levels". To implement the Project the GSO has established working groups to review the calculation methodology and data sources of GRDP and recalculate the GRDP data compiled in five

[29]This Chapter draws heavily on a Note prepared by Nguyen Van Doan, Director, Institute of Statistical Science , GSO entitled Report on current status of monitoring, assessment and reporting of statistics quality in 5 years (2011-2015) dated 6 March and revised 20 March 2016.

[30]270, 274,278, 299, 307 statistical examinations and inspections in 2011, 2012, 2013, 2014 and 2015 respectively..

[31] Report on Strengthening statistical knowledge propaganda and statistical inspection, examination and monitoring for improving statistics quality (Document of Statistics Conference 2016).

[32]Final Reports of Statistics Conferences 2012, 2013 and 2014 refers to the problem of overcoming the difference of GDP data.

provinces and cities[33]. The recalculation result showed that the GRDP growth rate in 2011 compared to 2010 of theseprovinces and cities decreased 2.5 percent points at least, and 5.5 percent points at most. On the basis of GRDP recalculation results in the five provinces and cities, the GSO[34] requested all the provincial statistical departments to review and recalculate the GRDP data for the period 2011-2013. The recalculation results pointed out that the GRDP growth rate of provinces and cities directly under the Central Government was much lower than the figures calculated previously by the provincial statistical departments. The GRDP recalculation results were reported to the Government and used as a basis for planning socio-economic development at local level in 2015.

3. Assessment of statistics quality in some statistical domains

In 2010, with technical support provided by the United Nations Development Programme, the GSO established an independentExpertGroup to assess different statistical domains of the VSS as a basis for developing the VSDS. Accordingly, four independent experts were recruited to perform the assessment of data quality based on theIMF DQAF; the selected domains were national accounts; industry, construction and trade; agriculture, forestry and fisheries; population, labor, and gender; and health, education and environment. The Expert Group focused on assessment of relevance, quality management, professionalism, transparency and ethical standards. The assessment results were detailed in separate reports and also incorporated in the Report "Assessment of current status of the Vietnam Statistical System" (page 8-15 of the summary report; pages 47-81 and pages 104, 105 of the synthesis report)[35]. The report pointed out some basic limitations of statistics quantity and quality as follows: user needs have not been met; requirements of data release time or detailed statistical classification are not met; many key indicators announced by MAs and local agencies have not been consistent with the data announced by the GSO; statistical information has mainly served agencies and leaders of the Party and State while other users, especially domestic and international business and investors, are usually provided with statistical information only on request (see Box 1 for more details).

[33]Nam Dinh, Khanh Hoa, Dong Nai, Lam Dong and Hanoi (Final Report of Statistics Conference 2014).

[34]Official Dispatch No. 428 /TCTK-TKQG date on 21st June 2013 on review and reporting of GRDP data in 2011

[35] Report on Assessment of current status of the Vietnam Statistical System by Richard Roberts, Technical Consultant for developing the Vietnam Statistical Development Strategy2011 – 2020 and Vision to 2030.

Box 1: Quantity and quality of statistical information are limited

1.In recent years, Vietnam statistic has made important progress in collection and aggregation of socio-economic statistics. However, the quantity and quality of information collected, aggregated and disseminated are limited and do not meet the user needs.

2. Data producers cannot meet the requirements of data release time or data classification for some indicators. Some other indicators are not compiled well because the private sector is not included in data collected, especially indicators of health and vocational training. This limits the use of those indicators.

3. The lack of data quantity and quality is reflected in the fact that the Socio-economic Development Plan approved by the National Assembly in 2009 has 25 key indicators including 7 economic ones, 10 social ones and 8 environmental ones, but the GSO cannot collect and aggregate all of the indicators in the annual report.

4. The limited information quality is also reflected in the fact that many key indicators announced by ministries, ministerial-level and local agencies are not consistent with the data announced by the GSO. The poverty rate announced by the Ministry of Labour, Invalids and Social Affairs is usually 1-2% lower than this indicator announced by the GSO. Besides, only 23 provincial statistical departments have 2007 population data which is consistent with the data announced by the GSO. In addition, the GDP growth rate of Vietnam in 2007 is 8.48%, but this indicator calculated from data of provincial statistical departments is 12.5%.

5. The survey of statistical information needs conducted in 2008 showed that only 27.2% of respondents said that the statistics were "reliable" against 67.1% of the opinion that it was "relatively reliable". Especially, out of 10 embassies, there were7 "relatively reliable" opinions, 2"less reliable", and only one "reliable".

6.Due to the limitations of information quantity and quality as above, although the data users has been widened, statistical information has mainly served agencies and leaders of the Party and State. Other users, especially domestic and international business and investors are usually provided with statistical information only when they request it.

4. Report on assessment of statistical surveys in the period of 2008-2012

This Report[36] shows that annually, the CSS has implemented nearly 40 surveys of various kinds, including 9 monthly surveys, 4 quarterly surveys, 11 annual surveys, 5 every-two-year surveys, 6 every-five-year surveys, 2 every-five-year censuses, and 1 every-ten-year census.

The Report summarized some results of statistical surveys, including: (1) the preparation of surveys and censuses has been made strictly according to the contents (including issuing relevant documents and establishing the steering committee of surveys; developing survey

[36] The presentation by Integrated Statistics Department at Statistics Conferences in 2013

plans and related documents; sampling; preparing the funding for surveys; and organizing the propaganda activities for statistical surveys); (2) the implementation of surveys and censuses has been conducted in accordance with all the steps (including recruitment of enumerators and supervisors, training for personnel involved in surveys, information collection, official acceptance of questionnaires, and re-examination of survey results); (3) the synthesis, analysis andpublishing of survey results have been implemented faster and more diversely in comparison with the previous period.

In addition to the achievements mentioned above, the Report shows many limitations and shortcomings, including: (1) the development of survey plans is irrational; (2) survey plans and guiding documents are not consistent among the surveys - hey are not close to reality and not derived from actual information needs, thus the collected information may be redundant, and alsodeficient; (3) most sampling surveys do not support the cannot calculation and announcement of the parameters of the sample (for example, sampling error, standard deviation, variance, etc); (4) the design of questionnaires and composite tables is not logical and scientific, making the information collection wasteful or inadequate for synthsizing the survey results; (5) the professionalism and sense of responsibility of investigators are still limited; (6) the use and publishing of survey results are not commensurate with the amount of collected information and the costs; and (7) the atabase of survey results is stored at the GSO's departments and Statistical Computer Center in a scattered manner, and not connected into a centralized and unified database for serving the GSO in disseminating statistical information, and serving external data users. The limitations and shortcomings mentioned above have reduced the quality of statistical survey data.

5. Conduct of user needs and satisfaction surveys in 2008 and 2013

In order to further improve and enhance the quality of statistical production and dissemination for meeting user needs, the GSO conducted a User Needs and SatisfactionSurvey in 2013 to follow up the 2008 Survey [37] to collect information for assessment of the use of statistical information and user satisfaction, as well as users' expectations for statistical information in the future. The 2013 survey was conducted with a sample of 7000 data users selected by the expert method from the Party and State agencies, unions; media agencies; business and investors; institutions of research, education and training; other data users in 32 provinces and cities directly under the Central Government[38]; and embassies and international organizations with representative offices in Vietnam.

[37] Decision No. 596 / QĐ-TCTKon conducting the 2013 survey of statistical information use.

[38] Including Hanoi, Hai Phong, Da Nang, Ho Chi Minh City, Can Tho, Quang Ninh, Vinh Phuc, Bac Ninh, Nam Dinh, Ninh Binh, Bac Kan, Tuyen Quang, Lao Cai, Bac Giang, Phu Tho, Son La, Hoa Binh, Thanh Hoa, Ha Tinh, Quang Binh, Thua Thien Hue, Quang Nam, Binh Thuan, Gia Lai, Lam Dong, Binh Duong, Dong Nai, Dong Thap, Kien Giang, Hau Giang, Soc Trang and Ca Mau

The report pointed out that the highest level of satisfaction was reported to be experienced by only 31.5% of the respondents for dissemination of statistical information, followed by 30% for reliability, 27.7% for accessibility, 22.7% for equality of data access, 15.3% for completeness, and 13.5% for timeliness.The report[39] of the survey results was disseminated on the official website of the GSO and sent to the related agencies in hard copy.

6. Other measures including reexamination of the results of some surveys

In addition to the monitoring and assessment activities mentioned above, the GSO has conducted a number of scientific projects, organized some workshops on statistical information quality; and conducted the re-examination of survey and census results to assess the quality of information collected.

B. Ministerial and agency-level statistics

Ministerial and agency level statistics organization is an important part of the VSS . For the last 5 years, the government has paid attention to strengtheningthis part of the statistics organization in order to improve its statistics quality[40].Some MAshave established their statistical units (mainly statistical divisions) and specialized statistics personnel but others have not[41]. However, the monitoring and assessment of statistics quality in MAs have not been paid much attention.The consultation results with 6 MAs on statistics quality shows thatstandardsof statistics quality had not been established and there were no processes, human resources or funding for activities of statistics quality monitoring, assessment and reporting; staff were not aware of the existence of national and international data quality assessment frameworks[42].

C. Current situation in Vietnam as regards monitoring, assessment and reporting statistics quality

[39] Report on the User Needs Survey, 2013; http://gso.gov.vn/Default.aspx?tabid=382&ItemID=13870

[40] Decree No. 03/2010 / NĐ-CP dated 10th March 2013 on functions, duties, authorities and organizational structure of the statistical organizations of the ministries, ministerial-level bodies and agencies under the Government; Directive No. 01 / CT-TTg dated 24th April 2014 on strengthening the ministerial-level statistics

[41] Directive No. 10 on strengthening the ministerial-level statistics

[42] "Report on consultation results of statistical production agencies on statistics quality".

1. Definition of statistical quality

The current Statistics Law prescribes a number of criteria for state statistics quality; these are specified in thefundamental principles of statistical activities as follows (identified by the article numbers in the Law):

1a) Impartiality, objectivity, accuracy, completeness and timeliness; b) Independence in statistical performances; c) Consistency in profession, no overlapping and duplication; d) Transparency and accountability; e) Comparability…

3b) Ensuring equal rights regarding access and use published state statistical information; c) Confidentiality as stipulated by law.[43].

In practice in the GSO, there are six statistics quality criteria used including Relevance, Completeness, Accuracy, Timeliness, Accessibility, and Interpretability. However, these criteria relate to statistical outputsand are not enough to assess statistics quality in a comprehensive manner, especially the quality of statistical processes.

2. Statistical qualitystandards

The fundamental principles of statistical activities and use of statistical information stipulated in the Statistics Law as above are consistent with the United Nations Fundamental Principles of Official Statistics[44]. The Vietnam fundamental principles and the specified quality criteria have served as the over-arching quality framework / standards of Vietnam statistics.

3. Tools for assessment

The set of tools that have been in usefor monitoring and assessment of statistics quality in Vietnam include questionnaires to collect information for quality assessment.Questionnaires were used in the User Needs and SatisfactionSurveys (2008 and 2013. An online survey on User Needs and Satisfaction was trialed beginning 2013. However, after more than one year of implementation, there were very few respondents to the survey. Therefore, the GSO decided to remove the online questionnaires in early 2015. The questionnaireshave been relatively simple and lack the ability for quantifying statistics quality. There is no standard set of questionnaires in place in Vietnam to collect information from producers and users for monitoring and assessment of statistics quality in a comprehensive manner.

[43] Article 5, Statistics Law approved by the National Assembly in 2015
[44] http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx

4 Process of monitoring, assessment and reporting

There are four types of statistics quality assessment carried out in recent years, including self-assessment, independent assessment, ad-hoc assessment and the inspection process for implementation of statistical survey and reporting.

(a) Self-assessment: In the last 5 years, the CSS has carried out nearly 1500 statistical examinations and inspections; GRDP data review; and reexamination of the results of several surveys as mentioned above.Self-assessment has also been carried out in District Statistical Offices / Provincial Statistical Departments, departments directly under the GSO.Ministerial and agency statistics organizations carry out self-assessments by themselves according to the standards and set of tools approved by the competent authorities

(b)Independent assessment: In 2010, the GSO established anindependentExpert Group to assess different statistical domains of the VSS In 2010, an independent Expert Group conducted an assessment of several statistical domains of the VSSas mentioned in section A3 above.

(c)Ad-hoc assessment: Ad-hoc assessments are carried out at the request ofNational Assembly and Government, or in case there is a sign of statistics quality problems mentioned by users. This task is assigned to the Statistical Legislation and Inspection Department of the GSO. For example At the 10th session of the 13th National Assembly, the National Assembly members raised the problem that the Vietnamese statistics on value of goods imported from China was $ 20 billion less than the Chinese statistics on value of goods exported to Vietnam. The GSO established a working group of experts inside and outside the GSO to review these statistics[45].

(d)The inspection process for implementation of statistical surveys and reporting: A formal inspection process is in place for implementation of statistical surveys and reporting[46]. In addition there are some processes on official acceptance and reexamination of the results of statistical surveys and censuses promulgated and applied. While these processes are applied there is no assessment or summarization on the application of those processes.

With these assessment and inspection processes in place errors affecting statistics quality have been detected. Many quality measures have been introduced in a timely manner, resulting in some improvements in statistics quality. Nevertheless, there are only qualitative assessments in some statistical offices, quantitative assessments are lacking, and work has not been done to assess the entire VSS and each stage of the statistical production process.

[45] The report by the GSO on explaining the difference of statistics on import and export of goods between Vietnam and China (at the meeting of the National Assembly Economic Committee on 31st July2015 with the contents agreed with the General Department of Customs on 2nd August 2015)

[46] Decision No. 1562 / QĐ-BKH dated 20th November 2012.

5. Reports on quality

For the last 5 years, the GSO has compiled a number of reports related to statistics quality, such as the annual reports on statistical inspection (annual report); Report on assessment of the current status of the Vietnam Statistical System (2010); Report on the results of the Project "Overcoming the difference of GRDP data between the central and local levels" (2013); Reports on the results of the user needs and satisfaction surveys (2008, 2013); and Report by the GSO on explaining the difference of statistics on import and export of goods between Vietnam and China (2015) . In addition, the Documents of the Statistics Conferences in 2012, 2013 and 2014 contain separate sections referring to statistics quality. These statistics quality reportspartly reflectthe statistical information quality of Vietnam. However, there is no standard template for this system of statistics quality reports (for example, structure, contents, form of publication, etc) and the reports have not been documented.

6. Organizational arrangements, responsibilities and resources

Currently, there are three units of the CSS with functions related to statistics quality management including the ISS, Statistical Legislation and Inspection Department, and Standard Methodology and IT Department.

(a) The Institute of Statistical Science (ISS) was assigned the function of statistics quality management as of July 2013[47]. The ISS has established the Statistical Science and Quality Management Division with four staff under the management of a Deputy Director. In the last two years, the ISS has conducted several activities of statistics quality management, such as studying the UN NQAF) and some documents compiled by the United Nations Statistical Commission; considering experience of some countries and international organizations; developing the statistics quality assessment process and testing the GDP quality assessment on the basis of the IMF DQAF; organizing a number of workshops on assessment of statistics quality; gathering the articles of statistics quality as well as writing the news, articles and subject-matter reports of statistics quality for publishingin the mass media[48]. Currently, the ISS is drafting the Project "Strengthening the state management of statistics quality in the period of 2016-2020" for submitting to the leaders of the GSO and Ministry of Planning and Investment for consideration, and submitting to the Government for approval.

(b) The Statistical Legislation and Inspection Department has the functions of examination and inspection of statistical activities;[49]; it has a staff of 14 civil servants. The

[47] Decision No 646/QĐ-TCTK dated 24th June 2013 on functions, tasks, organization and work regime of the ISS.
[48]The website: http://vienthongke.vn contains the products of statistics quality management by the ISS.
[49]Decision No 19/QD-TCTK dated on January 09, 2014on Specifying functions, duties, organizational structureand mode of work for the Statistical Legislation and Inspection Department.

content of statistical inspection primarily focused on the implementation of survey plans and statistical reporting system.

(c) The Standard Methodology and IT Department[50] has the functions of advising and assisting the Director General to direct, manage and organizeseveral areas including statistical methodology; development of legal documents on statistics; and application and development of information technology in statistics. There are 20 civil servants in theDepartment.

Overall, in the GSO there are organizational units and human resources established for performing the function of statistics quality management. However, there is no link among the units into a system of monitoring and assessment of statistics quality. The ISS, which has j been assigned the function as a focal point of statistics quality management since the mid-2013, is trying to overcome this limitation.

7. Education and training

Although the GSO has held hundreds of training and development courses on statistical knowledge for over 17,987 statistical civil servants[51] over the last 5 years, there is no course of knowledge and skills for assessment and reporting of statistics quality, except for two training courses of statistical inspection. Consequently, there are many statistical civil servants without comprehensive and systematic understanding of statistics quality in general and statistics quality assessment in particular[52].This affects significantly the quality of Vietnam statistics.

8. Publishing, advocacy and awareness-raising

The VSDS has led to some measures for publicity and advocacy and raising awareness of statistics in general, and statistics quality in particular. The dissemination policy for statistical information has been issued[53]; the official website of the GSO has been upgraded; the plan forpublicity, education and dissemination of the StatisticsLaw has been promulgated and implemented; there are three magazines published monthly; some publications for subject-specific publicity have been compiled and released[54]; and a number of conferences on dissemination and publicity for theStatisticsLaw have been organized. Awareness of the

[50] Decision No.21/QD-TCTK dated on *January 9, 2014*on Specifying functions, duties, organizational structureand mode of work for the Statistical Methodology & Information Technology Department.

[51]Report No. 604 / BC-BKHĐT dated 26th January 2016 of the Ministry of Planning and Investment on the five-year results of implementation of Decision No. 1374 / QĐ-TTg of the Prime Minister on approval of training and fostering plan for civil servants in the period of 2011-2015.

[52]Consultation results of nearly 60 statistical civil servants of the GSO and Provincial Statistical Departments point out that most of the participants ignored or had no sense of questions related to the current international frameworks/standards and tools of statistics quality assessment.

[53]Dissemination policy of statistical information has been issued in Decision 34/2013/QĐ-TTg dated June 4, 2013;

[54]The book "Common statistical knowledge" for mainly serving members of the National Assembly; and documents for disseminating common statistical knowledge for journalists.

importance and role of statistics has been raised considerably[55]. However, the activities of publicity and dissemination have mainly focused on statistical knowledge and law, but have not paid significant attention to statistics quality. Therefore, many people including statistical personnel do not understand the concepts, characteristics and criteria of statistics quality, as well as the tools and methods of assessment of quality statistics in a comprehensive manner.

9. Summary and conclusion

In summary, statistical quality is considered as a core value of statistical agenciesin the VSS. The government has created different mechanisms to ensure high-quality statistical information is produced. Especially for the last 5 years, many measures have been taken to improve statistics quality which have been described above.

However, statistics quality in general, and the monitoring, assessment and reporting of statistics quality in particular still have limitations and shortcomings.Statistical information quality has been assessed in a qualitative manner without specific standards, tools, and statistical quality indicators. Also, only the quality of statistical output has been assessed, but not the quality of statistical production processes, The monitoring and assessment of statistics quality have not been performed regularly.

The causes of limitations include:

(a)there is no periodic and transparent system of monitoring, assessment and reporting of statistics quality established in a formal manner in each area and each stage of the statistical production process in the GSO and the MAs. This system includes standards, processes,organizational arrangements and resource allocation for implementation of monitoring, assessment and reporting of statistics quality.

(b) the legal framework to support statistical quality management is not complete and adequate. For example, there is a lack of legal documents which specify the contents of state management of statistical quality.

(c) the resources applied for activities related to monitoring, assessment and reporting of statistics quality, including dissemination and education of statistics quality knowledge, are inadequate

In conclusion, in order to address the limitations and shortcomings of statistics quality, it is necessary to strengthen the state management of statistics quality with some major contents as follows: (1) improving the legal environment for statistical activities, especially the legal documents of statistical quality management; (2) establishing a system of monitoring,

[55] Statistical information has been used in the Government's reports more regularly. For the last 5 years, there have been more than 300 statistical articles published in on the mass media, and many members of the National Assembly have spoken about statistics in National Assembly sessions.

assessment and reporting of statistics quality. This system includes the definitions, standards, tools, processes, organizational arrangements and resource allocation for implementation of monitoring, assessment and reporting of national statistics quality, as well as each area and each stage of the statistical production process; (3) setting the priority of resources for an efficient and effective system of monitoring, assessment and reporting of statistics quality.

IV Recommended System for Vietnam

The recommended system for monitoring, assessment and reporting statistical quality in Vietnamis comprised of the following:

A Definition of statistical quality

B The Vietnam Data Quality Framework

C Tools for monitoring and assessment

D Process of monitoring, assessment and reporting

E Reports on quality

F Organizational arrangements, responsibilities and resources

G Education and training

H Publishing, advocacy and awareness-raising

I Advantages and disadvantages of the proposed approach to Quality

J Roadmap for introducing the System

A.Definition of statistical quality

A definition of quality is proposedand is intended to be used consistently in the entire VSS.

The definition is based on the commonly used concept that statistical quality relates to 'fitness for use' by end users. Quality therefore depends on data uses and users.[56] According to the ISO quality is[57]: "*The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.*" A similar broad concept of quality of statistics is expressed in a UNSD document referenced in footnote 13 above. Consistent with these broad definitions and listings of quality dimensions used in national and international organizations the proposed definition for use in the VSSis that quality incorporates the following dimensions: Relevance, Accuracy and Reliability, Timeliness and Punctuality, Accessibility and Clarity, and Coherence and Compatibility[58].These dimensions are defined in the UN NQAF[59] as follows:

(a) Relevance

[56] Fromhttp://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_in_development_cooperation_-_quality_in_statistics

[57] Fromhttp://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_in_development_cooperation_-_quality_in_statistics

[58] These are also the quality dimensions included in the ESCoP, and similar ones are contained in other Codes of Practice and Quality Assurance Frameworks

[59] UN NQAF: Relevance, p36; Accuracy and Reliability, p38; Timeliness and Punctuality p40; Accessibility and Clarity p42; Coherence and Compatibility p45.

The statistical agency's challenge is to weight and balance the conflicting needs of current and potential users in order to produce statistics that satisfy the most important and priority needs within given resource constraints. The relevance of statistical information reflects the degree to which the information meets the current and/or potential or emerging needs or requirements of clients, users, stakeholders, or the audience. Relevance therefore refers to whether the statistics that are needed are produced and whether those that are produced are in fact needed and useful, and shed light on the issues of most importance to users.

Relevance also covers methodological soundness, particularly the extent to which the concepts, definitions and classifications correspond to user needs.

Relevance can be seen as having the following three components: completeness; user needs; and user satisfaction.

(b) Accuracy and Reliability

Statistical agencies should develop, produce and disseminate statistics that accurately and reliably portray reality.The accuracy of statistical information reflects the degree to which the information correctly describes the phenomena it was designed to measure, i.e. the degree of closeness of estimates to true values. It is usually characterized in terms of estimation of sampling and non-sampling errors. These errors are traditionally decomposed into bias (systematic error) and variance (random error) components, and reflect the major sources of error (e.g. errors linked to sampling, coverage, measurement, non-response and processing).

Reliability concerns whether the statistics consistently over time measure the reality that they are designed to represent.

(c) Timeliness and Punctuality

Statistical agencies should minimize the delays in making data available. Timeliness refers to how fast after the reference date or the end of the reference period the data are released or made available, whether for dissemination or for further processing. Punctuality refers to whether data are delivered on the dates promised, advertised or announced (for example, in an official release calendar).

(d) Accessibility and Clarity

Statistical agencies should ensure that the statistics and metadata they develop, produce and disseminate can be found or obtained without difficulty, and are presented clearly.Accessibility means that data and metadata are available and accessible to all users on an impartial and equal basis in various convenient formats, and are affordable, if not offered free of charge.It also means that statistics are presented in such a way that they can be understood,

Accessibility also encompasses access to microdata for research purposes, in accordance with an established policy which ensures statistical confidentiality.

Clarity also involves the availability of explanatory information and metadata, which are necessary for the proper understanding of the statistics and the appropriate uses to which they can be put. This information would normally cover the underlying concepts and definitions, origins of the data, the variables and classifications used, the methodology of data collection and processing, and indications of the quality of the statistical information.

(e) Coherence and Compatibility

Coherence and compatibility of statistics require that statistics are consistent internally and comparable over time and are produced using common standards with respect to scope, definitions, classifications and units. It should be possible to combine and make joint use of related data from different sources.

B.Vietnam Statistical Quality Framework

1. Description

In order to measure quality of statistics actual statistical practices and outputs need to be compared to a set of standards[60]and the standards have to be related to the agreed dimensions of quality. Comparison of the actual practices, procedures, methods and mechanisms that are in place with those that are considered to be quality-supportive provides a framework which allows an assessment of the quality of statistics to be made.

TheproposedVietnam Statistical Quality Framework (VSQF)is based on the UN NQAF. The UN NQAF was chosen as the basis because it was developed by a group of international experts, is recommended by the United Nations Statistical Commission for use in countries[61], incorporates the range of concerns reflected in existing major statistical quality codes and frameworks that are widely used; is the most recently developed framework (February, 2012), is supported by a set of explanatory materials; and is in use in countries.The VSQFis presented as a list of the practices, procedures, methods, and mechanisms that would be considered supportive of good quality statistics, (203 Elements to be Assured) and a number of specific performance measures that characterize the quality of statistics (Quality Indicators); e.g. coefficient of

[60]Such a system of standards is variously expressed nationally and internationally as a Code of Practice for Statistics, Quality Assessment Framework, Quality Assurance Framework or similar expression; eg the European Statistics Code of Practice (ESCoP), the United Nations Generic National Quality Assurance Framework(UN NQAF), the International Monetary Fund Data Quality Assessment Framework (IMF DQAF), Statistics Canada Quality Assurance Framework, United Kingdom Statistics Authority Code of Practice for Official Statistics and the Australian Bureau of Statistics Data Quality Framework.These codes and frameworks show the characteristics and the associated practices, procedures, methods, mechanisms that need to be taken into account for quality assurance and assessment. These are considered in Chapter II of this Report.

[61]Report of the United Nations Statistical Commission, 2012, E/CN.3/2012/34, Decision 43/110

variation, response rates and others.Eurostat has recommended16 Quality Indicators[62] all of which are included in the VSQF.

The Elements to beAssured in the VSQFand the Quality Indicators are grouped under a set of 19 quality-related characteristics reflecting 4 broad areas of concern, as follows:

A. Statistical system

1 The VietnamStatistical System is coordinated

2 Effective relationships are maintained with stakeholders ((government, users, providers, media, development partners)

3 Statistical standards are applied

B. Institutional environment

4 Professional independence is assured

5 Impartiality and objectivity are practiced

6 Policies and practices are transparent

7 Statistical confidentiality and security are guaranteed

8 Quality commitment is in place

9 Adequate resources are made available

C. Statistical processes

10 Sound methodologies are applied

11 Cost-effectiveness is achieved

12 Implementation is sound

13 Respondent burden is managed

D. Statistical outputs

14 Statistical outputs are relevant

15Statistical outputs are accurate and reliable

16 Statistical outputs are timely and punctual

[62] ESS Guidelines for the implementation of the ESS quality and performance indicators; 2014; http://ec.europa.eu/eurostat/documents/64157/4373903/02-ESS-Quality-and-performance-Indicators-2014.pdf/5c996003-b770-4a7c-9c2f-bf733e6b1f31; Accessed on 8 May 2016

17 Statistical outputs are accessible and clear

18 Statistical outputs are coherent and comparable

19 Adequate metadata is made available.

The list of the associated practices, procedures, methods, and mechanisms that would be considered quality-supportive ie the Elements to be Assured and the Quality Indicators are presented in Annex IV.

2. Applicability

The VSQF supports assessment of:

- the overall VSS and the institutional and legal environment of the statistical operations and their support for quality statistics of the institutions of the VSS(VSQF Items 1-9);)

- eachstatistical process of the various statistical domains/collections, where a statistical collection may be a sample survey, a census, a derivation of statistics from an administrative record system or some combination of the above (VSQS Items 10-13).

- the quality of the statistical outputs (the statistics and the form in which they are disseminated(VSQFItems 14-19).

The VSQFis applicable to assessment of the quality of allstatistical collections across all **fields/statistical domains/collections**of statistics.

The VSQF is also applicable to monitoring, evaluating and reporting on the quality of the various statistical processes. The GSO has adopted a standard set of statistical processesfor describing the overall statistical production and dissemination process [63] which are compatible with the Generic Statistical Business Process Model[64] (GSBPM).These processes will be adoptedand used in the system for quality monitoring purposes. The statistical processes are:

(i) Specify needs

This process includes all activities associated with engaging customers to identify their detailed statistical needs, proposing high level solution options and preparing business cases to meet these needs.

(ii) Prepare for information collection

This step includes activities, such as: making a plan forinformation collection; sample selection; developing methods of information collection; preparing human resources, means and

[63]Decision No. 945/QĐ-TCTK dated September 24th2013 by the Director General of the General Statistical Office

[64] General Statistical Business Process Model, Version 5.0, December, 2013; Joint UNECE/Eurostat/OECD Work Session on Statistical Metadata (METIS)

othernecessary conditions for information collection; collecting limited information in order to test all planned contents before official implementation.

(iii) Collect

This process collects or gathers all necessary information (data and metadata), using different collection modes (including extractions from statistical, administrative and other non-statistical registers and databases), and loads them into the appropriateenvironment for further processing.

(iv) Process

This process describes the cleaning of data and their preparation for analysis. It is made up of sub-processes that check, clean, and transform input data, so that they can be analyzed and disseminated as statistical outputs.

(v) Analyse (and document)

In this process, statistical outputs are produced, examined in detail and made ready for dissemination. It includes preparing statistical content (including commentary, technical notes, etc.), and ensuring outputs are "fit for purpose" prior to dissemination to customers.

(vi) Disseminate

This process manages the release of the statistical products to customers. It includes all activities associated with assembling and releasing a range of static and dynamic products via a range of channels. These activities support customers to access and use the outputs released by the statistical organisation.

(vii) Store information

This step includes all activities related to data storage to serve for convenience of data exploitation.

3. Compatibility with the Statistics Law 2015

The VSQF, including the definition of quality, is compatible with the Vietnam Statistics Law 2015[65] which lays down fundamental principles of statistical activities including:

1. Fundamental principles of State statistical activities include:

a) Impartiality, objectivity, accuracy, completeness and timeliness;

b) Independence in statistical performances;

c) Consistency in profession, no overlapping and duplication;

[65] Statistics Law 2015 Articles 5.1-5.3

đ) Transparency and accountability;

e) Comparability.

2. Fundamental principles of Statistical activities outside the state statistical activities include:

a). Follow the principles stipulated in the points a, b, c clause 1 of this Article;

3. Fundamental principles of statistical data and information utilization include:

b). Ensuring equal rights regarding access and use statistical information;

c). Confidentiality as stipulated by law.

A note: The Statistics Law does not say anything about "monitoring,assessment and reporting statistical quality". It may be necessary to issue a Regulation (or similar) to address this gap i.e. supplement whatever is in the new Statistics Act relating to quality assessment, if necessary.

4. Applying to the real conditions of the Vietnam Statistical System

The VSQF is considered to be sufficiently flexible in its application to be applicable to assess quality under the real conditions of the VSS.Thosereal/unique conditionsinclude:

a) Existence of state statistical activities and statistical activities outside the state statistical activities, but covered by the Statistics Law(Statistics Law 2015, Article 5)

b) Existence of the State Statistical Information System composed of four layers:

1. National statistical information system;

2. Statistical information system implemented by Ministries, Ministerial bodies, government bodies, the People's Supreme Court, the People's Supreme Prosecutorate and State Audit Agency (hereafter jointly refer to as ministries, line-ministries);

3. Provincial statistical information system; and

4. District statistical information system. (Statistics Law 2015, Article 12).

c) Existence of the National Statistical Indicator System (Statistics Law, 2015, Article 14), Sectoral Statistical Indicator System (Statistics Law 2015, Article 19), and Provincial, district and commune statistical indicator systems (Statistics Law 2015, Article 22)

d) State statistical information collection consisting of statistical surveys, use of administrative data for state statistical activities and the statistical reporting regime. (Statistics Law, chapter iii)

e) Existence of the national and sectoral statistical reporting systems (Statistics Law 2015, Articles 41 and 42)

f) Existence of:

1. Centralized statistics organization system, and

2. Sectoral statistics organization. (Statistics Law 2015, Articles 61-65)

The VSQFcan be applied in a flexible way over a period of time depending on the capacity/resources available in GSO and the MAs.

5. Compliance with international standards

The VSQFis in compliance with international standards and permits international comparison; it is based on the internationally agreed UN NQAF which has correlation to other international and national codes of practice and frameworks; it uses a definition of quality that is compatible with the internationally accepted and used definition of quality of statistics; it uses a set of statistical processes that is compatible with the statistical processes defined in the GSBPM. When applied consistently in Vietnam the VSQF will give consistency in assessment over time.

C.Toolsfor monitoring and assessment

Threequestionnaires are proposed to be used in the quality assessment process.

The first will cover the Statistical System and Institutional Environment-lines 1-9 of the VSQF (see Annex V)

The second will cover the Statistical Processes and Outputs- lines 10-19 of the VSQF(see Annex VI). This questionnaire will also allow assessment of the quality of the statistical processes as defined by the GSO (compatible with the GSBPM);

The third will cover User Needs and Satisfaction in relation to quality and other issues (see Annex VII.The questionnaire in the Annex , while prepared in relation to the Consumer Price Index (CPI), is intended to be modified to be applicable to the outputs of any statistical domain/collection by replacing “CPI” with the name of the particular statistical domain/ collection, replacing GSO with the name of the relevant MA responsible for the statistical domain/collection, and modifying the elements of multiple choice questions eg questions 7 and 8 to make them relevant to the particular statistical domain/collection.These questionnaires can be supplemented by information obtained from periodic contact with respondents to assess their views of the respondent burden which can have an impact on the quality of the raw data obtained and consequently affect the quality of the compiled statistics.

Documentary evidence will be gathered for all responses made in the replies to the questionnaires; other information may be separately collected independently of the questionnaires, by for example, reference to publications, reports, websites and other sources.

1.Questionnaire on the Statistical System and Institutional Environment

This questionnaire has questions which are built to obtain information relating to 79 Elements to be Assured. The main contents focus on coordination of the statistical work in the VSS; managing relationships with data users, providers, sponsors, related organizations, and media;

control of statistical standards; professional independence, impartiality, objectivity, and statistical confidentiality and security; quality commitment by institutions; and adequacy of resources made available. The Questionnaire can be appliedseparately to each institution of theVSS in respect of their own statistical operations and environment. Expected assessmentfrequency is every year for the first 3 years in order to gain initial information as a baseline and after that the frequency will be decided depending on information demands, perhaps every 3-5 years.

2. Questionnaire on Statistical Processes and Outputs

ThisQuestionnaire has questions which are designed to obtain information relating to 124 Elements to be Assured and the 16 Quality Indicators (non-response rates, time lags, number of accesses to online databases and others). The main content focuses on quality of the statistical processes; methodological soundness, and sound implementation; the specific dimensions of the quality of the outputs; and the provision of metadata. It also covers cost-effectiveness of the statistical activities and managing the respondent burden. (). The Questionnaire applies to each statistical domain/collection in the VSS eg the Consumer Price Index, statistics of imports and exports, the Annual School Census; and the Labour Force Survey (LFS) that will be the subject of assessment by the GSO and MAs. The Questionnaire will be applicable to the various types of collection eg sample surveys and censuses, reporting systems from institutions, and administrative records.It is expected that major statistical domains/collections would be covered once over a period of 3-5 years and then repeated over a 3-5 year cycle or earlier if any major change were to be introduced into a statistical domain/ collection (adjusted for the specific periodicity of some surveys/censuses). Abbreviated assessments would be done each time the collection is repeated (except for monthly and quarterly collections which would be assessed each year), comprised largely of the specific measurable QualityIndicators relevant to each statistical domain/collection and observations related to any significant change in the statistical domain/collection.

3. Questionnaire on User Needs and Satisfaction in relation to quality and other issues

ThisQuestionnaire has questions designed to get an understanding of user needs and satisfaction in relation to the quality of a specific statistical domain/collection. The main content of the Questionnaire focuses on: (i) the use of the statistical information by users; (ii) the satisfaction of users with the statistical domain/collection in general, and its quality dimensions in particular; (iii) user assessment of the quality of the statistical domain/collection; and (iv) the needs in relation to the statistical domain/collection in the future. The Questionnaire will be applied to users of the statistical domains/collectionseg CPI, imports and exports, annual school census, the LFS etc. which will be the subject of assessment by the GSO and MAs as covered by the Questionnaire on Statistical Processes and Outputs aboveThe

frequency of use of the Questionnaire would correspond to the frequency of the Questionnaire on Statistical processes and Outputs.

The questionnaires are based on the Guidelines and Checklist for the UN NQAF supplemented by materials available from the Eurostat quality assessment approach viz the DESAP, and the European Statistics Code of Practice Self-Assessment Questionnaire.

D. Process of monitoring, assessment and reporting

Three processes of assessment are proposed to be undertaken: **IndependentAssessment**, **Self-Assessment**: and **Ad-hocAssessment.**

1. Independent Assessment

The Independent Assessments are proposed to be conducted of each statistical domain/ collection. Theywill use the Questionnaire on Statistical Processes and Outputs.Two broad options are available for the conduct of the Independent Assessments depending on the legal framework that may exist or may be established. The first option is for the GSO to have the responsibility and legal authority to conduct these assessments in respect of any statistical domain/collection in all institutions of the VSS, preferably with the agreement of and collaboration with the institution; this would allow for a comprehensive plan to be set up, consistent assessments throughout the VSS and taking advantage of expertise that will be established and developed in the GSO. The second option is for reach institution to conduct its own Independent Assessments using its own resources (and calling on assistance from the GSO if the institution so desires); this option maintains the independence of decision making by institutions but would be expected to be a less technically sound approach. The proposal in this report adopts the first option above. (See also section F. below on Organizational arrangements, responsibilities and resources)

The Independent Assessmentswould be conducted by a Team including the officer responsible for the particularstatistical domain/collection and staff from the quality assessment office(See also section F. 2. (a) below onthe proposedStatistical Quality Management Department). When assessing a statistical domain/collection in an MA the Team will include an appropriate staff member from the MA.The IndependentAssessment will also use the Questionnaire on User Needs and Satisfaction in relation to quality and other issues which is to be completed by users; the Questionnaire should be dispatched to users by the Assessment Team and will be analysed by the Assessment Team. Quality reports emanating from an IndependentAssessment would be reviewed by an Assessment Committee and subsequently by the Statistical Quality Council including users, academics and others on the basis of a Validation Report prepared by an external expert (in an effort to promote trust in the Quality Reports by users) and the reports will be published(see under Section F.4 Assessment Team, Assessment Committee, Statistical Quality Councilbelow).

2. Self Assessment

Self- Assessmentis proposed to be conducted of the statistical system and institutional environment of the GSO and MAs. The GSO and each MA will conduct their own Self-Assessments.Self-Assessment will use the Questionnaire on the Statistical System and Institutional Environment. The GSO/ISS should be available to review the MA completed questionnaires. GSO should circulate its completed questionnaire to MAs for information and comment.

Self-Assessment may also be conducted of any statistical domain/collection by any institution of the VSS separately from and in addition to the Independent Assessment process, when a responsible officer may decide to do so. Such an assessment may also use the Questionnaire on Statistical Processes and Outputs.Quality reports resulting from Self-Assessments should be processed within the institution including submitting to the Director General of the GSO and/or officer in charge of statistics in the MA, submission to the appropriate minister, and to the relevant international organizations; decisions on any further distribution of the reports eg to the Assessment Committee and Statistical Quality Council would be made by the respective organizations.

3. Ad-hoc Assessment

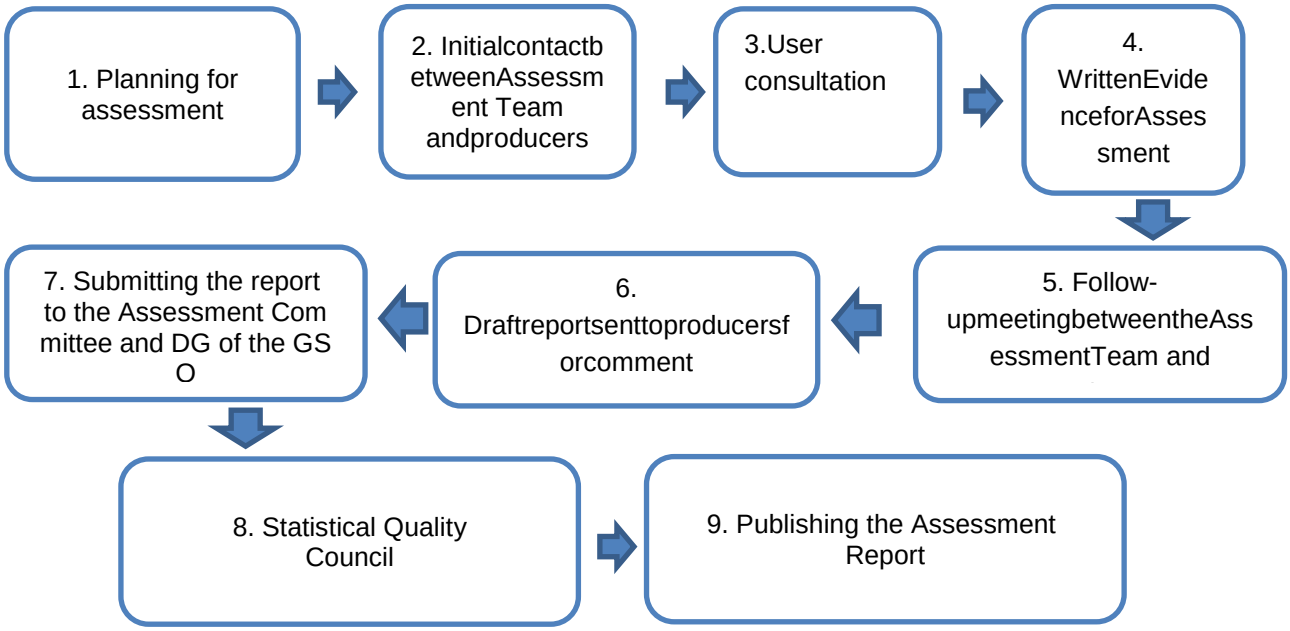
Ad-hoc Assessmentis proposed to be carried out at the request of National Assembly and Government, or in case there is a sign of statistics quality violation reflected by users directly to the GSO or on the mass media. This task is assigned to the Statistical Legislation and Inspection Department of the GSO. Ad-hoc Assessment and the treatment of any resulting reports will be conducted in accordance with each request but utilizing as far as possible the system set up for Independent Assessment.

4. The steps of the processes

The process is set out below in some detail for Independent Assessment which is the most formal process.

1.Independent Assessment

The Assessment Team would follow the steps shown in the following process map and further described below:



Step 1.Planning for assessment[66]

Set-up, through consultationsbetween GSO, the MAs and relevant international organizations, an initial list of statistical domains/ collections to be assessed.

Step 2. Initial contact between Assessment Team and producers[67]

For each statistical domain/collection theaimoftheinauguralmeetingistoagreeonthetimetablefortheassessment,takingcaretoavoidany especiallyresource-intensiveperiods;todecideonthescopefortheassessmentintermsofclarifyingthelistofoutputs,and; tooutlinethenextstepsintheprocess.The Questionnaire on Statistical Processes and Outputs and Questionnaire onUser Needs and Satisfaction in relation to quality and other issuesshould be discussed. Producerswould alsobe askedtoprovideanyrelevantbackgroundmaterialtotheAssessmentTeamat,orsoonafter,thismeeting.Relevantmaterialinclude:

Copies of/linkstothemostrecentpublicationofthe statistical domain/collection,alongwithaccompanyingspecific measurable QualityIndicators,metadataandothersupplementaryreports.

[66]Experience of Korea described in Statistics Quality Management Handbook, Korea (2010), pages 26 to 31

[67] Steps 2 to 7 draw heavily on the United Kingdom Statistics Authority practice described in Section 3 of the Producer Handbook for the Assessment Process https://www.statisticsauthority.gov.uk/monitoring-and-assessment/assessment/guidance-about-assessment/producer-handbook-for-the-assessment-process/

Summary(maximumone page)ofthehistoryandkeycharacteristicsofthestatistical domain/collection and product(s),includinganyrelevant(nationalorinternational)legislationorotherobligations,andanestimateofthecostsofproducingthem.

Abriefsummaryofthewaysinwhichthepublic,Parliamentorotherusersarelikelytousethedata,particularlyincludingthoseuseswhichgobeyondtheiroriginalintendeduse.It includesanyGovernmenttargetsthatthestatisticsareusedtomeasureprogressagainst.Thiswillformthebasisofasummaryintheassessmentreportaboutthestatistics,theiruseandutilityandwillhelptodemonstratetherelevanceandimportanceofthem.

Ifreadilyavailable,detailsof the websiteusagefortheoutputsconcerned– e.g.numberofdownloadsorwebhitsforthestatisticaloutputs.

Organizationchartofthestatistical domain/collection,includinggovernancearrangementssuchassteeringgroups.

Listofusersofthestatistics,withcontactdetails.

Step 3. Userconsultation

TheAssessmentTeamwould collectevidencetosupportits assessment and recommendationsfrom arange ofsourcesoneofwhichisthebodyofusersofthestatisticaloutputs.Theaimwould be toassessthelevelofengagementtheproducershavewithusersandthe use of and perceptions of quality that the users have.Inordertocarryoutthisprocess,theproducerswould providetheTeamwithanup-to-datelistofusercontactdetailssothattheTeam could send the Questionnaire on User Needs and Satisfaction in relation to quality and other issues.Producerswould also be askedtolistthevarioususesmadeofthestatisticsbyexternalandinternalusers.

Step 4. WrittenEvidenceforAssessment

Thiswould be themainevidenceprovidedbyproducerstotheAssessmentTeam.It would involve answering the questions in the Questionnaire on Statistical Processes and Outputs and providing supporting evidence.

Step 5. Follow-upmeetingbetweentheAssessmentTeamandproducers

Thismeetingwould servetoclarifyanyissueswhichmaybeuncleartotheAssessmentTeamandensuretheyunderstandtheanswers given to the Questionnaire and the writtenmaterialsprovided.Itwould alsogivetheproducerstheopportunitytoaddadditionalinformationwhichmayhavebeenomittedfromthewrittenevidence.FollowingthismeetingtheAssessmentTeamwould analyseevidenceandcompletetheDraftAssessmentReport.

Step 6. DraftAssessment Reportsenttoproducersforcomment

TheAssessmentTeamwouldsendthecompletedDraft AssessmentReporttotheproducerssothattheywould be abletomakecommentsinrelationtofactualaccuracy.Producerswouldgenerallybegivenatleastfivew orkingdaystocomment.

Step 7. Submitting the Draft Assessment Report to the Assessment Committee,Director General of the GSO and an external expert

After completing the Draft Report and receiving the feedback on the report from statistical production agencies, the Assessment Team would submit the report to the Assessment Committee and after any necessary revisions to the Director General of the GSO for comments. At this point the report would also be given to an external expert for review and completion of a Validation Report attesting to the technical acceptability of the process and outcomes of the Assessment Report.

Step 8. Statistical Quality Council

The Assessment Report with the Validation Report would be sent to the Statistical Quality Council whichwouldeitherapprovethe Assessment Reportforpublicationoraskforfurtherwork until the Council is able to approve the Assessment Report.

Step 9. Publishing the Assessment Report

The Assessment Report including its approval by the Statistical Quality Councilwould be made public through the media, the GSO's official website, and others according to apublicity plan. The Report would also be provided to relevant international organizations.

2.Self-Assessment

The Self-Assessment processis proposed to apply to the statistical system and institutional environment of any institution of the VSS and can also apply to the statistical processes and outputs. It is less formal than the Independent Assessment process and can be accomplished as follows:

Step 1. Self-Assessment preparation

Establish a Self-Assessment Team, and train the members on the definitions, VSQF and Questionnaires for assessment.

Decide on the scope of the Self-Assessment

Gather documentation and the specific measurable Quality Indicators

Step 2. Self-Assessment exercise

- Complete the Questionnaire or those parts of it that have been selected for the assessment

- Team discussion on the findings

Step 3. Self-Assessment Report

- Prepare the Assessment Report and distribute it as set out under the description of SelfAssessment above.

3. Ad-hoc Assessment

Ad-hoc Assessment and the treatment of any resulting reports would be conducted in accordance with each request but utilizing as far as possible the system set up for Independent Assessment.

E.Reports on quality

A comprehensive set of reports is recommended. However, their production should be streamlined by tying their contents directly to the completed questionnaires. The aim will be to have complete but brief and well-delineated reports that can be produced with minimum resources. The reports should be action oriented to identify actions to deal with situations impacting negatively on the quality of statistics**.**

An **Institutional Report** would be prepared for the GSO and each MA, assessing the overall institutional arrangements and the impact on the quality of their statistics. It would be prepared and structured based on the implementation of the Questionnaire on the Statistical System and Institutional Environment; the report structure would be standard for all institutions and follow the structure of theQuestionnaire. These reports may be around 20 pages in length. Section headings would be:

A. Statistical system

1 The Vietnam Statistical System is coordinated

2 Effective relationships are maintained with stakeholders

3 Statistical standards are applied

B. Institutional environment

4 Professional independence is assured

5 Impartiality and objectivity are practiced

6 Policies and practices are transparent

7 Statistical confidentiality and security are guaranteed

8 Quality commitment is in place

9 Adequate resources are made available

Quality Reports would be prepared for each statistical domain/collection assessing quality of the statistical processes and the outputs. It would be prepared based on application of the Questionnaire on Statistical Processes and Outputs (majorstatistical domains/ collections would be covered during a period of 3-5 years and repeated over a 3-5 year cycle or earlier if any major change were to be introduced into anystatistical domain/ collection;the report structure would be standard for all statistical domains/collections and follow the structure of the questionnaire. In addition a specified subset of the questions would form the basis for a section of the report on the statistical processes as identified in the GSO (Specify needs, Prepare for information collection, Collect, Process, Analyse and document, Disseminate, and Store information).The specified subset is identified at the end of Annex VI.These reports may be up to 30 pages in length. Section headings would beas follows:

C. Statistical processes

1Specify needs,Prepare for information collection, Collect, Process, Analyzeand document, Disseminate, and Store information

2 Sound methodologies are applied

3 Cost-effectiveness is achieved

4 Implementation is sound

5 Respondent burden is managed

D. Statistical outputs

6 Statistical outputs are relevant

7 Statistical outputs are accurate and reliable

8 Statistical outputs are timely and punctual

9 Statistical outputs are accessible and clear

10 Statistical outputs are coherent and comparable

11 Adequate metadata is made available.

Abbreviated Quality Reportswould be prepared in between the **Quality Reports** each time a statistical collection is repeated (except for monthly and quarterly collections which would be assessed each year); the abbreviated reports would be comprised largely of the specific measurable QualityIndicators relevant to each statistical domain collection and observations related to any significant change in the statistical domain/collection. These reports may be 5-10 pages in length.

The above reports will be designed for use by management levels in the producing institutions, direct managers of the statistical domains/collections and technical staff involved in the

statistical domain/collections, and expert users. Important extracts from the Quality Reports particularly relating to the dimensions of quality of the statistics will be incorporated in the technical notes accompanying release of the statistics to meet needs of the more general users of the data.

A**User Needs and Satisfaction Report**would be prepared in relation to the quality of the outputs of each statistical domain/collection and would accompany each **Quality Report**; the report structure would be standard for all surveys and follow the structure of the questionnaire. These reports may be around 5 pages in length.

Self-Assessment Reports may be prepared on theassessment of a statistical domain/l collection assessing quality of the statistical processes and the outputs.Self-Assessment is considered optional at the decision of management or the senior staff officer responsible for a statistical domain/collection and may be a regular or periodic activity or a response to an issue of concern. It may be prepared based on the Questionnaire on Statistical Processes and Outputs. The report structure mayvary from assessment to assessment depending upon issues of concern that may have prompted the Self-Assessment. These reports may be around 10 pages in length.

Annual Report on Quality would be prepared by the GSO covering the VSS and giving (i) an overview of the work done on monitoring, assessment and reporting statistical quality, (ii) current issues on statistical quality which come from data providers, data users, the media , sponsors, stakeholders, and (iii) improvements in quality that have been introduced as a result of the process.

Five-year year report on qualitywould be prepared assessing the overall impact after five years of introducing the system of monitoring, assessment and reporting on statistical quality and making recommendations for the future implementation.

This set of reports would provide a well documented approach to monitoring, assessment and reporting on statistical quality. The set of reports should be reviewed after 5 years to assess whether they are achieving their objectives or whether changes in them are advisable.

F. Organizational arrangements, responsibilities and resources

1. General concerns

GSO and each MAshould ensure clear organizational responsibility formonitoring, assessment and reportingof statistical quality with adequate numbers of suitably trained staff(Also see Section D. 1.above on Process of monitoring, assessment and reporting).

The organizational unit which has responsibility for monitoring, assessment and reporting statistical quality should ideally not have any statistical production or dissemination responsibilities which might create a conflict of interest - such a unit would bechallenged in

conducting an IndependentAssessment of its own statistical domains/collections.In addition,having a non-production unit responsible should contribute to ensuring the independence and objectiveness in quality assessment done by the unit.

Also the unit should report at a high level in the organization structure, preferably to the Director General in the case of the GSO and at a very senior level in the MAs. Such a reporting arrangement would demonstrate the importance given to the quality monitoring function and give the necessary status and authority to conduct its responsibilities.

The organizational unit which has responsibility for monitoring, assessment and reporting statistical quality in the GSO should also have that responsibility in relation to statistical activities ofprovincial statistics departments, district statistical offices and statistical organizations of MAs, but working through the responsibleorganizational unit/person in the those bodies.

The Independent Reviews should be conducted by an Assessment Team reporting to the head of the organizational unitresponsible for the monitoring, assessment and reporting function and comprised of staff of the unit and other members.

The Self-Assessment tasksshould be conducted by staff of the units responsible for the statistical domain/collectionand will be advised by the head of the unit responsible for the monitoring, assessment and reporting function.

Ad- hoc Assessments should be conducted by the Statistical Legislation and Inspection Department.

An Assessment Committee made up of GSO and MA staff and outside experts should be established under the Chairmanship of the head of the unitresponsible for the monitoring, assessment and reporting function to review draft quality reports. An independent external Statistical Quality Council will be established to review and approve quality reports.

The GSO's departments, provincial statistics departments and district statistical offices, and statistical organizations of MAs responsible for statistical domains/collections should assign responsibility to one or more staff members to carry out the tasks associated with monitoring, assessment and reporting in their units and participation in the work of the Assessment Team as needed. In addition, provision should be made for the contracting of independent assessment experts in accordance with work demands. Expert staff (assessment or technical) from each institution in the VSS should be made available to other institutions as necessary for assessments and related tasks.

2. Departments involved in quality in the General Statistics Office

(a) Statistical Quality Management Department

In order to improvethe organizational structure for monitoring, assessment and reporting quality, it is proposedthat the GSOshould restructure the Institute of Statistical Science, rename it as the Statistical Quality Management Department, strengthen its capacity to advise the Director General of the GSOand perform the function of monitoring, assessment and reporting statistical quality,and transferother existing(unrelated)responsibilities of the Institute to other Departments and units under the GSO[68]. The Department would report directly to the Director General and be supervised directly by the Director General on matters of monitoring, assessment and reporting of statistical quality.

The Statistical Quality Management Department would be at departmental level so it will be ensured adequate position to organize monitoring and assessment in other units of GSO andstatistical organizations of MAs.

The Department would:

- advise the DG of the GSO on performing the functions of monitoring, assessment and reporting statistics quality.

- compile documents on monitoring, assessment and reporting statistical quality;

-plan, organize and conduct, through an Assessment Team,IndependentAssessmentsof statistical quality of statistical domains/collections in the GSO's departments, provincial statistics departments, district statistical offices, and statistical organizations of MAs, including submitting the Assessment Reports for approval;

-Publicise the plan of IndependentAssessments to users, the public and international organizations based on their particular domains of interest;

- Advise on and monitor Self-Assessments of statistical quality conducted by the GSO's departments, provincial statistics departments, district statistical offices, and statistical organizations of MAs.

- Participate in Ad-hoc Assessments upon request of the Statistical Legislation and Inspection Department

- Function as the repository of all Independent, Self and Ad-hoc Assessments conducted by the GSO's departments, provincial statistics departments, district statistical offices, and statistical organizations of MAs

[68]Some functions of ISS proposed for transfer to other Department are:
- The research function to the Department of Methodology and IT;
- The information dissemination function to The Figures and Events Journal
- The training function to the Department of Human Resources

- compile and disseminate the annual and five-yearreportson quality

- develop a range of training and development programmes on monitoring, assessment and reporting statistics quality to meet the needs of specialists who will be involved in these processes, and staff at large to create a quality culture.

The Department should be staffed withat least 5 positions for implementation of the responsibilities.

(b) Statistical Legislation and Inspection Department

Added responsibilities of this Department on monitoring, assessment and reporting statistical quality (in addition to those specified in 2.5 below for other institutions) wouldinclude:

-conducting the Ad-hoc Assessments of statistical quality for the GSO's departments, provincial statistics departments and district statistical offices, and statistical organizations of MAs,

-compiling a report on Ad-hoc Assessments of statistical quality for inclusion by the Statistical Quality Management Department in the annual and five-year reports on quality , and

-organizing publicity on statistical quality.

The Department should be staffed with at least 2 officers to implement these tasks.

(c) The Statistical Standard, Methodology and Information Technology (IT) Department

Added responsibilities of this Department on monitoring, assessment and reporting statistical quality (in addition to those specified in 2.5 below for other for institutions) wouldinclude*:*

-development of statistical standards, and

-verifying the statistical survey plans and products of ministerial statistical organizations in accordance with the provisions of law.

The Department should be staffed with at least2 officers to implement these tasks.

3. Other components of the General Statistics Office andministries and agencies

(Also see Section D. 1.above on Process of monitoring, assessment and reporting).The GSO's departments which produce statistics, provincial statistics departments and district statistical offices, and statistical organizations of MAswould all have common additional responsibilities to contribute to monitoring, assessment and reporting statistical quality.The responsibilities would be:

- To participate in Independent and Ad-hoc Assessments when requested

- To carry out Self-Assessment of quality when decided by the responsible officer and send reports to the Statistical Quality Management Department (through the Assessment Team);

- To cooperate with the Statistical Methodology and Information Technology (IT) Department to develop statistical standards; and verifying the statistical survey plans and products of ministerial statistical organizations in accordance with the provisions of law.

In addition the provincial statistical departments would be responsible to inspect and check the reporting system and data quality of district statistical offices; the statistical organizations of MAswould be responsible to inspect and check the situation of reporting system and data quality with units under MAs.

4. Assessment Team, Assessment Committee, Statistical Quality Council

(a)Assessment Team

An Assessment Team would be established. It would:

-- plan, organize and conduct Independent Assessments.

- as directed by the Statistical Quality Management Department to implement other activities related to monitoring, assessment and reporting quality of statistical activities;

The Team would consist ofapproximately 8 persons (Statistical Quality Management Department: 3 persons, Statistical Legislation and Inspection Department: 2 persons; and Statistical Methodology and Information Technology (IT) Department: 2 persons) and a member from the organizational unit responsible for the statistical domain/collection being studied. The leader of the Team would be the Director of the Statistical Quality Management Department. The GSO may invite additional individuals with appropriate expertise to serve on the Assessment Team.

(b)Assessment Committee

An Assessment Committee made up of GSO and MA staff and outside experts would be established under the Chairmanship of a Deputy Director General of the GSO to review draft quality reports.

(c) Statistical Quality Council

A Statistical Quality Council would be established which would function independently of the GSO. The Chairperson of the Council would be a statistical expert who has achieved high reputation and respect.

The Council would beresponsible for consideration of, making suggestions to and approving all Institutional Reports and Quality Reports (accompanied by the Validation Report prepared by an external expert) and the Five-year Report on Quality, and publishing their comments on these reports. The Council would submit an annual report to the Prime Minister.

The Council would have approximately eight members including: the Chairperson, statistical experts, representatives of producers; providers; users; other organizations (governmental organizations, unions, associations, non-governmental organizations, international organizations, development partners). Additional individuals with relevant expertise may be invited by the Council to participate in its work

G.Education and training

Given the urgency being assigned to improving statistical quality and the specialized skills that are needed to monitor, evaluate and report on statistical quality,it is necessary to prepare and organize training and development courses on statistics quality for all the civil servants of the VSS;this will involve specific training for those civil servants in charge of monitoring, assessment and reporting of statistics quality, and general training for all staff in the VSS to develop a "quality culture" in the entire system.

1. Specific training for those involved in the quality process

These staff have to achieve advanced quality management knowledge to meet requirements of monitoring,, assessment and reporting quality. Specialized training would be aimed to provide advanced knowledge of quality management of statistical activities nationally and internationally; knowledge of the definition of quality, standards, tools and reports in place in Vietnam, skills in interpretation of information and verification; skills in consultation and teamwork. Advantage should be taken of any overseas training courses on quality management.

2. General training to develop a quality culture

All staff in the VSS should be given basic training to develop a "quality culture" in the entire System. Quality should be emphasized in orientation programmes and every training programme should have a unit on the importance of quality so that staff would come to considers quality at all stages of the statistical process that they may be involved in. Therefore,staff should have basic knowledge about quality management of statistical activities.

3. Implementation of training

For the specific training group: GSO should entrust the Statistical Quality Management Department with compilation of a set of training documents and the organization of training courses. Besides theoretical knowledge, it is necessary to include practical experience of monitoring, assessment and reporting.

The training course could be constructed as follows. It could be conducted over 3 days, perhaps once a year

- Overview of statistical quality:
- .International and some national practices
- The quality system in Vietnam
- Definition of quality
- System of Standards
- Questionnaires to collect relevant information
- The reports that are produced
- The process that is used
- Actual quality assessments carried out in Vietnam
- Conduct an experimental Independent Assessment

For the general training group : GSO should entrust the Statistical Quality Management Department and the Human Resources Department with compilation of training documents and the organization of training courses.

The training course could be constructed as follows. It could be conducted in half a day as part of an orientation course, as part of any other course on statistics in the VSS or as a stand-alone course.

- The importance of quality in statistics
- Recent history of quality of statistics in the VSS
- Overview of what the VSS currently does on monitoring, assessment and reporting statistics quality
- The individual's role and responsibility in maintaining and improving statistics quality

The above training would play an important role in developing technical competence for those involved in monitoring, assessment and reporting of statistics quality and in creating sensitivity to and commitment to quality among staff of the VSS.Besides theoretical training,on-the-job training would play a significant role. Staff can be trained at their workplaces and can immediately apply the learned knowledge directly to their environment of work. This would apply both to the specialists involved in the process and the staff at large.

H. Publishing, advocacy and awareness-raising programmes

Publicity programmmes on statistics quality need to be developed, directed at the various stakeholders in the VSS including statistical producers, users and respondents. Publicity documents need to be produced and disseminated through a variety of channels including libraries, mass media,via the producer and user group structure,events such as open meetings and focus groups and on the websites of institutions. The Quality Reports on monitoring, assessmentand dissemination of statistics quality need also to be published and disseminated.

A number of steps are recommended:

Publicity

Prepare and distribute a publicity brochure showing what the GSO intends to do about statistics quality; release it to the media;

Issue press releases and engage in discussions with the media on a selection of the Quality Reports.

Advocacy

Prepare a brochure explaining the importance of good quality statistics and how good quality is achieved eg by having reliable input data.

Awareness raising

Publish the plan of Independent Assessments each year;

Publicly announce the availability of the Quality Report for each statistical domain/ collection and put it on the GSO/MA website;

Create a webpage about statistical quality in the GSO website as the focus to place publications on quality (Quality Reports);

Publish the full set of Quality Reports;

Include relevant excerpts of the Quality Reports in the publications of the statistics.

I. Advantages and disadvantages of the proposed approach to quality

Having a clear programme of monitoring, assessment and reporting of statistics quality has many benefits: producers will be more focused on quality and a "quality culture" will be generated; the quality of statistics will be improved; decisions in both the public and private sector will be better-based;analysis of economic and social aspects of life in Vietnam will be more informed; policy development will be improved along with improved measurement of the impact of policies; trust and confidence of users in the official statistics and policies and stated results will be raised.

However, quality assessment poses new demands for information, and added burdens on producers requiring a combination of diversion of resources or additions to them or advances in efficiency.

The advantages of the specific approach to monitoring, assessment and reporting statistics quality in Vietnam are several: i) the approach is based on a United Nations framework which is in turn based on proven international/national practices and well established frameworks; ii) it is comprehensive in that it has been designed to be used in evaluating all forms of data

collection (e.g. survey data and administrative data); iii) it is applicable to all statistical processes and outputs; iv) it is flexible to account for variations across statistical domains/collections (e.g. national accounts, industrial statistics, agriculture statistics, price statistics, demographic statistics, environment statistics or education statistics); v) it gives an assessment that is usable by producers and users; and it has external input to the process to give the assessment a high level of credibility.

The approach adopted has no unique disadvantages compared to other alternative approaches;the approach involves costs which are comparable to other approaches.

J. Roadmap for introducing the System

The implementation of the system of monitoring, assessment and reporting statistical quality can be accomplished through a number of steps over five years. They are outlined below.

No	Task	Timeline
1	Carry out a pilot Independent Assessment (eg on quality of price statistics) using existing GSO resources; review the outcome; consult within GSO and MAs	Q3/2016
2	Consult and obtain agreement of the VSS to proceed with monitoring, assessment and reporting statistics quality System-wide; establish the legal framework(see Note below) , issue appropriate guidance;	Q4/2016
3	Establish the organization structures and staffing	Q1/2017
4	Implement the roll-out of the training and development activities	Q2/2017
5	Implement the first round of publicity activities	Q2/2017
6	Conduct the Questionnaire on Statistical System and Institutional Environment in GSO and MAs to assess the VSS	Q3/2017
7	Conduct the Questionnaire on Statistical Processes and Outputs and Questionnaire on User Needs and Satisfaction to assess statistical domains/collections at the rate of 8 statistical domains/collections per year in the GSO and MAs	Q4/2017
8	Produce First Annual Report on Quality	Q4/2017
9	Continue with assessments applying the three Questionnaires at the rate of 8 statistical domains/ collections of the GSO and MAs and the Statistical System and Institutional Environment each year and producing the Annual Reports on Quality	Q4/2018 Q4/2019 Q4/2020 Q4/2021

10	Produce the Five-Year Report on Quality and reassess the Programme	Q4/2021

Note: Very few countries have specific legislation relating to monitoring, assessment and reporting statistical quality. Some examples are: Republic of Lithuania's Law on the amendment of the Law on statistics – Article 8: "*when necessary, to invite experts in order to check reliability of data*"; Statistics Law of Turkey - Article 18: "Duties and authorities of the Institute are ....to follow the performance of *tasks assigned by the Programme to the institutions and organisations in relation to official statistics, to examine statistics produced by these institutions and organisations in terms of their conformity to international standards, to perform quality control and to provide technical support and ensure coordination in these issues*"; and Official Gazette of the Republic of Montenegro -Article 9: "*Statistical activities of the Body-in-charge, comprise notably: Monitoring and conduct of quality control of statistical results…".*

Annex I:List of Producers and Users Interviewed

No	Counseling agency, unit
Producers	
1	- Social and Environmental Statistics Department, GSO
2	- Statistical Methodology and Information Technology (IT) Department, GSO
3	Institute of Policy and Strategy for Agriculture and Rural Development (Vietnam), MARD
4	Ministry of Industry and Trade (MOIT)
5	Ministry of Culture, Sport and Tourism
6	Ministry of Education and Training
7	Ministry of Finance
8	The People's Supreme Prosecutorate of Vietnam
Users	
1	Central Institute for Economic Management (CIEM), MPI
2	Development Strategy Institute, MPI
3	IMF
4	Institute of Policy and Strategy for Agriculture and Rural Development (Vietnam), MARD

5	Institute of Sociology, Vietnam Academy of Social Sciences (VASS)
6	Ministry of Industry and Trade (MOIT)
7	Ministry of Planning and Investment (MPI)
8	Ministry of Finance
9	National Assembly Committee for Economic Affairs
10	National Assembly Committee for Social Affairs
11	National Economics University
12	Office of the National Assembly of Vietnam
13	OXFAM
14	Strategic Research Institute, MOIT
15	UNDP
16	University of Social Sciences and Humanities
17	VCCI
18	Vietnam Television Corporation (VTC)
19	WB

Annex II:Report of Workshop onAssessment of StateStatistics Quality: Some recommendations for Vietnam (December 7th, 2015)

Minutes of Workshop on state statistical quality assessment and some recommendations for Vietnam

Time: 8am, December 7th 2015

Location: Room F303, General Statistics Office (GSO) – Ministry of Planning and Investment

I. Delegates

1. Representative of the GSO leadership: Mr. Vu Thanh Liem, Deputy Director General of the GSO;

2. Domestic and external experts;

3. Directors of the GSO's departments;

4. Representative of Hai Phong Statistical Department;

5. Representatives of research institutes: Vietnam Academy of Social Science, Institute of Policy and Strategy for Agriculture and Rural Development;

6. Representatives of 17 ministries and sectors;

7. Media agencies

8. Staff of Institute of Statistical Science

Chair of the workshop: Mr. Vu Thanh Liem, Deputy Director General of the GSO

Secretary of the workshop: Ms. Vu Thi Lan Phuong, Institute of Statistical Science.

II. Contents of the workshop

1. Ms. Dinh Thi Thuy Phuong, Deputy Director of the Institute of Statistical Science introduced the workshop delegates

2. Mr. Vu Thanh Liem, Deputy Director General of the GSO had a speech to open and direct the Workshop

- To warmly welcome all the delegates to the workshop.

- Statistical information provided to users can be considered as a particular commodity.

- The Statistics Law (amendment) has many articles reflecting the improvement of statistical quality.

- The Vietnam statistics has nearly 70 years of formation and development; in 2013, the statistical quality of Vietnam increased over 5 points compared to the average of the world (and reached 73 points in 2014).

- There has been a series of measures for improving the quality of statistical information, such as improving the professional ethics, improving the institutional environment, strengthening the statistical inspection and checking, enhancing the human resources, applying the IT in statistical activities of ministries and sectors, improving the legal framework, etc. These measures have been implemented synchronously, but not effective due to the lack of a statistical quality assessment framework.

- In the Vietnam Statistical Development Strategy, this is one of the 9 action plans determined by the Prime Minister. The GSO has implemented the activities such as the ministerial-level research, the Scheme, experience studying in Korean, etc. Accordingly, the Scheme has proposed 6 statistical quality criteria and assessment tools.

- The result of this workshop will be a good preparation for developing and implementing the Scheme.

2. Mr. Nguyen Van Doan, Director of the Institute of Statistical Science presented the report “Innovations for assessment and improving the Vietnam statistical quality”

3. Mr. Cao Van Hoach, Department of Statistical Methodology and IT, presented the report "Assessment of the quality of state statistics on the view of statistical producers"

4. Comments of the representative of Institute of Policy and Strategy for Agriculture and Rural Development

5. Mr. Huynh Dac Thang, Ministry of Industry and Trade

6. Mr. Richard Roberts – International consultant, presented the international experience on statistical quality assessment

7. Mr. Nguyen Phong, National consultant, presented the UK’s experience on statistical quality assessment

8. General discussion

There are many comments and recommendations presented in the workshop, which focus on the issues as follows:

The first, the lack of statistics:

Currently, the statistics can only meet the request of reporting. There is no statistics at the detailed level such as sub-industry level, to serve in-depth research, for example public investment by sub-industry, statistics on rural areas, etc. Therefore, the usefulness of statistics is limited.

The second, the timeliness of statistics:

The results of surveys and censuses, for example Census of Agriculture conducted every 5 years, are published too late, thus the timeliness of statistics is not ensured.

The delegates (ie, the representative of Ministry of Information and Communications) recommended the GSO to classify the indicators into the fast and slow indicators (ie the time period of aggregation) to shorten the time period of disseminating the results. Some basic indicators at commune level should be reported directly by communes, but there is no need to be reported by investigators in surveys.

The third, the transparency of statistics:

It's necessary to consider and uniform the definitions, approaches of some indicators investigated and calculated by the GSO and ministries/sectors, because there are many indicators published by the GSO which are different from the same indicators of ministries and sectors (eg migration). This fact makes users confused.

Also, we need to have mechanisms for data users involving in statistical production.

The fourth, the accessibility of statistics:

Currently, it's difficult to access to statistics, especially the detailed data and raw data. An online database should be developed for making the access to statistics easier.

The coordination regulations in using statistics has been established by the GSO, but not used effectively. Many ministries and sectors said that they cannot access to statistics easily. For example, the provincial statistical departments are not responsible to provide statistics to the provincial industry and trade departments, thus the provincial industry and trade departments

have no data for reporting to the Ministry of Industry and Trade. Usually, they have to obtain necessary data based on personal relations.

The fifth, the human resources for statistics:

The role of statistics is not appreciated by ministries and sectors, especially the staff assigned to be in charge of statistics. The GSO should coordinate with the Ministry of Home Affairs to build the apparatus of human resource for statistics in ministries and sectors, as well as strengthen the human resources for assessment of statistical quality.

Finally, the Statistics Law approved by the National Assembly has many contents reflecting the statistical quality. The GSO should quickly draft decrees and circulars for guiding along with periodic and ad-hoc assessments conducted by experts in order to increasingly improve the statistical quality.

The GSO need to consider the appropriate classification of indicators included in the Statistics Law.

In addition, the GSO has to propagate and promote the empowerment of statistics.

III. Conclusion

Based on the delegates 'comments, Mr. Vu Thanh Liem concluded:

- The Institute of Statistical Science:

+ to consider and redefine the statistical quality

+ to complete the procedures and the draft scheme "Strengthening the State management of statistical quality "

- Department of Statistical Methodology and IT: to specify the 7-step process of statistical production

- To complete the assessment framework, the set of criteria for assessing the statistical quality of Vietnam based on the set of tools of Korea Statistics (Kostat).

Annex III:Report of Second Workshop on Assessment of State Statistics Quality: Proposed Approach (March 18, 2016)

MINUTES of the Workshop on Proposed State Statistical Quality Assessment Framework

Time: 8am, March 18th 2016

Location: General Statistics Office (GSO) – Ministry of Planning and Investment

I. Participants

1. Representative of the GSO leadership: Mr. Vu Thanh Liem, Deputy Director General of the GSO;

2. Representatives of the leaders of departments and non-business units under the GSO: 19;

3. Leaders of 02 provincial statistical departments: Hanoi Statistical Department and Hai Phong Statistical Department;

4. Consultant group: 01 international consultant and 03 national consultants;

5. Representatives of research units: Stastistics Faculty - the National Economics University, the Central Institute for Economic Management, the Development Strategy Institute;

6. Members of the Central Steering Committee and Secretary group on implementation the Vietnam Statistical Development Strategy 11-20

7. Representatives of ministries and agencies of the Party, Government and National Assembly: Ministry of National Defence, Ministry of Foreign Affairs, Ministry of Justice, Ministry of Planning and Investment, Ministry of Finance, Ministry of Agriculture and Rural Development, Ministry of Home Affairs, Ministry of Transport, Ministry of Science and Technology, Ministry of Health, State Bank of Viet Nam, Committee for Ethnic Affairs, Government Inspectorate, Supreme People's Procuracy of Vietnam, Office of the President, Office of the National Assembly, and Economic Committee of the National Assesmbly;

8. Non-government organization: VCCI;

9. International organizations: UNDP, ILO and FAO;

10. Media agencies: Vietnam Economic Times, Vietnam Television, National Assembly Television, and Economic and Urban Newspaper

Chair of the workshop: Mr. Vu Thanh Liem, Deputy Director General of the GSO

Secretary of the workshop: Ms. Dau Thi Quynh Trang, Institute of Statistical Science.

II. Contents of the workshop

1. Mr. Vu Thanh Liem, Deputy Director General of the GSO had a speech to open and direct the Workshop

- To confirm the important role of statistical information

- The ultimate aim of statistical agency is to make satisfactory to statistical information users' demands.

- Although statistical quality has been taken more frequent attention, many limitations and shortcomings are avalable. Therefore now, improving statistical quality is an important task of the GSO.

- From the previous workshop until now, we have used many sources to research and implement many activities in order to improve statistical quality.

- At this workshop, we hope that we will gain many comments as a basis of developing the State statistical quality assessment framework.

2. Mr. Nguyen Van Doan presented "Innovation for assessment and improving Vietnam Statistics Quality"

- Main contents of the presentation:

- Innovation for improving statistics quality

- Statistical quality

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem***

- He confirmed that because of higher and higher demands of users, improving the statistical quality is more and more necessary;

- The presentation of Mr. Doan mentioned to measures, but we need to have the measures with a larger scale at the high level.

3. Mr. Richards Robert – International Consultant, presented: "Development of the Proposed Approach to monitoring, assessment and reporting the quality of State statistics in Vietnam"

Mr. Nguyen Van Doan had presented a lot of measures to improve statistical quality in recent years, and now we also have to continue this mission. The GSO has recognized the issues related to statistical quality, also achieved many feedbacks on current statistical quality. Until now, the GSO has conducted proposed steps to develop the system of monitoring, assessment and reporting of statistical quality. This system will follow and consider to quality and efficiency of statistical data's usage. With this target, the General Statistics Office established a consultant group including national consultants and 01 international consultant, it is me in order to assess situation of statistical quality in the world, which lead to proposed State Statistical Quality Assessment Framework in Vietnam. Improving statistical quality will help the better assessment and orientation activities; simultaneously gain statistical data users' confidence. Consultant group has referred to statistical quality assessment activities of international organizations and nations in the world. The proposed approaches of group follow by 2 directions:

- To assess current situation, achievements and limitations of statistical quality assessment activities in recent time
- To review and assess recent research and feedbacks of media on statistical quality which are commented by users

Based on the results of 2 above directions, consultant group made detailed plan to assess Vietnam statistics quality. To need define quantitative indicators, acceptable indicators in real situation as well as the questionnaires to investigate the production agencies of statistical information aimed define what factors determine the statistical quality according to these agenies'opinions. These questionnaires are applied for production agencies of various statistical information, be suitable with specific domains. The Group also proposed steps to assess statistical quality. In there, organizational structure was proposed because it is necessary to get more human resources to conduct tasks of statistical quality assessment. Related to this, training and development staffs' awareness on "quality culture" are essential. It means each statistical staff must be aware of statistical quality and how to ensure statistical quality. The consultant group's proposes also mention that reports of statistical quality should be published and statistical quality should be propagated broadly. The group developed the Roadmap for implementation of statistical quality assessment. Besides, the group assessed advantages and

disadvantages of the proposed assessment framework. The assessment results are positive and show outstanding advantages against disadvantages. The contents of each parts will be presented by national consultants in the following agenda.

**** Comments by Mr. Vu Thanh Liem***

- The presentation of Mr. Roberts pointed out overall measures

- Mr. Robert is responsible for assigning tasks, as well as guiding how to implement these tasks to each national consultant

4. Mr. Nguyen Phong – National consultant, presented: "Review and assess current situation in the world"

Documents referred international experiences of Eurostat, NQAF, quality framework of some countries such as Australia, Canada, United Kingdom…

- Main contents of presentation:

+ Definition of quality (by ISO and the national statistical agency)

+ Quality framework

+ System/ Set of tools

+ Monitoring, assessment andreporting processes

+ Organizational structure, personnel and missions

+ Training programs

+ Publication, policy advocacy and raising awareness

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- The Consultant group need comprehensive research quality framework, then consult for the General Statistics Office. According to the presentation, the consultant group referred many different quality frameworks of national and international organizations around the world. These frameworks should be reviewed because they could conflict with each other.

5. Mr. Nguyen Van Doan presented: "Current situation of assessmentment and reporting of statistical quality in Vietnam in the last 5 years (2011-2015)".

- Main contents:

+ Overview of assessment of statistical quality in the last 5 years (2011-2015)

+ Outcome, limitations and reasons

+ Some recommendations

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- Through the presentation by Mr. Doan, it can be seen that understanding and knowledge about statistical quality are still a big hole.

- About the types of statistical quality assessment:

+ Seft-assessment: the GSO has implemented seft-assessment through self-examination.

+ Extraordinary assessment: the GSO has implemented extraordinary assessment through inspection

+ Assessment of expert: this type of statistical quality assessment has been effectively implemented in the GSO with the consultation of national and international experts.

+ Periodic assessment: Currently, the GSO has the lack of periodical assessment of statistical quality. It is necessary to plan periodical assessment activity similar to audit activity. Therefore, periodic review process should be supplemented and standardized for issuing periodic assessment of statistical quality.

6. Mr. Nguyen Phong – National expert, presented: "Proposed elements for State Statistical Quality Assessment Framework"

- Main contents:

+ Sources

+ The structure of proposed elements

+ Proposed elements

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- This framework can also be applied to non-state statistics.

- Proposed Framework is mainly based on NQAF developed by the UN, and also inherited from various statistical quality frameworks of other countries and international organizations.

- Mr. Liem would like the expert to clarify the use of the term "indicator" and "element" for accuracy and consistence. In addition, he proposed to use the following terms appropriately and would like to take opinion from the Group of experts:

+ Dimension: is replaced with "set of elements"

+ Element is replaced with "name of the element"

+ Indicator is replaced with "indicator content"

- It's necessary to set a benchmark for each indicator content (refer to the 19 new rural criteria)

- He proposed the Group of expert to clarify which object this Framework is developed for, for example, national statistical agency.

7. Ms. Hoang Thu Hien, Deputy Director General of Institute of Statistical Science, National expert, presented: "Proposed questionaire for state statistical quality assessment on "Statistics System and Institutional environment"

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- The Questionaire is one of the effective tools to assess statistical quality

- It is necessary to design a standard questionaire, such as:

+ Specify that which object the questionaire is designed for

+ Specific instructions for each question

+ The questions from NQAF have to be translated more accurately

+ The Questionaire should be designed according to the statistical standard sample

8. Mr. Ha Manh Hung, Institute of Statistical Science, National expert, presented: Proposed questionaire for state statistical quality assessment on "Statistical procedure and products"

- Main contents:

+ The principles to build the questionaire

+ Introduction about the questionaire

+ Case study: regular assessment every 3 years

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- Does the Questionaire use open-ended questions? Why?

- Need to specify the orientation for aggregation and scoring after completing the questionaire, and build the benchmark for assessment, comparison and grading.

9. Mr. Ha Manh Hung, Institute of Statistical Science, Natinal expert, presented: "Proposed procedure of monitoring, assessment and report on state statistical quality"

- Main contents:

+ Experience and practice in 6 countries: The United Kingdom, Japan, Slovenia, Australia, Korea, and Canada.

+ Proposed organizational model

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- "The basis of procedure building" should mention to Statistical Quality Assessment Framework proposed above as Mr.Phong's presentation, Statistics Law and legal documents, but not include international experience.

- This presentation has not mentioned the report form for self-assessment report. It should be online form with a self-assessment report provided after answering the online questionaire. The expert needs to supplement this content.

- The expert needs to clarify who writes this report, for example statistical agencies or users, for whom, etc.

- The expert needs to make these reports detailed to standardize and submit for approval

10. Ms. Hoang Thu Hien presented "Proposed organizational structure, personnel and assignment"

(Detailed presentation is attached in the Minutes)

**** Comments by Mr. Vu Thanh Liem:***

- The expert needs to reconsider the method to draw organization chart for specification, clearance and misleading avoidance.

- The contents of Workshop agenda have been arranged very reasonably. However, due to the limited time, the remaining contents should be refered in the documents herein to have time for general discussion.

III. General discussion

1. Comments by Ms. Vu Thi Thu Thuy, Director of Price Statistics Department

- It can be seen that the reports of Group of experts are very meticulous

- About the evaluation of statistical quality assessment by the GSO now: the group of experts only mentioned 77 inspectors, 1500 inspections carried out, but they have not mentioned the activities of statistical quality assessment by the specialized departments. In the past few years, the specialized departments have implemented many monitoring and examination activities. In addition, the reports should be supplemented with the statistical quality assessment activities by provincial statistical departments.

- Regarding the proposed framework: the framework is unclear, and the scope is too broad. It should be clarify who is going to make this framework. Under this framework, the specialized departments also conduct self-assessment beside the units with the function of statistical quality assessment. Therfore, it is necessary to make different indicators, elements for each

unit and each field, such as the questions on law or institution are not applied to specialized units. For the units with the function of statistical quality assessment, it should be clarified which contents these units assess. In addition, it should be have specific methodology to assess the different contents, such as the specialized departments are weak at the current methodology of non-sampling error assessement.

**** Comments by Mr. Nguyen Van Doan:***

-This is only the first step. There will be specific guidelines for the assessment of statistical quality then.

2. Comments by Ms. Nguyen Bui Linh, Representative of UNDP:

- At first, it can be seen that the volume of presentations is quite bulky

- The comments will be classified into 3 groups as follows:

+ The general comments:

- The name of the workshop is related to state statistical quality assessment, however, the contents of the presentations did not stand out the purpose and object of statistical quality assessment activity. With different purposes and objects, the assessment would be designed differently. For example, this activity only serves for GSO or national statistics.
- Quality assessment system is independent or not independent? According to the presentations, it seems that the quality assessment system is not independent but GSO's activities, in consultation with some external object.
- Need to clarify the role of Statistical Quality Council that is proposed to establish by Group of experts.

+ Comments on the set of tools:

- The number of indicators and elements are huge. Many indicators and elements are hard to understand, therfore, it should be localized these indicators and elements, such as reviewing the number and names of the indicators and elements
- Questions should be more specific, not general
- How about the issue of questionnaire result aggregation?

- Who is the object of the questionnaire? This system will monitor and assess the statistical quality, so does the questionnaire serve for regular monitoring or assessment of statistical quality?
- It's necessary to clarify the process of collecting, and to specify the form of reports

- Comments on organization:

- There is no mention of the involvement and role of ministries, non-state entities, and data users
- How about budget and human resources for this activity
- With a workload like this, probably the GSO needs to establish a separate department to perform statistical quality assessment
- The GSO has assessment system of statistical development strategy (DQAF framework), so how do these two tools work together? How do manpower and funding allocate to these two activities?
- Why is the proposed framework based on NQAF of UN rather than other frameworks as DQAF or framework of Canada?

**** Comments by Ms. Vu Thi Thu Thuy***

- 355 elements need to consider the situation in Vietnam. It is not sure that the agencies will be in compliance with the provisions of law. For example, the ministries have not coordinated with the GSO. Therefore, the questions need to specify if it is implemented, not only the yes / no questions.
- Canada reports every 5 years, now reduced to every 3 years, so what is the reason?

4. ***Comments by Ms. Loi, Deputy Director of Trade and Service Statistics Department***

- Affirming the need to develop a statistical quality framework

- Presentation by Mr Nguyen Van Doan has listed some articles “speak scornfully of” Vietnam statistical quality, however it should be noted these articles do not always reflect the true state

- Which quality framework have the ASEAN countries adopted? If yes, there is a need to study the experience of ASEAN countries because these countries have the statistical level quite similar to Vietnam

- Regarding the assessment process: need a uniform procedure, such as to extraordinary assessment, there must be steps to work with the statistical agency.

- Organizational chart of quality assessment system is still in internal GSO, without the participation of other stakeholders

5. Mr. Dau Ngoc Hung, Acting Director of Integrated Statistics Department

- The volume of literature is quite large

- The first presentation by Mr. Doan should supplement into the content of the institutional environment: Asean regional cooperation

- The set of indicators is divided into 2 parts: the factors to ensure and quality elements and, so how to harmonize these two parts together.

- It should be reconsidered the number of indicators because we have quite a lot. At the same time, the time of assessment is evey 5 years, every 3 years or every year, need be considered carefully.

- Regarding the assessment process:

+ Organizational model should demonstrate which units assess, which units are assessed, which units report, which units receive reports (path of the reports)

+ The role of specialized departments and ministerial statistics in the model is still fuzzy.

6. *Mr. Nguyen Van Hong, National Assembly Economic Committee*

- Statistics Law has provisions for statistical quality. Besides, the National Assembly has also recently approved a lot of contents on statistics, which focus on improving statistical quality

- To assess statistical quality, it is necessary to develop a quality framework. In particular, the proposed framework has been developed quite full. However, with such a broad framework, there should be method to use this framework with the current resources.

For example, the National Assembly delegates are now very interested in a number of quality elements such as accuracy, timeliness and accessibility. Therefore, to serve these issues in an immediate manner, we need to use the framework simply and easily, which focuses on the state statistical indicators and national indicator system.

- It is unclear that the target of questionnaire is to assess the overall strategy or specific groups of indicators

- Need to reduce the number of tools, clarify its object and purpose

7. ***Answering questions***

**** Mr. Nguyen Van Doan***

- About the comments by Ms. Loi related to the list of articles reflecting the quality of statistics, my presentation made it clear: some articles reflect statistical quality, and some articles reflect the current situation of the shortage of knowledge and understanding of statistical quality

- About the selection of the NQAT Framework of UN: The group of experts have studied many different quality frameworks of other countries and international organizations, however, we found that the NQAF of UN has been developed on the legacy, the selective synthesis of the other frames. Thus, after the process of research and discussion, the experts went to choose NQAF to apply mainly for statistical quality framework of Vietnam.

- Currently, Asean countries have not developed the state quality framework, they just started the research on this issue.

**** Mr. Nguyen Phong:***

- About the reason why Canada reduces the report time from every 5 years to every 3 years: no specific documentation about the cause, only knows that Canada has faced one serious statistical problem so it should be adjusted.

**** Mr. Richard Robert***

- Concerning the independence of the monitoring, assessment and reporting of statistical quality:

+ The monitoring, assessment and report on statistical quality must be absolutely independent and expressed in the publication and publicity for the public and private users

+ To ensure the independence, it is necessary to perform the following tasks:

- About technical issue: the whole process of statistics compilation implemented by the statistical agency or other agencies should have an internal self-assessment of each step. Additionally, the GSO in coordination with the independent external committees assesses the statistical quality. Ie, the GSO is responsible to data collection for assessment, but the assessment must be implemented by external agencies and committees. At the same time, assessment methods and reports on statistical quality should be made public to ensure transparency.

- The statistical quality assessment should be carried out in several levels in each field of statistics. Therefore, there should be detailed questionnaire and specific assessment for each field of surveys. Thus the frequency of assessment will depend on frequency of surveys.

IV. Conclusion and closing speech

**** Mr. Vu Thanh Liem made a consclusion and closing speech***

- All questions, comments will continue to be answered in the next workshop

- The workshop has been taken place actively with an appropriate program with a series of presentations

- The GSO appreciates all the findings of the expert group as well as all the delegates' comments

- In addition to achieved results, the Group of experts needs to clarify and complete the following issues:

+ To identify the objects who assess statistical quality must be Vietnam statistical agencies (including the GSO), rather than the entire Vietnam statistical system

+ To complete and "Vietnamize" the indicators, elements and questionnaires

+ To introduce assessment forms for Vietnam statistics, namely four types of assessment: self-assessment, extraordinary assessment, periodic assessment and expert assessment. In this regard, it should be studied the experience of Korea.

+ To Vietnamize translated documents. They are difficult to understand now.

+ To improve the questionnaires

+ To propose to legalize with clear rules on the assessment of statistical quality

- Suggestions for the next steps:

+ Need to absorb the positive comments

+ Final objective of statistical quality assessment is to meet the needs of users; therefore, there is a need to have a model and process to implement the assessment. Along with that is a set of tools to perform assessment and accompanying guidelines.

+ The object to assess: statistical producers

+ About assessment elements: Vietnam Statistics should have standards, specific processes, such as 7-step process should be made public. Group of experts should refer to the 19 new rural criteria.

+ Group of experts should recommend the contents that need to be legalized and put into the law

+ Quick translation of documents on statistical quality asseement compiled by Korea Statistics

+ Identify contents about the statistical quality in the Statistics Law. It will be the basis to Vietnamize the set of indicators, elements and questionaires in accordance with Statistics Law

+ Institute of Statistical Science continues to chair, promote and facilitate the group of experts to take steps to implement the draft proposal and complete proposal for being submitted to the Prime Minister

+ Project Management Board continues to facilitate the group of experts to continue studying and completing the results in accordance with the terms of reference

+ The GSO is open-minded and eager to get more feedback from the delegates.

The workshop ends at 12:00 on 18th March 2016.

SECRETARY	CHAIRMAN
Dau Thi Quynh Trang	**PhD. Vu Thanh Liem** *(Deputy Director General of the General Statistics Office)*

Annex IV: The Vietnam Statistics Quality Standards-Elements to be Assured and Quality Indicators

The Vietnam Statistical Quality Framework (VSQF) is presented as a list of the practices, procedures, methods, and mechanisms that would be considered supportive of good quality statistics, (Elements to be Assured) and a number of specific performance measures that characterize the quality of statistics (Quality Indicators) eg. coefficient of variation, response rates and others. The Statistical Office of the Europen Communities (Eurostat) has recommended 16 Quality Indicators all of which are included in the VSQF.

219 Elements to be Assured, arranged in 19 groups of characteristics (VSQF1-VSQF19), are proposed for the VSQF; the elements are largely taken from the United Nations National Quality Assurance Framework (NQAF) Checklist (175 elements). Additional elements are selected from the Guidelines for the Template for a Generic National Quality Assurance Framework (28 elements noted with * in the first column named "VSQF number" in the table below) and Eurostat's Quality Indicators (16 indicators noted with ** in the column). Effort has been made to include elements that are relevant to the situation in Vietnam while keeping the list at a practical length for sustainable application.

A small number of entries are repeated in two groups to allow the groups to be self-contained and comprehensive: There are 10 repeated or partially repeated entries as follows:

(i) 1.6 (in VSQF 1) fully duplicates 10.1 (in VSQF 10):

> 1.6 (in VSQF 1): The GSO sets the methodological guidelines for the production of official statistics and promotes methodological soundness and consistency throughout the VSS.
>
> 10.1 (in VSQF 10): The agency sets the methodological guidelines for the production of official statistics and promotes methodological soundness and consistency throughout the VSS.

(ii) 4.7 fully duplicates 5.14:

4.7: Procedures are in place for ensuring that statistical releases are clearly distinguished from political/policy statements and are issued separately from them.

5.14: Procedures are in place to ensure that statistical releases are clearly distinguished from political/policystatements and issued separately from them.

(iii) 5.4 partly duplicates 6.6:

5.4. Major changes in the methodologies and data revisions are clearly explained to users and advance notice of major revisions and changes in methodology source data and statistical techniques is given and explained to users.

6.6. Advance notice of major revisions and changes in methodology, source data, and statistical techniques is given and explained to users.

(iv) 5.11 duplicates 6.1

5.11. If access to statistics prior to their release is allowed it is controlled and made known publicly.

6.1. If access to statistics prior to their release is allowed it is controlled and made known publicly.

(v) 5.14 partly duplicates 6.4:

5.14. Procedures are in place to ensure that statistical releases are clearly distinguished from political/policy statements and issued separately from them.

6.4. Products of the statistical agency are clearly identified as such.

(vi) 7.5 partly duplicates 17.4:

7.5: A formal data dissemination policy sets out how statistics are to be disseminated to users and under what circumstances certain microdata (i.e. statistical information relating to individual respondents) may be made available.

17.4: A dissemination policy for defining dissemination practices and a clear pricing policy (if applicable) governing the dissemination, are in place and are made known publicly.

(vii) 10.11 and 12.7

10.11: Data capture and data collection instruments are tested and adjusted (if required and possible) to ensure that the set of questions asked is sufficient to achieve the aims of the survey.

12.7: Data capture and data collection instruments are tested and adjusted (if required and possible) prior to the actual field operation or data collection process.

(viii) 12.18 mostly duplicates 14.7:

> 12.18: Appropriate arrangements are in place for post-collection evaluation to take stock of outcomes as compared with design plans, to draw out any issues upon which users should be informed, and to provide feedback for consideration in the planning for future such collections.
>
> 14.7: Procedures are in place for carrying out post-collection evaluations to: take stock of outcomes as compared with design plans and user needs; highlight any issues upon which users should be informed; and to provide users ways to give feedback that can be taken into account in the planning for future collections.

(ix) 15.5 partly duplicates 18.15:

> 15.5: Source data and statistical outputs are compared with other sources of information in order to ensure validity.
>
> 18.13: Statistical outputs are compared with other statistical or administrative sources that provide the same or similar information on the same subject matter, and divergences are identified and explained to users.

(x) 17.12 partly duplicates with 19.5:

> 17.12: Policies are in place for archiving statistics and metadata.
>
> 19.5: There is a systematic way for archiving metadata which also ensures that they are accessible for reuse in the future.

The VSQF is applicable to the VSS, which includes (i) the Centralized Statistical System and its statistical units (the General Statistics Office, the General Statistics Office's departments, provincial statistical offices, and district statistical offices); and (ii) the ministerial and agency statistical organizations (for example, the statistical organization of the Ministry of Finance is the Department of Financial Informatics and Statistics and the statistical units under the Department of Financial Informatics and Statistics are statistical divisions of the General Department of *Taxation,* General Department of *Vietnam Customs,* General *Department* of State Reserves, and the State Treasury);agencies include the Supreme People's Court of Vietnam, the Supreme People's Prosecutorate, etc)".

Where the word "agency" is usedbelow it means the GSO or a ministry or government agency such as the Supreme People's Court of Vietnam, the Supreme People's Prosecutorate, etc)" depending on the context.

Vietnam Statistical Quality Framework

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	A. Statistical System **VSQF 1 The Vietnam Statistical System is coordinated**
1.1	A law or some other formal provision establishes the Vietnam Statistical System (VSS or the System).
1.2	The VSS members are specified in the law or other formal provision establishing the VSS.
1.3	The role of the General Statistical Office (GSO) is legislated (established by law) or established by some other formal provision
1.4	The GSO is designated as coordinating agency by the law or other formal provision establishing the VSS.
1.5	The GSO plays a leading role in coordinating the VSS and this role is recognized/accepted by the VSS members.
1.6	The GSO sets the methodological guidelines for the production of official statistics and promotes methodological soundness and consistency throughout the VSS.
1.7	The GSO promotes/facilitates - the harmonisation of statistical information and the avoidance of duplication of work among the members of the VSS - the implementation of standards throughout the System - the identification of good statistical practices among the members and promotes their implementation.
1.8	Procedures are in place for facilitating cooperation among the members of the VSS in order to: - improve the performance of the System. - facilitate agreement among the VSS members on priorities for the production of statistics. - exchange data according to established guidelines. - share technical knowledge.
	VSQF 2 Effective relationships are maintained with stakeholders (government, users, providers, media, development partners)
2.1	The key stakeholders have been identified by the agency
2.2	Relationships between the agency and stakeholders are discussed or defined, and the rights, responsibilities and obligations are understood by both sides.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
2.3	The agency has a suitably composed body that advises it in setting overall statistical priorities (for the GSO a multi-sectoral body, for the agencies an expert composition).
2.4	Procedures/committees are in place for various forms of interaction or consultations between the agency and users, at all appropriate stages of the statistical life cycle (Specify needs, Prepare for information collection, Collect, Process, Analyse and document, Disseminate and Store information) about stakeholders' current and emerging needs, priorities and concerns and for keeping them informed about actions taken to address them.
2.5	Consultations with provider organizations (such as government departments, businesses, industry associations, administrative agencies, etc.) take place regularly.
2.6	The agency has agreements in place (and which are effective) to access records maintained by any government department, corporation, business or organization that could be used for statistical purposes including describing the data and timelines or schedules for providing or accessing data.
2.7*	Processes are in place to assure statistical confidentiality of individuals, businesses or other entities in the administrative records, and to ensure that the information will be used for statistical purposes only.
2.8	The agency has a strategy to maintain media relationships, supports their role in disseminating statistics to a large audience, and maintains regular contact with the media.
2.9	There are well-documented work plans and budgets in the agency that can be shared with the development partners to ensure the mutual understanding of technical and funding requirements.
	VSQF 3 Statistical standards are applied
3.1	The agency works towards the review, development, promotion and implementation of statistical standards.
3.2	There is a person or unit in the agency that leads and supports programmes in the agency to develop/update statistical standards; the person or unit has the appropriate level of seniority.
3.3	Users and data providers, along with the agency, are involved in the process for originating, developing and approving statistical standards.
3.4	All relevant staff of the agency, as well as potential data users and the public are made aware of statistical standards and any changes made to them.
3.5	Statistical standards include statements about how compulsory their application is and whether they conform to corresponding international or national standards; divergences from the corresponding international or national statistical standards are documented and explained.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
3.6	Detailed concordances to corresponding international and national statistical standards are available and are provided.
3.7	Detailed concordances to previous statistical standards are available and are provided.
3.8	Statistical programmes of the agency collect and retain information at the fundamental or most detailed level of each standard classification in order to provide maximum flexibility in aggregation and facilitate retrospective reclassification as needs change.
3.9	The statistical standards are regularly reviewed, and revised, if necessary, to ensure their quality, notably their relevance, coherence, clarity, etc.
3.10*	Statistical products are accompanied by, or make explicit referenceto, readily accessible documentation on the statistical standards used.
3.11	Periodic reports to senior management of the agency are prepared on the extent to which statistical standards are used by the statistical programmes in the agency
	B. Institutional environment **VSQF 4 Professional independence is assured**
4.1	Viet Nam Statistical Law or some other formal provision specifies that the agency is obligated to develop, produce and disseminate statistics without interference from other government agencies or policy, regulatory or administrative departments and bodies, the private sector or any other persons or entities which may be considered as potential conflicts of interest.
4.2	The rules applied for appointing and dismissing the head of the agency are based on professional competence, and are free from political considerations.
4.3	Procedures are in place for ensuring that the head of the agency is of the highest professional calibre and has sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies.
4.4	The head of the agency has exclusive and full control over the decisions on statistical methods, standards and procedures, and on the content and timing of statistical releases.
4.5	The head of the agency) is responsible for ensuring that statistics are developed, produced and disseminated in an independent manner.
4.6	Procedures are in place for regularly publishing the statistical work programmes and for issuing periodic reports to describe progress made.
4.7	Procedures are in place for ensuring that statistical releases are clearly distinguished from political/policy statements and are issued separately from them.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
4.8	A formal policy or well-established customs exist for the agency to comment publicly on statistical issues, criticisms, negative media reports, misinterpretations and misuses of official statistics.
4.9	The organizational structure for statistical work of the agency is supportive of statistical activities and professional independence of the work
	VSQF 5. Impartiality and objectivity are practiced
5.1	A law or formal provision is in force which specifies that the agency should develop, produce and disseminate statistics following professional standards.
5.2	Mechanisms are in place, such as a declaration or code of conduct or code of ethics which governs statistical practices (e.g. Code of Practice, declaration on professional ethics, and/or other guidelines, etc.) for assuring that professional standards are followed and impartiality and objectivity are achieved, and their implementation is followed up.
5.3	Sources, concepts, methods, processes and data dissemination paths are chosen and statistics are produced on an objective basis which means that the work is determined only by statistical considerations taking account of national and international principles and best practices.
5.4*	Major changes in the methodologies and data revisions are clearly explained to users and advance notice of major revisions and changes in methodology, source data and statistical techniques is given and explained to users.
5.5	Information is made available to all users at the same time.
5.6	Statistical releases and statements made, for example in press conferences, are objective and non-partisan.
5.7	Errors that are detected in published data are corrected as soon as possible and users are informed about those errors and there causes.
5.8*	A revision policy, which is made known publicly, is in place and states the principles and procedures, the timing of revisions, their reasons, and the nature of the revisions
5.9*	Guidelines for assuring impartiality and objectivity exist and the implementation of the guidelines followed up.
5.10*	A policy for data dissemination exists and is made publicly known.
5.11*	If access to statistics prior to their release is allowed it is controlled and made known publicly.
5.12*	There is a published release calendar in place in which dissemination dates and times are pre-announced (at least major ones).

VSQF number	Elements to be Assured and Quality Indicators in VSQF
5.13*	Divergences from pre-announced times are published in advance; a new release time is then announced with explanations on the reasons for the delays.
5.14*	Procedures are in place to ensure that statistical releases are clearly distinguished from political/policystatements and issued separately from them.
	VSQF 6. Policies and practices are transparent
6.1	If access to statistics prior to their release is allowed, it is controlled and made known publicly.
6.2	Respondents are provided with information about the legal basis for a survey, its purpose (including the expected uses and users of the statistics to be produced from it), the collection details, its mandatory or voluntary nature, the confidentiality protection, and publication of results etc.
6.3	Users are made aware that procedures to eliminate the risk of identification of individual respondents have been implemented, and that this could lead to a loss of information.
6.4	Products of the statistical agency are clearly identified as such.
6.5	Advance notice of major revisions and changes in methodology, source data, and statistical techniques is given and explained to users.
	VSQF 7. Statistical confidentiality and security are guaranteed
7.1	Viet Nam Statistical Law or some other formal provision or policy (e.g. confidentiality policy) guarantees the proper management, with regard to privacy and security, of information received from data providers. National privacy laws are respected.
7.2	Where the statistics law provides for exceptions to the general confidentiality provisions, clear policies and procedures are in place and are made known publicly to operationalize the exceptions.
7.3	The staff of the agency signs legal confidentiality agreements or declarations covering their obligations.
7.4	There are appropriate penalties or sanctions, which have been made known publicly, for statistical staff or other personnel (e.g. external parties who undertake work on behalf of the statistical agency) who have been found guilty of activities leading to the release of confidential data.
7.5	A formal data dissemination policy sets out how statistics are to be disseminated to users and under what circumstances certain microdata (i.e. statistical information relating to individual respondents) may be made available.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
7.6	Mechanisms are in place (e.g. appropriate codes of practice, standards, guidelines, handbooks and/or other instructions) to specify procedures to follow for ensuring that statistical data about individuals, businesses, other entities in administrative data, etc. remain confidential, and are only released to users in line with statistical laws and/or data dissemination policies.
7.7	Procedures are in place, documented, made public and are applied in line with the data dissemination policy for ensuring that individual respondents cannot be identified from the public release of statistics, including microdata that are to be disseminated
7.8	Appropriate physical and information technology security procedures are in place for ensuring the protection of statistical information relating to individual respondents.
	VSQF 8. Quality commitment is in place
8.1	The agency's policy or message about its commitment to quality in statistics is made known publicly, clearly conveys and promotes the shared concern for quality of all of the staff, and includes information about trade-offs affecting the statistical work programme and product quality.
8.2	A culture of continuous quality improvement is promoted which fosters the documentation of methodology and processes, the identification and exchange of good statistical practices, and the monitoring, assessment and improvement of the quality of statistical operations and products
8.3	A specific person or persons have been assigned with explicit responsibility for the management of statistical quality within the agency.
8.4	Procedures or guidelines are in place for implementing quality management which: • describe the entire statistical process and identify relevant documentation for each stage of production; • describe the methods for monitoring the quality of each stage of the statistical production process; • identify the indicators (quality measures) for evaluating the quality of the main stages of production.
8.5	The agency's quality guidelines are made available to users, at least in a summary version.
8.6	Procedures are in place for ensuring that the required documentation on quality is regularly updated.
8.7	Staff training and development programmes are available to relevant staff on a regular basis and ensure that the staff is aware of the agency's quality policy and has an understanding as to how quality may be achieved..

VSQF number	Elements to be Assured and Quality Indicators in VSQF
8.8	The agency's management ensures that compiling areas or subject matter units have access to necessary tools and specialized methodological and technical support as needed to help implement their strategies for improving data development, production and dissemination.
8.9	A quality assurance plan or similar mechanism is in place that describes the working standards, the formal obligations (such as laws and internal rules) and quality control actions to prevent and monitor errors, to evaluate quality indicators and to control different points at each stage of the statistical process.
8.10	Quality indicators and/or quality reports are prepared and made known publicly to the data users and producers to help them assess the quality of the released data.
8.11	Procedures are in place for conducting periodic quality reviews (such as audits and self-assessments) of key products to assess adherence to internal guidelines and international standards. Top management is informed of the results in order to define improvement actions. Some of the quality reviews are conducted by external experts that are called in by the agency
8.12	Mechanisms are in place for regularly collecting and following up on users' reactions and feedback, for example, user satisfaction surveys or other indirect methods which are implemented regularly, and their results are made known publicly.
8.13	Metadata and quality indicators or measures are prepared and provided to users to help them assess the quality of the released data.
	VSQF 9. Adequate resources are made available
9.1	The financial, human and technological resources (hardware, software, etc.) resources are sufficient to implement the statistical work programme.
9.2	Resource allocation is regularly reviewed.
	C.Statistical processes **VSQF 10. Sound methodologies are applied**
10.1	The agency sets the methodological guidelines for the production of official statistics and promotes methodological soundness and consistency throughout the national statistical system.
10.2	The overall methodological framework (concepts, definitions, classifications, basis of recording (if applicable), etc.) of the agency is consistent with international standards, guidelines and good practices.
10.3	Procedures are in place for ensuring that standard concepts, definitions and classifications are consistently applied.and divergences from existing methodological recommendations are explained and justified.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
10.4	The agency cooperates with the scientific community to discuss methodology, information technology (IT) and innovation, to improve methodology and the effectiveness of the methods implemented, and to promote better tools.
10.5	Procedures are in place for ensuring that the agency recruits appropriately qualified staff from the relevant academic disciplines.
10.6	Training and development programmes are in place for ensuring that continuous vocational training can be undertaken by the staff.
10.7	The methodologies of surveys and the use of administrative data are evaluated periodically to guarantee their continuing suitability for producing high quality statistical outputs.
10.8	A systematic approach is in place for updating survey frame(s).
10.9	When administrative data are used, it is verified that the population is consistent with the statistical output requirements, that the classifications and underlying concepts are appropriate, and that the administrative data are complete and up to date.
10.10	Assessments are undertaken to determine: the adequacy of the coverage of the target population; the sampling error when sampling is being used; non-response rates or percentages of estimates imputed; or any other serious accuracy or consistency problems with the collection results.
10.11	Data capture and data collection instruments are tested and adjusted (if required and possible) to ensure that the set of questions asked is sufficient to achieve the aims of the survey.
10.12	Assessments are undertaken to determine if there were any problematic aspects of the questionnaire design and its implementation.
10.13	Procedures are in place for the agency to review the methodology used by an independent body, and to advise the independent body on the methodology to be used.
10.14	Management processes are in place for allowing the senior management of the agency to be assured that sound methodological approaches have been adopted in producing the statistical outputs.
10.15	Management information is available to monitor and manage various aspects of the collection; such information might include regular reporting and analysis of response rates and completion rates; monitoring refusal and conversion rates; monitoring interviewer and respondent feedback; monitoring of edit failure rates and progress of corrective actions; monitoring the results of quality control procedures during collection and processing; monitoring of expenditures against progress, etc.
10.16	Sampling and estimation options and their impacts (on accuracy, timeliness, cost, respondent

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	burden, data comparability over time and across programmes, etc.) are considered.
10.17	A sound methodology that has been developed for imputation based on scientific principles is in place..
10.18*	There has been follow up with users to seek their views on the fitness of the statistical outputs for the purposes for which the data will be used.
	VSQF 11. Cost-effectiveness is achieved
11.1	Procedures or guidelines are in place for assuring cost-effectiveness and optimal use of resources.;
11.2	The processes used for the development, collection, compilation and production of statistics are well documented and regularly reviewed to assess their efficiency and effectiveness.
11.3	The agency promotes and implements standardized solutions that increase effectiveness and efficiency.
11.4	The programmes share and re-use existing data, solutions to problems and statistical and data processing tools and methods to increase efficiency and savings.
11.5	The agency's use of resources is monitored both by internal and independent external mechanisms.
11.6	The costs of producing the statistics at each stage of statistics production (survey paradata) are accurately assessed to evaluate the effectiveness of each stage and are well documented.
11.7	Before undertaking a new data collection, the use of alternative sources of data, such as existing survey data and administrative data that are available (when possible and appropriate) is explicitly considered.
11.8*	Proactive efforts are made to improve the statistical potential of administrative data and to limit recourse to direct surveys.
11.9	The use of sample surveys instead of censuses when appropriate and possible is explicitly considered.
11.10	Review processes are in place for assessing whether each programme continuously operates in the most cost-effective way to meet its stated requirements; the results of the reviews are documented.
11.11	The productivity potential of information and communications technology is optimized for data collection, processing and dissemination, with routine clerical operations (e.g. data capture, coding, validation, etc.) and automated wherever possible.
11.12	There is a clear and documented justification for each specific programme, including a cost-effectiveness assessment

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	VSQF 12. Implementation is sound
12.1	Appropriate implementation instruments are in place, including resource and material plans, the supervisory structure, attainable schedules, operations, procedures and checks, training manuals and training programmes, the publicity surrounding the collection, etc.
12.2*	Adequate quality control and quality assurance measures are in place at all stages of collection and processing.
12.3*	The statistical activity is properly communicated and advertised in order to increase awareness and trust among respondents.
12.4	The list of respondents' contact information is regularly updated.
12.5	The data collection process is designed in such a way that the ethnicity and language of respondents is taken into consideration before the data collection instruments are developed, and when the staff (especially the interviewers) are being selected and trained.
12.6	The data collection instruments (mainly questionnaires) are designed to minimize coding errors taking account of cost and time.
12.7	Data capture and data collection instruments are tested and adjusted (if required and possible) prior to the actual field operation or data collection process.
12.8*	The data capture mode is designed to improve accuracy and timeliness through integrating, to the extent possible, data capture with data collection or automated data capture rather than the traditional manual mode of capture.
12.9*	Adequate measures are in place for encouraging accurate response, following up on non-response, and dealing with missing data.
12.10	Edit rules exist during the data capture exercise in order to validate the data entered and allow for error corrections and quality improvement.
12.11	Data editing is repeated after each stage of data processing, including imputation.
12.12	When coding is done through an automated process, appropriate staff are assigned to handle uncoded cases.
12.13*	There are appropriate arrangements in place for internal and external consistency checking of data, with corresponding correction or adjustment strategies.
12.14	The format of the database is compatible with statistical software that is usually used for

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	compilation and data analysis.
12.15	Follow-up activities are in place for collecting support information (such as the size of households or establishments, dwelling status, etc.) to be used, if necessary, for non-response adjustment.
12.16	Follow-up procedures are in place for filling data gaps and handling inconsistencies.
12.17*	Activity and cost indicators (survey paradata) are produced and properly documented in order to be used in monitoring and managing the current and future collection processes.
12.18*	Appropriate arrangements are inplace for post-collection evaluation to take stock of outcomes as compared with design plans, to draw out any issues upon which users should be informed, and to provide feedback for consideration in the planning for future such collections.
	VSQF 13. Respondent burden is managed
13.1	The agency has a respondent relations or respondent burden management programme.
13.2	Procedures are in place for assessing the necessity to undertake a new statistical survey.
13.3	The data collection process is designed to reduce or distribute the respondent burden while increasing response rates, in particular by applying sound methods and different modes of data collection (for instance a telephone-based interview in a sample survey to complement a self-enumeration process and reduce non-response error).
13.4	Surveys apply statistical standards to make it easier to respond to them.
13.5	Standard practices for responding to respondents' requests and complaints are defined and followed up on.
13.6*	A provider charter exists that spells out the rights and responsibilities of respondents.
13.7*	Assessments are undertaken to ascertain if there were problematic aspects of the questionnaire design and its implementation.
	D. Statistical outputs **VSQF 14. Statistical outputs are relevant**
14.1**	Data completeness – rate: The ratio of the number of data cells provided to the number of data cells required.
14.2	The laws or regulations requiring the agency to consult users and compile particular statistics are understood and made known publicly.
14.3	Data on users and their utilization of the statistical products are analysed (e.g by evaluating downloads, subscriptions to reports, requests for information, etc.) to support priority setting

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	and user consultation.
14.4	Strategic goals and work programme plans reflect users' priority needs, and are made known publicly.
14.5	The users are provided information or metadata that allow them to be aware of possible divergences between the agency's measured statistical concepts and their own concepts of interest.
14.6	The objectives of the survey are set out in written form specifying the population of interest; geographic level of detail required; intended reference period; frequency and timeliness; main data items/outputs required; the particular type of analysis intended to be conducted on the data; and other necessary quality attributes that the statistics need to meet so as to be consistent with users' expectations of fitness for purpose.
14.7	Procedures are in place for carrying out post-collection evaluations to: take stock of outcomes as compared with design plans and user needs; highlight any issues upon which users should be informed; and to provide users ways to give feedback that can be taken into account in the planning for future collections.
14.8	Action plans are implemented to improve relevance and meet emerging needs.
14.9*	Procedures are in place to consult users about the content of the statistical work programme.
14.10*	Periodic reviews are undertaken of the continuing relevance and cost-effectiveness of individual statistical programmes/domains.
14.11*	Mechanisms are in place to identify users'needs and to describe how the data relate to their needs.
14.12*	The users and uses to which they put the statistical products are known and regularly tracked.
14.13*	Procedures are in place to gather information on potential needs of users of statistics.
14.14*	User satisfaction is regularly measured and systematically followed up
14.15*	The statistical dissemination products are aligned with users' needs.
14.16*	Users are informed about known gaps between the measured statistical concept and the user's concept of interest.
	VSQF 15. Statistical outputs are accurate and reliable
15.1	Statistical procedures (e.g. compilation, data adjustments and transformations, statistical analysis, etc.) employ internationally recognized statistical techniques.
15.2	Source data, intermediate results and statistical outputs are regularly assessed and validated.
15.3	Systems for assessing and validating source data, intermeduiate results and statistical outputsare developed and managed.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
15.4	Procedures and guidelines for data quality assessment are in place and address accuracy issues.
15.5	Source data and statistical outputs are compared with other sources of information in order to ensure validity.
15.6	Sampling and non-sampling errors are measured, evaluated and systematically documented.
15.7**	Sampling error – indicators: Coeficient of variation, Confidence interval
15.8**	Over-coverage – rate: The rate of over-coverage is the proportion of units accessible via the frame that do not belong to the target population (are out-of-scope).
15.9**	Common units – proportion: The proportion of units covered by both the survey and the administrative sources in relation to the total number of units in the survey.
15.10**	Unit non-response – rate: The ratio of the number of units with no information or not usable information (non-response, etc.) to the total number of in-scope (eligible) units.
15.11**	Item non-response – rate: The item non-response rate for a given variable is defined as the (weighted) ratio between in-scope units that have not responded and in-scope units that are required to respond to the particular item.
15.12**	Data revision - average size: The average over a time period of the revisions of a key indicator. The “revision” is defined as the difference between a later and an earlier estimate of the key item.
15.13**	Imputation – rate: The proportion of units for which a value has been imputed due to the original value being a missing, implausible, or inconsistent value in comparison with the number of units with a value for this variable.
15.14	Procedures and guidelines are available on how to measure and reduce errors.
15.15	A quality assurance plan is in place that describes the quality control actions to prevent, monitor and evaluate the errors.
15.16	The sampling and non-sampling errors are analysed over time and improvement actions are taken as a result.
15.17	Methods and tools for preventing and reducing sampling and non-sampling errors are in place.
15.18	A revision policy, which is made known publicly, is in place and states the principles and procedures, the timing of revisions, their reasons, and the nature of the revisions
15.19	An analysis of revisions is performed and used to improve the statistical process.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	VSQF 16. Statistical outputs are timely and punctual
16.1	A release policy is defined and published; it distinguishes between different kinds of statistical outputs (press releases, statistics specific reports or tables, general publications, etc.) and their corresponding release procedures.
16.2	The timeliness of the agency's statistics comply with IMF data dissemination standards or other relevant timeliness targets.
16.3	A published release calendar announces in advance the dates, and times if applicable, that statistics (at least the major ones) are to be released.
16.4	Quality indicators on timeliness and punctuality are regularly calculated, monitored and published.
16.5**	Time lag - first results: The number of days (or weeks or months) from the last day of the reference period to the day of publication of first results.
16.6**	Time lag - final results: The number of days (or weeks or months) from the last day of the reference period to the day of publication of complete and final results.
16.7**	Punctuality - delivery and publication: The time lag between the delivery/release date of data and the target date for delivery/release as agreed for delivery or announced in an official release calendar, laid down by Regulations or previously agreed among partners.
16.8	Procedures are in place for regularly monitoring and evaluating the punctuality of every release according to the information in the release calendar.
16.9	Divergences from pre-announced times are published in advance; a new release time is then announced with explanations on the reasons for the delays.
16.10	The possibility and usefulness of releasing preliminary data is regularly considered, while at the same time taking into account the data's accuracy.
16.11	Procedures are in place for following-up to ensure timely receipt of data.
16.12	Action plans are developed and followed if the timeliness targets are not met.
	VSQF 17. Statistical outputs are accessible and clear
17.1**	Data tables – consultations: Number of consultations of data tables within a statistical domain for a given time period. By "number of consultations" it is meant number of data tables views, where multiples views in a single session count only once.
17.2**	Metadata – consultations: Number of metadata consultations within a statistical domain for a given time period. By "number of consultations" it is meant the number of times a metadata file is viewed.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
17.3**	Metadata completeness – rate: The ratio of the number of metadata elements provided to the total number of metadata elements applicable
17.4	A dissemination policy for defining dissemination practices and a clear pricing policy (if applicable) governing the dissemination, are in place and are made known publicly.
17.5	Statistics and the corresponding metadata are presented in a form that facilitates proper interpretation and meaningful comparisons and are archived.
17.6	Guidelines are in place for ensuring that authors of statistical publications/databases are aware of the appropriate content and preferred formats and style (layout and clarity of text, tables, charts, etc.) of the agency's outputs.
17.7	Staff training and development programmes are in place on writing about statistics (for example, in press releases, explanatory texts, publication highlights, etc.).
17.8	Statistics are presented in a clear and understandable manner.
17.9	The explanatory texts that accompany the data are reviewed for clarity and readability.
17.10	Meaningful comparisons are included in the publications when appropriate.
17.11	Different levels of metadata detail are made available to users to meet their requirements.
17.12	Policies are in place for archiving statistics and metadata.
17.13	Modern information and communication technology (ICT) is mainly used for disseminating statistics (i.e. statistical databases, the agency's website, electronic releases and data made available on request, etc.), and traditional hard copy and other services are provided when appropriate, to ensure that users have appropriate access to the statistics they need.
17.14	Catalogues of publications and other services are made available.
17.15	There is a well-publicized information or user support service, call centre or hotline available for handling requests for data and for providing answers to questions about statistical results, metadata, etc.
17.16	The statistics and metadata are disseminated using tools and formats that facilitate re-dissemination by the media or other users by means of, for example, press releases, readymade tables, charts, maps connected to statistics, etc.
17.17	The public is informed about the agency's data outputs and services, and is made aware that custom-designed outputs, statistics not routinely disseminated and longer time series can be provided on request when feasible, and they are instructed how the data can be ordered. These custom-designed outputs are made public where possible.

VSQF number	Elements to be Assured and Quality Indicators in VSQF
17.18	Mechanisms are in place for enabling users to generate their own tables in formats (xls, html, etc.) most appropriate to them.
17.19	Access to microdata is allowed for research purposes, subject to specific rules and protocols on statistical confidentiality that are made known publicly and posted on the agency's website.
17.20	The agency consults users on a regular basis to find out about the formats of dissemination that they most prefer.
	VSQF 18. Statistical outputs are coherent and comparable
18.1**	Asymmetry for mirror flows statistics – coefficient: The coefficient of difference or the absolute difference of inbound and outbound flows between a pair of countries divided by the average of these two values.
18.2	Procedures or guidelines are in place for ensuring and monitoring internal coherence (e.g. observance of arithmetic and accounting identities) and consistency.
18.3	Procedures or guidelines are in place for ensuring and monitoring cross-sectoral coherence and consistency
18.4**	Length of comparable time series: Number of reference periods in time series from last break.
18.5	Changes in methods are clearly identified and measured to facilitate reconciliation.
18.6	Breaks in the series are explained and the methods for ensuring reconciliation over a period of time are made known publicly.
18.7	Effects of changes in methodologies on final estimates are assessed and appropriate information is provided to users.
18.8	Statistics are compiled on the basis of common standards with respect to scope, definitions, units and classifications in the different surveys.
18.9	A common repository (of concepts, definitions, units, classifications, etc.) or other mechanisms for promoting coherence and consistency are in place for consulting (especially when designing a new individual statistical programme/domain).
18.10	Quality reports include a section on the assessment of internal consistency and comparability over time and with other subject matter related statistics.
18.11	It is possible to compare statistics derived from different sources or with different periodicities

VSQF number	Elements to be Assured and Quality Indicators in VSQF
	(e.g. monthly, quarterly and yearly); differences are explained and reconciled.
18.12	Cooperation, the exchange of knowledge, and the understanding of the interdependencies among the individual statistical programmes/domains is promoted.
18.13	Statistical outputs are compared with other statistical or administrative sources that provide the same or similar information on the same subject matter, and divergences are identified and explained to users.
	VSQF 19. Adequate metadata is made available
19.1	Procedures or guidelines are in place for metadata maintenance and dissemination.
19.2	Metadata are documented according to standards.
19.3	A glossary of statistical concepts is made known publicly.
19.4	Staff training and development programmes are in place on metadata management and related information and documentation systems.
19.5	There is a systematic way for archiving metadata which also ensures that they are accessible for reuse in the future.

Annex V:Questionnaire on the Statistical System and the Institutional Environment

Note: Questions 1.1-1.4 are to be answered by the General Statistics Office (GSO); all other questions are to be answered by GSO and Ministries and Agencies in respect of their own statistical operations and environment.

Expected assessment frequency is every year for the first 3 years in order to gain initial information as a baseline and after that the frequency will be decided depending on information demands, perhaps every 3-5 years.

Where the word "agency" is used it means the GSO or a ministry or government agency such as the People's Supreme Court, the People's Supreme Prosecutorate, and others, depending on the context.

VSQF number	Questions
	A. Statistical System **VSQF1. The Vietnam Statistical System is coordinated**
1.1	Does a law or some other formal provision establish the Vietnam Statistical System (VSS)? 1. Yes 2. No If "Yes", please name the law and article or other formal provision: ……
1.2	Are VSS members specified in the law or other formal provision establishing the VSS? 1. Yes 2. No If "Yes", please name the article of the law or other formal provision and list the names of the members who are specified: ……
1.3	Is the role of the General Statistics Office (GSO) legislated (established by law) or established by some other formal provision?

VSQF number	Questions
	1. Yes 2. No If "Yes", please name the law and article or other formal provision: ……
1.4	Is the GSO designated as coordinating agency by the law or other formal provision establishing the VSS? 1. Yes 2. No → If "Yes", please name the article of the law or other formal provision: ……
1.5	a. In practice, does the GSO play a leading role in coordinating the VSS? 1. Yes 2. No → If "Yes", please list actions that have been taken by the GSO in playing this leading role: …….. b. Do the VSS members recognize/accept that the GSO has the leading role in coordinating the VSS? 1. Yes 2. No
1.6	a. Does the GSO set the methodological guidelines for the production of official statistics? 1. Yes 2. No If "Yes", please list the guidelines that have been set: …… b. Does the GSO promote methodological soundness and consistency throughout the VSS? 1. Yes 2. No If "Yes", please list promotional actions that have been taken by the GSO:

VSQF number	Questions
	……
1.7	a. Does the GSO promote/facilitate the harmonisation of statistical information among the members of the VSS? 1 Yes 2. No If "Yes", please list the actions that the GSO takes to promote/facilitate the harmonisation of statistical information: …… b. Does the GSO promote/facilitate the avoidance of duplication of work among the members of the VSS? 1 Yes 2. No If "Yes", please list the actions that the GSO takes to promote/facilitate the avoidance of duplication of work: …… c. Does the GSO promote/facilitate the implementation of standards throughout the System? 1. Yes 2. No If "Yes", please list the actions that the GSO takes to promote/facilitate the implementation of standards: ……. d. Does the GSO promote/facilitate the identification of good statistical practices among the members of the VSS? 1. Yes 2. No If "Yes", please list the actions that the GSO takes to promote/facilitate the identification of good statistical practices:

VSQF number	Questions
	…….. e. Does the GSO promote/facilitate the implementation of good statistical practices among the members of the VSS? 1. Yes 2. No If "Yes", please list the actions that the GSO takes to promote/facilitate the implementation of good statistical practices: …….
1.8	a. Are procedures in place for facilitating cooperation among the members of the VSS in order to improve the performance of the System? 1. Yes 2. No If "Yes", please list the procedures: …… b. Are procedures in place for facilitating cooperation among the members of the VSS in order to facilitate agreement among the VSS members on priorities for the production of statistics? 1. Yes 2. No If "Yes", please list the procedures: …… c. Are procedures in place for facilitating cooperation among the members of the VSS in order to exchange data between GSO and other members of the VSS according to established guidelines? 1. Yes 2. No If "Yes", please list the procedures: ……

VSQF number	Questions
	d. Are procedures in place for facilitating cooperation among the members of the VSS in order to share technical knowledge? 1. Yes 2. No If "Yes", please list the procedures: ……
	VSQF 2. Effective relationships are maintained with stakeholders (government, users, providers, media, development partners,)
2.1	Have the key stakeholders been identified by the agency? 1. Yes 2. No If "Yes", please name the key stakeholders which have been identified: ……..
2.2	a. Are the relationships between the agency and stakeholders discussed or defined and are the rights, responsibilities and obligations understood by both sides? 1. Yes 2. No If "Yes", please specify the modality of discussions and cite any documentation concerning defining the relationships: ……..
2.3	a. Does the agency have a suitably composed body that advises it in setting overall statistical priorities? 1. Yes 2. No If "Yes", please name the body and describe its composition: ……

VSQF number	Questions
2.4	Are procedures/committees in place for various forms of interaction or consultations between the agency and users, at all appropriate stages of the statistical life cycle ((Specify needs, Prepare for information collection, Collect, Process, Analyse and document, Disseminate and Store information) about stakeholders' current and emerging needs, priorities and concerns and for keeping them informed about actions taken to address them? 1.Yes 2. No If "Yes", please describe the committees and procedures: .....
2.5	a. Do consultations with provider organizations (such as government departments, businesses, industry associations, administrative agencies, etc.) take place regularly? 1. Yes 2. No If "Yes", please describe how the consultations are conducted: …….. b. What is the frequency of the consultations? …… c. Number of months since the latest consultation took place: ……month(s)
2.6	a. Does the agency have any agreements in place (and which are effective) to access records maintained by any government department, corporation, business or organization that could be used for statistical purposes, including describing the data and timelines or schedules for providing or accessing data? 1. Yes 2. No If "Yes", please list the entities with which you have agreements:

VSQF number	Questions
	…… and indicate if the agreements specify: 1. Data description 1. Yes 2. No 2. Delivery/access schedule 1. Yes 2. No 3. Other……..
2.7	a. Does the agency have in place any processes to assure statistical confidentiality of individuals, businesses or other entities in the administrative records, and to ensure that the information will be used for statistical purposes only? 1. Yes 2. No If "Yes", please describe the processes: ……
2.8	a. Does the agency have a strategy to maintain media relationships? 1. Yes 2. No If "Yes, please cite documents or describe the strategy: …… b. Does the strategy include: 1. Supporting the media role in disseminating statistics to a large audience? 1. Yes 2. No 2. Maintaining regular contact with the media? 1. Yes 2. No

VSQF number	Questions
	3. Other……
2.9	a. Does the agency have well-documented work plans and budgets that can be shared with the development partners to ensure the mutual understanding of technical and funding requirements? 1. Yes 2. No If "Yes", are they in practice shared with the development partners, and in what way? ……
	VSQF 3. Statistical standards are applied
3.1	Does the agency work towards the review, development, promoting and implementation of statistical standards? 1. Yes 2. No If "Yes", please describe the activities reflecting this fact: ……..
3.2	Is there a person or unit in the agency that leads and supports programmes in the agency to develop/update statistical standards? 1. Yes 2. No If "Yes", does the person or unit have the appropriate level of seniority? 1. Yes 2. No If Yes, what is the name of the organizational unit and the level of the responsible person: ……
3.3	Are users and data providers, along with the agency, involved in the process for originating, developing and approving statistical standards? 1. Yes 2. No

VSQF number	Questions
	If “Yes”, how are they involved? .....
3.4	Are all relevant staff of the agency, as well as potential data users and the public made aware of statistical standards and any changes made to them? 1. Yes 2. No If “Yes”, how are they made aware of statistical standards and any changes made to them? ……
3.5	a. Do statistical standards include statements about how compulsory their application is and whether they conform to corresponding international or national standards? 1. Yes 2. No If “Yes”, please cite the sections of statistical standards containing the statements: …… b. Are divergences from the corresponding international or national statistical standards are documented and explained? 1. Yes 2. No If “Yes”, please cite the documents: .....
3.6	Are detailed concordances to corresponding international and national statistical standards available and provided? 1. Yes 2. No If “Yes”, please cite documents or describe the detailed concordances: .....
3.7	Are detailed concordances to previous statistical standards available and are provided?

VSQF number	Questions
	1. Yes 2. No If "Yes", please cite the documents or describe the detailed concordances: .....
3.8	Do statistical programmes of the agency collect and retain information at the fundamental or most detailed level of each standard classification in order to provide maximum flexibility in aggregation and facilitate retrospective reclassification as needs change? 1. Yes 2. No What level of detail is retained? .....
3.9	Are the statistical standards regularly reviewed, and revised, if necessary, to ensure their quality, notably their relevance, coherence, clarity, etc? 1. Yes 2. No If "Yes", please list the standards that have been revised and indicate the frequency of the reviews and revisions: .....
3.10	Are statistical products accompanied by (or do statistical products make explicit reference to) readily accessible documentation on the statistical standards used? 1. Yes 2. No If "Yes", please cite the documentation: .....
3.11	Are periodic reports to senior management of the agency prepared on the extent to which statistical standards are used by the statistical programmes in the agency? 1. Yes 2. No

VSQF number	Questions
	If "Yes", please cite the reports: .....
	B. Institutional environment **VSQF 4. Professional independence is assured**
4.1	Does the Vietnam Statistical Law or some other formal provision specify that the agency is obligated to develop, produce and disseminate statistics without interference from other government agencies or policy, regulatory or administrative departments and bodies, the private sector or any other persons or entities which may be considered as potential conflicts of interest? 1. Yes 2. No If "Yes", please name the law and article or other formal provision: ……
4.2	Are the rules applied for appointing and dismissing the head of the agency based on professional competence, and are free from political considerations? 1. Yes 2. No If "Yes", please cite the rules: ……
4.3	Are there procedures in place for ensuring that the head of the agency is of the highest professional calibre and has sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies? 1. Yes 2. No If "Yes", please describe the procedures: ……
4.4	Does the head of the agency have exclusive and full control over the decisions on statistical

VSQF number	Questions
	methods, standards and procedures, and on the content and timing of statistical releases? 1. Yes 2. No If "No", describe what control the head of agency has and indicate who has final say on these matters: ……..
4.5	Is the head of agency responsible for ensuring that statistics are developed, produced and disseminated in an independent manner? 1. Yes 2. No If "Yes", please cite the legal or other provisions specifying this responsibility: ……
4.6	Are there procedures in place for regularly publishing the statistical work programmes and for issuing periodic reports to describe progress made? 1. Yes 2. No If "Yes", please describe the procedures: ……
4.7	Are there procedures in place for ensuring that statistical releases are clearly distinguished from political/policy statements and are issued separately from them? 1. Yes 2. No If "Yes", please describe the procedures: ……
4.8	Are there a formal policy or well-established customs for the statistical agency to comment publicly on statistical issues, criticisms, negative media reports, misinterpretations and misuses of official statistics?

VSQF number	Questions
	1. Yes 2. No If "Yes", please cite documents or describe the formal policy or well-established customs and cite any examples of such comments: ……
4.9	a. Is the organizational structure for statistical work of the ministry or agency supportive of statistical activities and professional independence of the work? 1. Yes 2. No b. If Yes, please explain what makes the structure supportive: ……
	VSQF 5. Impartiality and objectivity are practiced
5.1	Is there a law or formal provision in force which specifies that the agency should develop, produce and disseminate statistics following professional standards? 1. Yes 2. No If "Yes", please cite the law and article or formal provision: .....
5.2	Are there mechanisms in place such as a declaration or code of conduct or code of ethics which governs statistical practices (e.g. Code of Practice, declaration on professional ethics, and/or other guidelines, etc.) for assuring that professional standards are followed and impartiality and objectivity are achieved, and their implementation is followed up? 1. Yes 2. No If "Yes", please cite the documents or describe the mechanisms: .....
5.3	Are sources, concepts, methods, processes and data dissemination paths chosen and statistics produced on an objective basis which means that the work is determined only by

VSQF number	Questions
	statistical considerations taking account of national and international principles and best practices? 1. Yes 2. No If "Yes", please cite any documents or describe relevant practices: .....
5.4	a. Are major changes in the methodologies and data revisions clearly explained to users? 1. Yes 2. No If "Yes", cite documents or explain how are they explained to users: ..... b. Is advance notice of major revisions and changes in methodology, source data and statistical techniques given and explained to users? 1. Yes 2. No If "Yes", cite documents or describe how is it given and explained to users: .....
5.5	Is information made available to all users at the same time? 1. Yes 2. No If "Yes", please describe the release process that achieves this: ……
5.6	Are statistical releases and statements made, for example in press conferences, objective and non-partisan? If "Yes", please cite examples: ……

VSQF number	Questions
5.7	a. Are errors that are detected in published data corrected as soon as possible? 1. Yes 2. No If "Yes", please cite or describe examples: …… b. Are users informed about those errors and their causes? 1. Yes 2. No If "Yes", please cite or describe examples: ……
5.8	Is there a revision policy, which is made known publicly, and states the principles and procedures, the timing of revisions, their reasons, and the nature of the revisions? 1. Yes 2. No If "Yes", please cite or describe the revision policy: ……
5.9	a. Do guidelines for assuring impartiality and objectivity exist? 1. Yes 2. No If "Yes", please cite or describe the guidelines: …… b.Is the implementation of the guidelines followed up? 1. Yes 2. No If "Yes", how is the implementation followed up? ……
5.10	a. Does a policy for data dissemination exist?

VSQF number	Questions
	1.Yes 2. No If “Yes”, cite or describe the policy: …… and, is the policy made publicly known? 1.Yes 2. No If Yes, how is it made publicly known? …….
5.11	b. If access to statistics prior to their release is allowed, is it controlled and made known publicly? 1. Yes 2. No c. If “Yes”, please describe how it is controlled and made known publicly: d. ……
5.12	e. Is there a published release calendar in place in which dissemination dates and times are pre-announced (at least major ones)? f. 1. Yes 2. No g. If “Yes”, please cite the document or describe the release calendar: h. ……
5.13	i. Are divergences from pre-announced times published in advance? j. 1. Yes 2. No k. If “Yes”, how/where are they announced? l. …… Is a new release time then announced with explanations on the reasons for the delays?

VSQF number	Questions
	m. Yes 2. No n. If yes, please describe some examples: o. ……..
5.14	p. Are procedures in place to ensure that statistical releases are clearly distinguished from political/policystatements and issued separately from them? q. 1. Yes 2. No r. If "Yes", please describe the procedures: s. ……
	VSQF 6. Policies and practices are transparent
6.1	If access to statistics prior to their release is allowed, is it controlled and made known publicly? 1. Yes 2. No If "Yes", please describe how it is controlled and made known publicly: ……
6.2	Are respondents provided with information about the legal basis for a survey, its purpose (including the expected uses and users of the statistics to be produced from it), the collection details, its mandatory or voluntary nature, the confidentiality protection, and publication of results, etc? 1. Yes 2. No If "Yes", please cite documents or explain how this is done: ……
6.3	Are users made aware that procedures to eliminate the risk of identification of individual respondents have been implemented, and that this could lead to a loss of information?

VSQF number	Questions
	1. Yes 2. No If "Yes", please describe how users are made aware? ……
6.4	Are products of the statistical agency clearly identified as such? 1. Yes .2. No If "Yes", please describe how this is achieved: ……
6.5	Is advance notice of major revisions and changes in methodology, source data, and statistical techniques given and explained to users? 1. Yes 2. No If "Yes", please cite documents or describe how notice is given and revisions and changes explained to users? ……
	VSQF 7. Statistical confidentiality and security are guaranteed
7.1	Does the Vietnam Statistical Law or some other formal provision or policy (e.g. confidentiality policy) guarantee the proper management, with regard to privacy and securityof information received from data providers? 1. Yes .2. No If "Yes", please cite the law and article or other formal provision or policy: …… b. Are national privacy laws respected? 1. Yes 2. No If Yes, please name the national privacy laws and provisions that are respected:

VSQF number	Questions
	……..
7.2	Where the statistics law provides for exceptions to the general confidentiality provisions, are clear policies and procedures in place and are made known publicly to operationalize the exceptions? 1. Yes 2. No If "Yes", please cite the articles of the law and cite or describe the policies and procedures: ……
7.3	Do the staff of the agency sign legal confidentiality agreements or declarations covering their obligations? 1. Yes 2. No If "Yes", please cite the agreement or describe it : ……
7.4	Are there appropriate penalties or sanctions, which have been made known publicly, for statistical staff or other personnel (e.g. external parties who undertake work on behalf of the statistical agency) who have been found guilty of activities leading to the release of confidential data? 1. Yes 2. No If "Yes", please cite the legal provisions for those penalties or sanctions and describe how they are made publicly known: ……
7.5	Does a formal data dissemination policy set out how statistics are to be disseminated to users and under what circumstances certain microdata (i.e. statistical information relating to individual respondents) may be made available? 1. Yes 2. No

VSQF number	Questions
	If “Yes”, please cite the document. ……
7.6	Are mechanisms in place (e.g. appropriate codes of practice, standards, guidelines, handbooks and/or other instructions) to specify procedures to follow for ensuring that statistical data about individuals, businesses, other entities in administrative data, etc. remain confidential, and are only released to users in line with statistical laws and/or data dissemination policies? 1. Yes 2. No If “Yes”, please describe the mechanisms: ……
7.7	Are procedures in place, documented, made public and applied in line with the data dissemination policy for ensuring that individual respondents cannot be identified from the public release of statistics, including microdata that are to be disseminated ? 1. Yes 2. No If “Yes”, please describe the procedures: ……
7.8	Are appropriate physical and information technology security procedures in place for ensuring the protection of statistical information relating to individual respondents? 1. Yes 2. No If “Yes”, please describe the procedures: …….
	VSQF 8. Quality commitment is in place
8.1	Is there an agency policy or message about its commitment to quality in statistics? 1. Yes 2. No

VSQF number	Questions
	If Yes, please cite or describe the policy: …… If "Yes", is the policy or message made known publicly, and does it clearly convey and promote the shared concern for quality of all of the staff, and include information about trade-offs affecting the statistical work programme and product quality? 1. Yes 2. No If yes how is the policy made publicly known? ……
8.2	Is a culture of continuous quality improvement promoted which fosters the documentation of methodology and processes, the identification and exchange of good statistical practices, and the monitoring, assessment and improvement of the quality of statistical operations and products? 1. Yes 2. No If "Yes", please describe how the culture of continuous quality improvement is promoted: ……
8.3	Has a specific person or persons been assigned with explicit responsibility for the management of statistical quality within the agency? 1. Yes 2. No If "Yes", please specify the title of that person and quote the job description: ……
8.4	a. Are procedures or guidelines in place for implementing quality management? 1. Yes 2. No If "Yes", do the procedures or guidelines include the following? (Please circle all that apply) • describe the entire statistical process and identify relevant documentation for each

VSQF number	Questions
	stage of production; • describe the methods for monitoring the quality of each stage of the statistical production process; • identify the indicators (quality measures) for evaluating the quality of the main stages of production • other(please specify): .....
8.5	Are the agency's quality guidelines made available to users, at least in a summary version? 1. Yes 2. No If "Yes", cite the document and describe how it is made available to users: …….
8.6	Are procedures in place for ensuring that the required documentation on quality is regularly updated? 1. Yes 2. No If "Yes", please describe the procedures: …….
8.7	a. Are staff training and development programmes available to relevant staff on a regular basis and ensure that the staff is aware of the agency's quality policy and has an understanding as to how quality may be achieved? 1. Yes 2. No If "Yes", please list and describe the programmes: ……
8.8	Does the agency's management ensure that compiling areas or subject matter units have access to necessary tools and specialized methodological and technical support as needed to help implement their strategies for improving data development, production and

VSQF number	Questions
	dissemination? 1. Yes 2. No If "Yes", please describe how the management ensures this practice: ……
8.9	Is a quality assurance plan or similar mechanism in place that describes the working standards, the formal obligations (such as laws and internal rules) and quality control actions to prevent and monitor errors, to evaluate quality indicators and to control different points at each stage of the statistical process? 1. Yes 2. No If "Yes", please cite the document/plan or describe the quality assurance plan or similar mechanism: …….
8.10	Are quality indicators and/or quality reports prepared and made known publicly to the data users and producers to help them assess the quality of the released data ? 1. Yes 2. No If "Yes", please cite the documentation and describe how it is made known publicly to the data users and producers: ……..
8.11	a. Are procedures in place for conducting periodic quality reviews (such as audits and self-assessments) of key products to assess adherence to internal guidelines and international standards? 1. Yes 2. No If "Yes", please describe the procedures: ……

VSQF number	Questions
	b. Is top management informed of the results in order to define improvement actions? 1. Yes 2. No If Yes, how is top management informed and give examples of top management actions in response? …… c. Are some of the quality reviews conducted by external experts that are called in by the agency? 1. 1. Yes 2. No If Yes, please give examples: ……..
8.12	Are mechanisms in place for regularly collecting and following up on users' reactions and feedback, for example, user satisfaction surveys or other indirect methods which are implemented regularly, and their results are made known publicly ? 1. Yes 2. No If "Yes", please list and describe the mechanisms and give examples of any follow-ups: ……
8.13	Are metadata and quality indicators or measures prepared and provided to users to help them assess the quality of the released data? 1. Yes 2. No If "Yes", please cite the documents of metadata and quality indicators or measures: …… And, describe how they are provided to users: ……

VSQF number	Questions
	VSQF 9. Adequate resources are made available
9.1	a. Are the financial resources sufficient to implement the statistical work programme? 1. Yes 2. No If "No", how does the lack of financial resources affects the statistical work programme? …… b. Are the human resources sufficient to implement the statistical work programme? 1. Yes 2. No If "No", how does the lack of human resources affect the statistical work programme? …… c. Are the technological resources (hardware, software, etc.) sufficient to implement the statistical work programme? 1. Yes 2. No If "No", how does the lack of technological resources affects the statistical work programme? ……
9.2	Is resource allocation regularly reviewed? 1. Yes 2. No If "Yes", what is the frequency of review and what is covered by the review? …… Please give examples of actions taken as a result of review: ……

Annex VI:Questionnaire on Statistical Processes and Outputs

The Questionnaire allows an assessment to be made of the quality of the statistical processes in a domain/statistical data collection and the statistical outputs resulting from those processes according to elements 10-19 of the Vietnam Statistical Quality Framework (VSQF 10 to VSQF 19) as follows:

C. Statistical processes

10 Sound methodologies are applied

11 Cost-effectiveness is achieved

12 Implementation is sound

13 Respondent burden is managed

D. Statistical outputs

14 Statistical outputs are relevant

15Statistical outputs are accurate and reliable

16 Statistical outputs are timely and punctual

17 Statistical outputs are accessible and clear

18 Statistical outputs are coherent and comparable

19 Adequate metadata is made available.

Questions are to be answered by GSO and Ministries and Agencies in respect of their own statistical processes and outputs.

It is expected that major domains/statistical collections would be covered once over a period of 3-5 years and then repeated over a 3-5 year cycle or earlier if any major change were to be introduced into a statistical collection (adjusted for the specific periodicity of some surveys/censuses).

Where the word “agency” is used it means the GSO or a ministry or government agency such as People's Supreme Court, the People's Supreme Prosecutorate, and others depending on the context.

VSQF No	Questions
	C. Statistical processes **VSQF 10. Sound methodologies are applied** [69]
10.1	1) Does the agency set the methodological guidelines for the production of official statistics and promote methodological soundness and consistency throughout the VSS? 1. YES ☐ 2. NO ☐ If YES, please list the guidelines that have been set: …… Please list the steps taken to promote methodological soundness and consistency throughout the VSS: ……
10.2	a. Is the overall methodological framework (concepts, definitions, classifications, basis of recording (if applicable), etc.) of the agency consistent with international standards, guidelines and good practices? 1. YES ☐ 2. NO ☐ If YES, please list the international standards, guidelines and good practices with which the framework is consistent: …… b. Are the concepts, definitions, classifications, basis of recording (if applicable), etc.) of the domain/statistical data collection consistent with international standards, guidelines and good practices?

[69] The following questions relate to the agency as a whole and not to a specific data collection:10..1, 2a, 3-6 and 10.13.

	1. YES ☐ 2. NO ☐ If yes, please cite the documentation or describe the consistencies ……
10.3	a. Are there procedures in place for ensuring that standard concepts, definitions and classifications are consistently applied? 1. YES ☐ 2. NO ☐ If YES, please list the procedures: …… b. Are divergences from existing methodological recommendations explained and justified? 1. YES ☐ 2. NO ☐ If YES, please list the documents containing the explanations and justifications: ……
10.4	Does the agency cooperate with the scientific community to discuss methodology, information technology (IT) and innovation, to improve methodology and the effectiveness of the methods implemented, and to promote better tools? 1. YES ☐ 2. NO ☐ If YES, please list the scientific institutions and issues discussed: ……
10.5	Are there procedures in place for ensuring that the agency recruits appropriately qualified staff from the relevant academic disciplines? 1. YES ☐ 2. NO ☐ If YES, please list the procedures: ……
10.6	Are there training and development programmes in place for ensuring that continuous

	vocational training can be undertaken by the staff? 1. YES ☐ 2. NO ☐ If YES, please list the training and development programmes: ……

10.7	a. Is the methodology of the survey evaluated periodically to guarantee its continuing suitability for producing high quality statistical outputs? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures of evaluating the methodology: …… b. Is the use of administrative data (if utilized) evaluated periodically to guarantee their continuing suitability for producing high quality statistical outputs? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures of evaluating the use of administrative data (if used) and list the administrative data which have been the subject of such evaluation ……

10.8	Is there a systematic approach in place for updating the survey frame(s) used? 1. YES ☐ 2. NO ☐ If YES, please describe the approach: ……..		
10.9	When administrative data are used, is it verified that:	YES	NO
	1. The population is consistent with the statistical	☐	☐

	output requirements: 2. The classifications and underlying concepts are appropriate 3. The administrative data are complete and up to date Please list the administrative data for which these have been done: ……..	☐ ☐	☐ ☐

10.10	Are assessments undertaken to determine:	Yes	No
	1. The adequacy of the coverage of the target population;	☐	☐
	2. The sampling error when sampling is being used	☐	☐
	3.Non-response rates;	☐	☐
	4.Percentages of estimates imputed;	☐	☐
	5.Any other serious accuracy or consistency problems with the collection results;	☐	☐

10.11	Are data capture and data collection instruments tested and adjusted (if required and possible) to ensure that the set of questions asked is sufficient to achieve the aims of the survey?	YES	NO
	1. Data capture instruments 2. Data collection instruments	☐ ☐	☐ ☐
10.12	Are assessments undertaken to determine if there were any problematic aspects of the questionnaire design and its implementation?	YES	NO

	1. Questionnaire design 2. Questionnaire implementation	☐ ☐	☐ ☐
10.13	Are there procedures in place for the agency to review the methodology used by an independent body, and to advise the independent body on the methodology to be used? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures. ..... If yes, please list the bodies and methodologies: ……		
10.14	Are there management processes in place for allowing the senior management of the agency to be assured that sound methodological approaches have been adopted in producing the statistical outputs? 1. YES ☐ 2. NO ☐ If YES, please describe the processes.		
10.15	Is management information available to monitor and manage various aspects of the collection? 1. Yes 2. No If YES, which of the following are available: 1. Regular reporting and analysis of response rates and completion rates ☐ 2. Monitoring refusal and conversion rates 3. Monitoring interviewer and respondent feedback ☐ 4. Monitoring of edit failure rates and progress of corrective actions ☐ 5. Monitoring the results of quality control procedures during collection and		

	processing	☐
	6. Monitoring of expenditures against progress	☐
	7. Other (please specify)…….	☐
10.16	Are sampling and estimation options and their impacts on accuracy, timeliness, cost, respondent burden, data comparability over time and across programmes, etc considered? 1. YES ☐ 2. NO ☐ If YES, which impacts are considered? 1. Accuracy ☐ 2. Timeliness ☐ 3. Cost ☐ 4. Respondent burden ☐ 5. Data comparability over time ☐ 6. Other: (please specify) …….	
10.17	Has a sound methodology for imputation been developed based on scientific principles and is in place? 1. YES ☐ 2. NO ☐ If YES, please describe the methodology: …….	
10.18	Has there been follow up with users to seek their views on the fitness of the statistical outputs for the purposes for which the data will be used? 1. YES ☐ 2. NO ☐	

	If YES, which users has been followed up? 1. Government agencies 2. Enterprises 3. Social and political organizations ☐ 4. Researchers ☐ 5. Other (please specify): ……. ☐ Also please list the outputs that were followed up: ☐ …….. ☐
	VSQF 11. Cost-effectiveness is achieved[70]
11.1	Are there procedures or guidelines in place for assuring cost-effectiveness and optimal use of resources? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures or guidelines. ……
11.2	a. Are the processes that are used for the development, collection, compilation and production of statistics well documented? 1. YES ☐ 2. NO ☐ If YES, please cite the documentation: …… b. Are the processes that are used for the development, collection, compilation and production of statistics regularly reviewed to assess their efficiency and effectiveness 1. YES ☐ 2. NO ☐

[70] The following questions relate to the agency as a whole and not to a specific data collection: 11.3-5, 8-10, and 12.

	If YES, please list the processes that have been reviewed and the most recent year in which they were reviewed: ……..
11.3	Does the agency promote and implement standardized solutions that increase effectiveness and efficiency? 1. YES ☐ 2. NO ☐ If YES, please list some standardized solutions and the promotion activities: …….
11.4	Do the programmes share and re-use existing data, solutions to problems and statistical and data processing tools and methods to increase efficiency and savings? 1. YES ☐ 2. NO ☐ If YES, please list the data, solutions, tools, methods: ……
11.5	Is the agency's use of resources monitored both by internal and independent external mechanisms? 1. YES ☐ 2. NO ☐ If YES, please describe the mechanisms: ……. If NO, which mechanism does the agency use? …….
11.6	a. Are the costs of producing the statistics at each stage of statistics production (survey paradata) accurately assessed to evaluate the effectiveness of each stage? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures and tools of assessment: ……

	b. Are the costs of producing the statistics at each stage of statistics production well documented? 1. YES ☐ 2. NO ☐ If YES, please cite the documentation: ……
11.7	a. Before undertaking a new data collection, is the use of alternative sources of data, such as existing survey data and administrative data that are available (when possible and appropriate) explicitly considered? 1. YES ☐ 2. NO ☐ b. If YES, please describe a recent example of such a consideration: …….
11.8	Are proactive efforts made to improve the statistical potential of administrative data and to limit recourse to direct surveys? 1. YES ☐ 2. NO ☐ If YES, please describe the efforts and specify the administrative data: ……
11.9	Is the use of sample surveys instead of censuses when appropriate and possible explicitly considered? 1. YES ☐ 2. NO ☐ If YES, please describe a recent example of such a consideration and the procedures of consideration: ……..
11.10	Are there review processes in place for assessing whether each programme continuously operates in the most cost-effective way to meet its stated requirements? 1. YES ☐ 2. NO ☐

	If YES, please describe the processes: ……. Are the reviews documented? 1. YES ☐ 2. NO ☐ If YES, please cite the documentation: …….		
11.11	Is the productivity potential of information and communications technology optimized for data collection, processing and dissemination, with routine clerical operations (e.g. data capture, coding, validation, etc.) and automated wherever possible? 1. YES ☐ 2. NO ☐ If YES, please describe what has been done on productivity in data collection, processing and dissemination: ……		
11.12	Is there is a clear and documented justification for each specific programme, including a cost-effectiveness assessment? 1. YES ☐ 2. NO ☐ If YES, please cite the documents: …….		
	VSQF 12. Implementation is sound		
12.1	Are there appropriate implementation instruments in place?	YES	NO
	1. Resource and material plans	☐	☐
	2. Supervisory structure	☐	☐
	3. Attainable schedules	☐	☐
	4. Operations	☐	☐
		☐	☐

	5. Procedures and checks 6. Training manuals and training programmes 7. Publicity surrounding the collection, 8. Other (please specify):……	☐ ☐ ☐	☐ ☐ ☐
12.2	Are there adequate quality control and quality assurance measures in place at all stages of collection and processing? 1. YES ☐ 2. NO ☐ If YES, please describe the measures: If NO, which stages of collection and processing have no adequate quality control and quality assurance measures and why?		
12.3	Is the statistical activity properly communicated and advertised in order to increase awareness and trust among respondents? 1. YES ☐ 2. NO ☐ If YES, please list the measures of communication and advertisement: ……		
12.4	Is the list of respondents' contact information regularly updated? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures for updating the list and list the date of the most recent update: ……		
12.5	Is the data collection process designed in such a way that the ethnicity and language of respondents is taken into consideration: a. Before the data collection instruments are developed? 1. YES ☐ 2. NO ☐		

	b. When the staff (especially the interviewers) are being selected and trained? 1. YES ☐ 2. NO ☐ Please describe how you take into account the ethnicity and language of respondents: …….
12.6	Are the data collection instruments (mainly questionnaires) designed to minimize coding errors taking account of cost and time? 1. YES ☐ 2. NO ☐ If YES, please describe the steps taken to minimise coding errors: If NO, please give the reasons: ……
12.7	Are data capture and data collection instruments tested and adjusted (if required and possible) prior to the actual field operation or data collection process? 1. Yes 2. No If YES, please describe the procedures of testing and adjusting: ..... If NO, please provide the reasons: ..... .
12.8	Is the data capture mode designed to improve accuracy and timeliness through integrating, to the extent possible, data capture with data collection or automated data capture rather than the traditional manual mode of capture? 1. YES ☐ 2. NO ☐ If YES, please describe what has been done: ……
12.9	a. Are there adequate measures in place for encouraging accurate response?

	1. YES ☐ 2. NO ☐ If YES, please describe the measures: …… b. Are there adequate measures in place for following up on non-response? 1. YES ☐ 2. NO ☐ If YES, please describe the measures: …… c.Are there adequate measures in place for dealing with missing data? 1. YES ☐ 2. NO ☐ If YES, please describe the measures: ……
12.10	Do edit rules exist during the data capture exercise in order to validate the data entered and allow for error corrections and quality improvement? 1. YES ☐ 2. NO ☐ If YES, please list the rules: ……
12.11	Is data editing repeated after each stage of data processing including imputation? 1. YES ☐ 2. NO ☐
12.12	When coding is done through an automated process, are appropriate staff assigned to handle uncoded cases? 1. YES ☐ 2. NO ☐ If NO, how do you handle uncoded cases? ……

12.13	Are there appropriate arrangements for internal and external consistency checking of data, with corresponding correction or adjustment strategies? 1. YES ☐ 2. NO ☐ If YES, please describe the arrangements: ……..
12.14	Is the format of the database compatible with different statistical software that is usually used for compilation and data analysis? 1. YES ☐ 2. NO ☐ If YES, which software: ……
12.15	Are there follow-up activities in place for collecting support information (such as the size of households or establishments, dwelling status, etc.) to be used, if necessary, for non-response adjustment? 1. YES ☐ 2. NO ☐ If YES, please describe the follow-up activities: ……..
12.16	Are there follow-up procedures in place for filling data gaps and handling inconsistencies? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures: ……..
12.17	Are activity and cost indicators (survey paradata) produced and properly documented in order to be used in monitoring and managing the current and future collection processes? 1. YES ☐ 2. NO ☐ If YES, please list the indicators that are produced and cite documentation: ……

12.18	Are there appropriate arrangements in place for post-collection evaluation?		
	1. To take stock of outcomes as compared with design plans:	Yes	No
	2. To draw out any issues upon which users should be informed,	☐	☐
	3. To provide feedback for consideration in the planning for future such collections,	☐	☐
		☐	☐
	VSQF 13. Respondent burden is managed [71]		
13.1	Does the agency have a respondent relations or respondent burden management programme? 1. YES ☐ 2. NO ☐ If YES, please describe the programme: ……		
13.2	Are procedures in place for assessing the necessity to undertake a new statistical survey? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures. ……		
13.3	Is the data collection process designed to reduce or distribute the respondent burden while increasing response rates? 1. YES ☐ 2. NO ☐ If YES, describe what has been done to reduce or distribute the respondent burden: …… In particular does the survey employ telephone-based interviews in a sample survey to complement a self-enumeration process and reduce non-response error? 1. Yes 2. No		

[71] The following questions relate to the agency as a whole and not to a specific data collection: 13.1, 2, and 6.

	Please describe any other methods in place: …… ……..
13.4	Does the survey apply statistical standards to make it easier for respondents to respond? 1. YES ☐ 2. NO ☐ If YES, please list the statistical standards: ……
13.5	Are standard practices for responding to respondents' requests and complaints defined and followed up on? 1. YES ☐ 2. NO ☐ IF YES, please describe the standard practices: ……..
13.6	Is there a provider charter that spells out the rights and responsibilities of respondents? 1. YES ☐ 2. NO ☐ If YES, please cite the charter: …….
13.7	Are assessments undertaken to ascertain if there were problematic aspects of the questionnaire design and its implementation? 1. Yes 2. No If yes, were the problems satisfactorily resolved? 1. Yes 2. No
	D. Statistical outputs **VSQF 14. Statistical outputs are relevant**
14.1	Is data completeness rate calculated?

	1. YES ☐ 2. NO ☐ If YES, please give the most recently available rate and two earlier rates if available: 1. Most recent rate: …….. 2. Previous Rate 1: …….. 3. Previous Rate 2: ……
14.2	Are there laws or regulations requiring the agency to consult users and compile the set of statistics under review? 1. YES ☐ 2. NO ☐ If YES, please cite the laws or regulations: …… Are the laws or regulations understood and made known publicly? 1. Yes 2. No …….. If Yes, how are the laws or regulations made known publicly? ……
14.3	Is the data on users and their utilization of the statistical products analysed (e.g by evaluating downloads, subscriptions to reports, requests for information, etc.) to support priority setting and user consultation? 1. YES ☐ 2. NO ☐ If YES, please check any of the following data that is used for analysis: 1. By evaluating downloads ☐ 2. Subscriptions to reports, ☐ 3. Requests for information ☐ 4. Other: Please specify……..) ☐

14.4	a. Do strategic goals and work programme plans reflect users' priority needs? 1. YES ☐ 2. NO ☐ If YES, please list the priority needs: ..... b. Are strategic goals and work programme plans made known publicly? 1. YES ☐ 2. NO ☐ If YES, how are they made known publicly? ……
14.5	Are the users provided information or metadata that allow them to be aware of possible divergences between the agency's measured statistical concepts and their own concepts of interest? 1. YES ☐ 2. NO ☐ If YES, please describe the information or metadata that is provided for this purpose: …….
14.6	Are the objectives of the survey are set out in written form specifying for example, the population of interest; geographic level of detail required; intended reference period; frequency and timeliness; main data items/outputs required; the particular type of analysis intended to be conducted on the data; and other necessary quality attributes that the statistics need to meet so as to be consistent with users' expectations of fitness for purpose? 1. YES ☐ 2. NO ☐ If yes, cite the written objectives or describe them: ……..
14.7	Are procedures in place for carrying out post-collection evaluations? 1. YES ☐ 2. NO ☐

	If YES, please check if any of the following are included: 1. Taking stock of outcomes as compared with design plans and user needs ☐ 2. Highlighting any issues upon which users should be informed ☐ 3. Providing users ways to give feedback that can be taken into account in the planning for future collections ☐
14.8	Are action plans implemented to improve relevance and meet emerging needs? 1. YES ☐ 2. NO ☐ If YES, please describe the action plans: .....
14.9	Are procedures in place to consult users about the content of the statistical work programme? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures: .....
14.10	Are periodic reviews undertaken of the continuing relevance and cost-effectiveness of this statistical programmes/domains? 1. YES ☐ 2. NO ☐ If YES, please indicate the date of the most recent review and describe the review and its outcomes: .....
14.11	Are there mechanisms to identify users' needs and to describe how the data relate to their needs? 1. YES ☐ 2. NO ☐ If YES, please describe the mechanisms: .....

14.12	a. Are the users and uses to which they put the statistical products known? 1. YES ☐ 2. NO ☐ If YES, please list the main users and uses: …… b. Are the users and uses to which they put the statistical products regularly tracked? 1. YES ☐ 2. NO ☐ If YES, how are they tracked? ……
14.13	Are there procedures to gather information on potential needs of users of statistics? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures: ……..
14.14	a. Is user satisfaction regularly measured? 1. YES ☐ 2. NO ☐ If YES, describe the procedures and frequency of measuring user satisfaction: …… b. Is user satisfaction systematically followed up? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures of following up user satisfaction: ……

14.15	Are the statistical dissemination products aligned with users' needs? 1. YES ☐ 2. NO ☐ If YES, please indicate your view of the alignment level: *(1= Very poor, 5= Very high)* 1. ☐ 2. ☐ 3. ☐ 4. ☐ 5. ☐
14.16	Are users informed about known gaps between the measured statistical concept and the user's concept of interest? 1. YES ☐ 2. NO ☐ If YES, please describe how users are informed: ……..
	VSQF 15. Statistical outputs are accurate and reliable
15.1	Do statistical procedures (e.g. compilation, data adjustments and transformations, statistical analysis, etc.) employ internationally recognized statistical techniques? 1. YES ☐ 2. NO ☐ If YES, please describe the internationally recognized statistical techniques that are used: ……
15.2	a. Are source data regularly assessed and validated? 1. YES ☐ 2. NO ☐ If Yes, how frequently are they assessed and validated? …… b. Are intermediate results regularly assessed and validated? 1. YES ☐ 2. NO ☐ If Yes, how frequently are they assessed and validated? ……

	c. Are statistical outputs regularly assessed and validated? 1. YES ☐ 2. NO ☐ If Yes, how frequently are they assessed and validated? …….
15.3	Are systems for assessing and validating source data, intermediate results and statistical outputs developed and managed? 1. YES ☐ 2. NO ☐ If YES, please describe the systems: ……..
15.4	a. Are there procedures and guidelines in place for data quality assessment? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures and guidelines: ..... b. Do the procedures and guidelines address accuracy issues? 1. YES ☐ 2. NO ☐
15.5	Are source data and statistical outputs compared with other sources of information in order to ensure validity? 1. YES ☐ 2. NO ☐ If YES, please list the other sources of information: ……..
15.6, 15.7, 15.8, 15.9,	a. Are sampling and non-sampling errors measured and evaluated? 1. YES ☐ 2. NO ☐ If YES, please list the values for the most recent survey: 1. Sampling error – indicators Value:…….

15.10 , 15.11	2. Over-coverage – rate (Under-coverage rate and misclassification rate) Values:……. 3. Common units – proportion Value:……. 4. Unit non-response – rate Value:……. 5. Item non-response – rate Value:……. b. Are sampling and non-sampling errors systematically documented? 1. YES ☐ 2. NO ☐ If YES, please cite the documentation: …….
15.12	Is the average size of data revision calculated? 1. YES ☐ 2. NO ☐ If YES, please provide the results of the most recent revision and if available for two earlier revisions 3 latest sizes: 1. Latest……Value……. 2. Previous 1…….Value……. 3. Previous 2…… Value…….
15.13	Is the imputation rate calculated? 1. YES ☐ 2. NO ☐ If YES, please provide the rate for the most recent survey and if available for two earlier surveys: 1. Latest……Value……. 2. Previous 1…… Value……. 3. Previous 2…… Value…….
15.14	Are there procedures and guidelines on how to measure and reduce errors?

	1. YES ☐ 2. NO ☐ If YES, please describe the procedures and guidelines: ……
15.15	Is there a quality assurance plan in place that describes the quality control actions to prevent, monitor and evaluate the errors? 1. YES ☐ 2. NO ☐ If YES, please describe the plan: ……
15.16	a. Are sampling and non-sampling errors analysed over time? 1. YES ☐ 2. NO ☐ b. If YES, are improvement actions taken as a result of analysis? 1. YES ☐ 2. NO ☐ If YES, please describe the improvement actions taken: .....
15.17	Are there methods and tools in place for preventing and reducing sampling and non-sampling errors? 1. YES ☐ 2. NO ☐ If YES, please describe the methods and tools: ……
15.18	Is there a revision policy in place? 1. YES ☐ 2. NO ☐ If YES, please check any of the following issues that are mentioned in the policy: 1. Revision principles and procedures ☐ 2. Timing of revisions ☐

	3. Reasons of revisions ☐ 4. Nature of the revisions. ☐ Is the revision policy made public? 1. YES ☐ 2. NO ☐ If Yes, how is it made public? ……..
15.19	a. Is an analysis of revisions performed? 1. YES ☐ 2. NO ☐ b. If YES, please cite the document: …… Is the analysis used to improve the statistical process? 1. YES ☐ 2. NO ☐ If YES, please describe how the analysis is used for improving the statistical process: ……
	VSQF 16. Statistical outputs are timely and punctual [72]
16.1	Is there a release policy defined and published? 1. YES ☐ 2. NO ☐ If YES, please cite the document and how is it published: …… Does the policy distinguish between different kinds of statistical outputs (press releases, statistics specific reports or tables, general publications, etc) and their corresponding release procedures? 1. YES ☐ 2. NO ☐

[72] The following questions relate to the agency as a whole and not to a specific data collection: 16.1

	If Yes, please describe the main contents of the policy: ……..
16.2	Does the timeliness of the statistics comply with IMF data dissemination standards (if applicable) or other relevant timeliness targets? 1. YES ☐ 2. NO ☐ If YES,please provide the details of compliance: …….
16.3	Is there a published release calendar announcing in advance the dates and times that the statistics are to be released? 1. YES ☐ 2. NO ☐
16.4	Are quality indicators on timeliness and punctuality regularly calculated, monitored and published? 1. YES ☐ 2. NO ☐ If Yes, how frequently? …….
16.5	Is the time lag of first results calculated? 1. YES ☐ 2. NO ☐ If YES, please give the time lag of first results and for the most recent issue and for the two previous issues if available: ……
16.6	Is the time lag of final results calculated? 1. YES ☐ 2. NO ☐ If YES, please give the time lag of final results and for the most recent issue and for the two previous issues if available: ……

16.7	Is the punctuality of actual delivery and publication compared to the target calculated? 1. YES ☐ 2. NO ☐ If YES, please give the punctuality of delivery and publication and for the most recent issue and for the two previous issues if available: ……
16.8	Are there procedures for regularly monitoring and evaluating the punctuality of every release according to the information in the release calendar? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures: ……
16.9	Are there divergences from pre-announced times? 1. YES ☐ 2. NO ☐ If YES, are the divergences published in advance with announcement of a new release time and explanations on the reasons for the delays? 1. YES ☐ 2. NO ☐
16.10	Is the possibility and usefulness of releasing preliminary data regularly considered, while at the same time taking into account the data's accuracy? 1. YES ☐ 2. NO ☐ Is preliminary data released and marked as preliminary? 1. Yes 2. No
16.11	Are procedures in place for following up to ensure timely receipt of (the raw) data? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures: ……

16.12	Are action plans developed and followed if the timeliness targets are not met? 1. YES ☐ 2. NO ☐ If YES, please describe the action plans: ……
	VSQF 17. Statistical outputs are accessible and clear [73]
17.1	Is the number of consultations of data tables compiled? 1. YES ☐ 2. NO ☐ If YES, please list results: ……
17.2	Is the number of consultations of metadata compiled? 1. YES ☐ 2. NO ☐ If YES, please list results: ……
17.3	Is the metadata completeness rate calculated? 1. YES ☐ 2. NO ☐ If YES, please list results: …….
17.4	Are there a dissemination policy for defining dissemination practices and a clear pricing policy (if applicable) governing the dissemination? 1. YES ☐ 2. NO ☐ If YES, please cite the documents or briefly describe the policies …….

[73] The following questions relate to the agency as a whole and not to a specific data collection: 17.4, 6, 7, 12, 14.

	Are the policies made known publicly? 1. YES ☐ 2. NO ☐ If Yes, how are they made known publicly? ……..
17.5	a. Are statistics and the corresponding metadata presented in a form that facilitates proper interpretation and meaningful comparisons? 1. YES ☐ 2. NO ☐ If YES, please describe the basis for your assessment: …….. b. Are statistics and the corresponding metadata archived? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures of archiving. ……
17.6	Are there guidelines in place for ensuring that authors of statistical publications/databases are aware of the appropriate content and preferred formats and style (layout and clarity of text, tables, charts, etc.) of the agency's outputs? 1. YES ☐ 2. NO ☐ If YES, please cite the document or describe the guidelines: ……
17.7	Are there staff training and development programmes in place on writing about statistics (for example, in press releases, explanatory texts, publication highlights, etc.)? 1. YES ☐ 2. NO ☐ If YES, please describe the programmes: ……
17.8	Are statistics presented in a clear and understandable manner?

	1. YES ☐ 2. NO ☐ If YES, please describe the basis of your assessment: …….
17.9	Are explanatory texts that accompany the data reviewed for clarity and readability? 1. YES ☐ 2. NO ☐ If YES, please describe the review process: ……
17.10	Are meaningful comparisons included in the publications when appropriate? 1. YES ☐ 2. NO ☐ If YES, please describe the comparisons: ……..
17.11	Are different levels of metadata detail made available to users to meet their requirements? 1. YES ☐ 2. NO ☐ If YES, please describe the levels: ……..
17.12	Are there policies in place for archiving statistics and metadata? 1. YES ☐ 2. NO ☐ If YES, please cite the documents or describe the policies: …….
17.13	a. Is modern information and communication technology (ICT) mainly used for disseminating the statistics? 1. YES ☐ 2. NO ☐ If YES, please check which ICT means are used for disseminating statistics:

	1. Statistical databases ☐ 2. The agency's website ☐ 3. Electronic releases ☐ 4. Data made available on request ☐ 5. Other (please specify: …… ☐ b. Are traditional hard copy and other services provided when appropriate, to ensure that users have appropriate access to the statistics they need? 1. YES ☐ 2. NO ☐ If YES, please list the hard copies and describe the services: ……..
17.14	Are catalogues of publications and other services made available? 1. YES ☐ 2. NO ☐ If YES, please cite the catalogues: ……
17.15	Is there well-publicized information or user support service, call centre or hotline available for handling requests for data and for providing answers to questions about statistical results, metadata, etc? 1. YES ☐ 2. NO ☐ If YES, please describe the support service that is available: ……..
17.16	Are the statistics and metadata disseminated using tools and formats that facilitate re-dissemination by the media or other users? 1. YES ☐ 2. NO ☐ If YES, which check which tools and formatsare used:

	1. Press releases ☐ 2. Readymade tables ☐ 3. Charts ☐ 4. Maps connected to statistics ☐ 5. Other (please specify): …….. ☐
17.17	a. Is the public informed about the agency's data outputs and services? 1. YES ☐ 2. NO ☐ If YES, please describe the methods of informing: …… b. Is the public made aware that custom-designed outputs, statistics not routinely disseminated and longer time series can be provided on request when feasible? 1. YES ☐ 2. NO ☐ If YES, how is the public made aware and are they informed on how the data can be ordered? 1. YES ☐ 2. NO ☐ If YES, please describe the methods of informing: …… c. Are the custom-designed outputs made public where possible? 1. YES ☐ 2. NO ☐ Please provide any reasons why the custom-designed outputs might not be made public: ……
17.18	Are there mechanisms in place for enabling users to generate their own tables in formats (xls, html, etc.) most appropriate to them? 1. YES ☐ 2. NO ☐

	If YES, please describe the mechanisms: ……
17.19	Is access to microdata allowed for research purposes, subject to specific rules and protocols on statistical confidentiality that are made known publicly and posted on the agency's website? 1. YES ☐ 2. NO ☐ If YES, please cite the documents or describe the rules and protocols: ……..
17.20	Does the agency consult users on a regular basis to find out about the formats of dissemination that they most prefer? 1. YES ☐ 2. NO ☐ If YES, please describe the method and frequency of consultations: ……
	VSQF 18. Statistical outputs are coherent and comparable[74]
18.1	Is the coefficient of asymmetry for mirror flows statistics calculated (if relevant)[75]? 1. YES ☐ 2. NO ☐ If YES, please provide the results of 3 latest calculations including dates: 1. …….. 2. …… 3. ……..
18.2	Are there procedures or guidelines in place for ensuring and monitoring internal coherence (e.g. observance of arithmetic and accounting identities) and consistency?

[74] The following questions relate to the agency as a whole and not to a specific data collection: 18.8, 9, 12.
[75] Applies to a limited number of domains/statistical calculations.

	1. YES ☐ 2. NO ☐ If YES, please describe the procedures or guidelines: ……..
18.3	Are procedures or guidelines in place for ensuring and monitoring cross-sectoral coherence and consistency? 1. YES ☐ 2. NO ☐ If YES, please describe the procedures or guidelines: ……
18.4	What is the length of comparable time series (in years or months as appropriate): …….
18.5	Are changes in methods clearly identified and measured to facilitate reconciliation? 1. YES ☐ 2. NO ☐ If YES, where is this information made available? ……
18.6	a. Are breaks in the series explained? 1. YES ☐ 2. NO ☐ b. Are the methods for ensuring reconciliation over a period of time made known publicly? 1. YES ☐ 2. NO ☐ If Yes, how are they made known publicly? ……
18.7	Are the effects of changes in methodologies on final estimates assessed? 1. YES ☐ 2. NO ☐ If YES: please describe the procedures of assessment:

	…… Is appropriate information provided to users? 1. YES ☐ 2. NO ☐ If yes, how is the information provided to users? ……..
18.8	Are statistics compiled on the basis of common standards with respect to scope, definitions, units and classifications in the different surveys? 1. YES ☐ 2. NO ☐ If YES, please describe the common standards: ……
18.9	Are a common repository (of concepts, definitions, units, classifications, etc.) or other mechanisms for promoting coherence and consistency in place for consulting (especially when designing a new individual statistical programme/domain)? 1. YES ☐ 2. NO ☐ If YES, please describe the repository or mechanisms: ……
18.10	Do quality reports include a section on the assessment of internal consistency and comparability over time and with other subject matter related statistics? 1. YES ☐ 2. NO ☐ If YES, please describe the scope of this section: …….
18.11	Is it possible to compare statistics derived from different sources or with different periodicities (e.g. monthly, quarterly and yearly)?

	1. YES ☐ 2. NO ☐ If yes, please describe the different sources: …….. If YES, are the differences found in comparisons explained and reconciled? 1. YES ☐ 2. NO ☐ If YES: please cite the documents or describe the comparisons: …… Are the explanations and reconciliations made public? 1. YES ☐ 2. NO ☐ If Yes, how are they made public? ……..
18.12	a. Is the cooperation, the exchange of knowledge, and the understanding of the interdependencies among the individual statistical programmes/domains promoted? 1. YES ☐ 2. NO ☐ b. If YES, describe the mechanisms for promoting: ……
18.13	a. Are statistical outputs compared with other statistical or administrative sources that provide the same or similar information on the same subject matter? 1. YES ☐ 2. NO ☐ If Yes, list the other statistical or administrative sources: …….. If YES, are divergences during the comparison identified and explained to users? 1. YES ☐ 2. NO ☐ If yes, please cite documentation or describe how they are explained to users:

	……..
	VSQF 19. Adequate metadata is made available[76]
19.1	Are there procedures or guidelines in place for metadata maintenance and dissemination? 1. YES ☐ 2. NO ☐ IF YES, please describe the procedures or guidelines: ……..
19.2	Are metadata documented according to standards? 1. YES ☐ 2. NO ☐ If YES, please describe the standards: ……
19.3	Is a glossary of statistical concepts made known publicly? 1. YES ☐ 2. NO ☐ If YES, cite the documentation or describe how it is made known publicly: ……..
19.4	Are staff training and development programmes in place on metadata management and related information and documentation systems? 1. YES ☐ 2. NO ☐ If YES, please describe the programmes: ……
19.5	Is there a systematic way for archiving metadata which also ensures that they are accessible for reuse in the future? 1. YES ☐ 2. NO ☐

[76] The following questions relate to the agency as a whole and not to a specific data collection: 19.3-5.

	If YES, please describe the way for archiving metadata: ……

Note on preparing quality assessment according to the statistical processes defined by GSO

A subset of the questions in the Questionnaire on Statistical Processes and Outputs provides a quality assessment of the statistical processes identified in the GSO (Specify needs, Prepare for information collection, Collect, Process, Analyse and document, Disseminate, and Store information) for a domain/statistical collection. The quality of the processes is taken to determine the quality of the statistical outputs produced by those processes. The Statistical processes and the associated questions are shown in the following table. Analysis of these questions provides a basis for Section 1 of the Quality Report on the domain/statistical collection.

Statistical processes defined by GSO	**VSQF headings and questions relevant to the statistical processes**
I Specify needs	VSQF 14 - Statistical outputs are relevant 14.1-14.16
II Prepare for information collection	VSQF 10 - Sound methodologies are applied 10.1 10.2 10.3 10.5 10.6 10.7 10.8 10.9 10.10 10.11

	10.12 10.14 10.17 VSQF 15-Statistical outputs are accurate and reliable 15.8 VSQF 17-Statistical outputs are accessible and clear 17.20
III Collect	VSQF 10 - Sound methodologies are applied and 10.15 VSQF 12 - Implementation is sound 12.1 12.2 12.3 12.4 12.5 12.6 12.7 12.8 12.9 12.10
IV Process	VSQF 10 - Sound methodologies are applied 10.17 VSQF 12 - Implementation is sound 12.2 12.11 12.12 12.13

	VSQF 15 - Statistical outputs are accurate and reliable 15.14 15.15 15.18
V Analyse (and document)	VSQF 11-Cost-effectiveness is achieved 11.2 VSQF 14 -Statistical outputs are relevant 14.3 14.7 14.14 VSQF 15 - Statistical outputs are accurate and reliable 15.6-13 VSQF 16 -Statistical outputs are timely and punctual 16.5 16.6 16.7 VSQF 17 -Statistical outputs are accessible and clear 17.9 17.10 17.11 17.17 17.18 17.19 VSQF 19 -Adequate metadata is made available 19.2
VI Disseminate	VSQF 16 - Statistical outputs are timely and punctual 16.1

	16.4 VSQF 17 - Statistical outputs are accessible and clear 17.1 17.2 17.6 17.8 17.9 17.13 17.14 17.15 17.16 VSQF 19 - Adequate metadata is made available 19.1
VII Store information	VSQF 17 - Statistical outputs are accessible and clear 17.12 VSQF 19 - Adequate metadata is made available 19.5

Annex VII:Questionnaire for User Needs and Satisfaction

Note: This questionnaire, while prepared in relation to the Consumer Price Index (CPI), is intended to be modified to be applicable to the outputs of any statistical domain/collection by replacing "CPI" with the name of the particular statistical domain/collection, replacing GSO with the name of the relevant ministry or agency responsible for the statistical domain/collection, and modifying the elements of multiple choice questions eg questions 7 and 8 to make them relevant to the particular statistical domain/collection.

1. Have you ever used CPI?

1. Yes 2. No →go to Question 30

2. Do you know which agency is in charge of producing CPI?

1. Yes 2. No → go to Question 4

3. Do you know the following information of the agency in charge of producing CPI?

1. Address

2. Office email address/ phone number/fax number

3. Contact person's email address/ phone number

4. None

4. Has the agency in charge of producing CPI consulted your organization/ you about your needs concerning CPI?

1. Yes 2. No

5. How do you get CPI information? *(Circle ALL that apply)*

1. Agency publications
2. News Release
3. Agency website
4. Internet
5. Research papers

6. Personal contact
7. Other

6. Which of these sources is most useful to you? (*Circle only ONE*)

    1. Agency publications
    2. News Release
    3. Agency website
    4. Internet
    5. Research papers
    6. Personal contact
    7. Other

7. What do you use CPI data for? (*Circle ALL that apply*)

1. Measuring general inflation
2. Escalating payments
3. Re calculating indicators at constant prices
4. Planning
5. Analyzing or forecasting
6. Measuring price trends for specific items
7. Accounting purposes
8. Market research
9. Indexation purposes
10. Other ……

8. What is your **primary** use of CPI data? *(Circle only ONE)*

1. Measuring general inflation

2. Escalating payments

3. Re calculating indicators at constant prices

4. Planning

5. Analyzing or forecasting

6. Measuring price trends for specific items

7. Accounting purposes

8. Market research

9. Indexation purposes

10. Other ……

9. Is CPI useful for the main purposes for which you use it?

(1 = Not very useful; 5= Very useful)

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

10. Which details of CPI do you use?

…….

11. What improvements/additions would be useful to you in CPI?

……

12. In your opinion, how sound and appropriate is the underlying methodology of CPI *(1=neither sound and appropriate; 5= highly sound and appropriate)?*

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

13. In general, how unbiased and accurate do you consider CPI to be for your purposes *(1=not sufficient; 5= highly sufficient)?*

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

14. How much do you trust CPI? *(Circle only ONE)*

1. Trust them greatly

2. Tend to trust them

3. Tend not to trust them

4. Distrust them greatly

5. Do not know

15. Do you know about the official release calendar for CPI?

1. Yes 2. No

If Yes, do you think that the calendar contains sufficient and relevant information for your needs? (*Circle only ONE)*

1. Yes 2. No

What additional information would you like to get? ……

3. Do not know

16. In general, how satisfied are you with the frequency of the publication of CPI for your purposes *(1= not satisfied; 5= highly satisfied)*?

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

If answer is 1 or 2, what frequency of the publication/statistics would meet your needs?

……..

17. In your experience, is CPI released on the dates announced in the official release calendar for CPI?

1. Yes 2. No

18. In case of divergences from pre-announced times published in the official release calendar for CPI, are you informed about them in advance?

1. Yes 2. No

If Yes, are you provided with the explanations on the reasons for the delays?

1. Yes 2. No

19. How easy or difficult is it for you to obtain/access CPI?

(1 = Difficult; 5 = Very Easy)

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

20. Which methods do you prefer as part of dissemination in terms of graphics, imagery and/or tabular data?

1. Graphs

2. Tables

3. Text

4. Other (please specify)……..

21. Are you willing to pay for additional CPI products and services? *(Circle ONE option only*)

1. Yes 2. No

If Yes, what additional products and services would you be prepared to pay for?

……

22. In your opinion, how consistent is the CPI with other price information that is available to you?

(1= not consistent; 5 = very consistent)

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

23. Do you refer to/make use of the metadata of CPI?

1. Yes 2. No

24. Is the CPI metadata clear, adequate and updated, as well as at an adequate level of detail to be useful to you (*1=not all; 5= very*)?

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

25. How easy or difficult is it for you to access the metadata of CPI (sources, explanatory notes, methodological description, and references concerning concepts, classifications, and statistical practice)? *(1 = Difficult; 5 = Very Easy)*

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

26. In your opinion, what makes it difficult for you to either obtain/access the CPI or access the metadata of CPI?

1. Cost too high…….. (Specify)……

2. Did not know where to get information.... (Specify)……

3. Did not know information exist..... (Specify)……

4. Other (specify)…….. (Specify)……

27. In your opinion, is CPI presented in an easy- to-understand way?

(1=Not easy; 5= Very easy)

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

28. Overall, how satisfied are you with CPI products and services?

(1=Not at all; 5= Very satisfied)

1.☐ 2.☐ 3.☐ 4.☐ 5.☐

29. Additional comments, including on areas where you see room for improvement. (*Please specify the dataset(s) to which your comments refer)*

.....

30. In the near future, do you have any plan to use the CPI?

1. Yes 2. No

General information of the respondent

31. Please indicate what type of user you are or from which organization/institution you come from?

1	Government/ Government agencies	☐
2	National Assembly/ National Assembly agencies	☐
3	Agencies directly under the Communist Party of Vietnam	☐
4	Ministries and ministerial-level agencies	☐
5	Enterprises	☐
6	Chambers of commerce / Trade associations	☐
7	Media	☐
8	Social organizations, social-professional organizations…	☐
9	Research Institutes/Universities/ Colleges	☐
10	International organizations	☐
11	Other (please specify):……..	☐

32. What is your highest level of educational attainment?

Lower secondary level ( )

Upper secondary level ( )

Undergraduate studies at university ( )

Postgraduate degree at university – Masters degree ( )

Ph. D. or equivalent ( )

Thank you for your assistance in completing this questionnaire.