# Toward Structural Reform of the Government Statistics

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# Contents

## Introduction

**“The development of statistics is the most fundamental task for the reconstruction of Japan.”**

The above words represent the firm conviction of Hyoe Ouchi, who worked to rebuild the statistical system of Japan in the wake of World War II and was appointed as the first Chairman of the Statistics Committee in 1949 by Shigeru Yoshida, the Prime Minister at the time.

In the sixty years since then, the burnt ruins of the war have become distant memories of the past and the Japanese society has achieved rapid economic development thanks to the Japanese people’s concerted efforts to rebuild their country. Over these years, statistics have been developed in various fields to look back on the past, understand the present and look into the future, and used not only by the government for policy purposes but also by a wide range of businesses and individuals for their decision-making, thus providing a basis for the social development of the nation.

However, rapid changes in the environment surrounding the national economy have made it necessary for the government and private sector to make difficult decisions in public policy and business management both inside and outside the country, calling for the development of more reliable and timely statistics that meet the current needs of the public.

Due to the decentralized government system that allows each division to produce its own statistics required to perform its duties and the need to ensure the continuity of data, the statistics system of Japan has generally lacked the speed to cope with changing demands and has lagged far behind in adapting to the changes of the times and responding to new needs.

Under the current circumstances where Japan is confronted by a serious population decline unprecedented in its history, various attempts are being made to provide an outlook for the future of the changing economy. Although we have recovered from the long-term stagnation after the collapse of the bubble economy, many Japanese people still have concerns over the future and a sense of pessimism about their society.

Now that we are faced with the challenge of building a new foundation for growth at a crucial phase of our economy, we need to focus once again on the question of how to develop statistics as the “most fundamental task” for the future. The development of statistics has remained a low profile policy issue that has hardly received the attention of the government since Shigeru Yoshida, the former Prime Minister, took the initiative to reconstruct the statistics system in the years immediately following the war in collaboration with Hyoe Ouchi and other people. These circumstances surrounding the development of the statistics system have created a number of biases in the statistics of Japan. In order to reform the current system of statistics, there is a need for the government to make concerted efforts to achieve specific goals for the future.

Needless to say, statistics are produced not merely for policy makers, researchers and business operators who use them directly. They provide information that serves as the foundation of

society to be shared by the public at large. The Fundamental Principles of Official Statistics, which were adopted by the United Nations Statistics Commission in 1994, define statistics as "an indispensable element in the information system of a democratic society" (Principle 1). While government agencies are always required to accept the full responsibility for providing useful statistical information compiled from an objective viewpoint, improvements of statistics cannot be made by the efforts of government officials and researchers alone but require the understanding and cooperation at all level of people.

We hope that this report will provide an opportunity to direct the attention of society at large to the need for the development of statistics, which is a challenge shared by all members of the nation.

The Economic and Social Statistics Development Promotion Committee was established in the Cabinet Office in November 2004 in order to promote the development of economic and social statistics in accordance with the Basic Policies for Economic and Fiscal Management and Structural Reform 2004 (Cabinet Decision on June 4, 2004), which were aimed at making extensive revisions to existing statistics to improve the statistics system.

Since its establishment, the Committee has held eight hearings with government agencies and other related organizations about the current progress and future prospects of initiatives for revisions of existing statistics. Based on these hearings, the Committee reviewed changes in the environment surrounding the statistics system of Japan along with its problems and examined specific future measures and their implementation schedules in order to draw up this report.

An enormous range of topics needs to be covered in order to develop a comprehensive system of economic and social statistics. However, considering that there are initiatives that have already been started by government agencies, and in order to conduct examinations by the Committee efficiently within a limited period of time, we discussed only those issues that have the highest priority for the future development of statistics, focusing on initiatives for developing individual statistical data and initiatives for creating systems to support the development of such data. We also presented basic principles underlying these initiatives, including the roles of statistics, the need for reforms, and perspectives associated with the reforms.

We present this report in order to formulate a specific strategy toward the extensive revisions of existing statistics and improvements of the statistics system that were proposed in the Basic Policies for Economic and Fiscal Management and Structural Reform 2004. We hope that what is proposed in this report will be reflected in the Basic Policies for Economic and Fiscal Management and Structural Reform 2005, which is scheduled to be formulated in the near future, with a view to developing economic and social statistical data designed to meet the changing needs of the times, and provide a foundation for future initiatives to be undertaken by the Cabinet Office, the Ministry of Internal Affairs and Communications, and other government agencies.

# 1. Basic Principles

## (1) Roles of Statistics

Statistics provide objective data on the population, economy and society of a nation, and thereby serve as a *mirror* to reflect the state of the nation and society and a *compass* to offer guidelines for the future. The fact that no state in the West or the East, whatever it was called, has ever failed to develop a statistics system to meet its needs—military and fiscal needs in particular—provides ample evidence to support this view on the roles of statistics. The following words of Maurice Bloch, a French statistician of the 19th century, represent the essential nature of statistics: “Where there exists a state, there exist statistics.” Meanwhile, statistics not only reveal the state of a group as a whole from a macroscopic perspective but also serve as an *endoscope* designed to capture the internal structures of economies and societies and to analyze their mechanisms. This last role of statistics has gained in importance especially in contemporary society. The fact that the United Nations provides its member countries with basic guidelines for the development of statistics, including the SNA (System of National Accounts), shows the importance of this role of statistics more clearly than anything else.

As people, goods, money and information move more freely beyond borders and without restrictions of time in the contemporary world, changes in the environments inside and outside our economy become more rapid than ever before.

Under these circumstances, statistics provide the national government and local public entities with basic information that serves as an indispensable tool for ensuring the rationality and objectivity of the pre and post-assessments of various aspects of their policies, including basic policy management, the design and planning of individual policy measures, and above all (especially in recent years) policy effects. Statistical information is also used by business operators and individuals inside and outside the country as essential standards for rational decision-making in their economic and social activities, including medium and long-term business and life plans, financial management and investment, and consumption and savings.

Apart from providing basic information for practical decision-making, statistics are also used for various macroeconomic and microeconomic analyses in scientific research to support the search for the truth and greatly contribute to promoting social welfare.

It is also worth mentioning that statistics, which are highly objective and comparative in nature, serve as an essential information foundation for mutual understanding and the promotion of development in various economic and social fields in the global community.

## (2) Need for Reform

The basic framework for the statistics system of Japan was established in the years immediately following World War II based on the recognition of the development of statistics as a government project aimed at creating the foundation for restoring the national

economy and social and supporting democracy. The statistics system was developed with the collaboration of business operators and individuals chosen as survey respondents and was brought to the highest level in the world in terms of both quality and quantity by the efforts of those engaged in work related to statistics and by academic research, thus providing support for post-war restoration and the subsequent rapid economic development. Information provided by statistics is precisely what enables us today to clearly foresee the coming population decline and super-aging and to gain a quantitative understanding of the rapid globalization of the economy. Thus, statistics serve as the foundation for providing a wide range of data required for the policy management of the government and local public entities and the decision-making of business operators and individuals.

On the other hand, however, reviews of the current state of statistics of Japan reveal that our statistics system is faced with the following challenges and fails to provide data that accurately reflect the actual state of the economy. The statistics of Japan are no longer properly performing their functions either as a *mirror* to reflect the state of our society, or as a *compass* to provide guidelines for the future, or as an *endoscope* to reveal the mechanisms of society.

### (i) Responses to Changes in the Industrial Structure

The analysis of the post-war economic activities in Japan based on data on GDP or the number of employees by industry reveals that its industrial structure has shifted from primary industries (agriculture, forestry and fisheries) to secondary (mining, construction and manufacturing) and tertiary industries (so-called service industries). In recent years, those engaged in tertiary industries account for about 70% of the total employed population on a GDP basis and about two-thirds on an employment basis.

Meanwhile, the development of statistics in industrial areas shows that while relatively extensive data are available on agriculture, forestry and fisheries, which played a major role in improving the food supply in the wake of the war, and manufacturing industries, which supported the subsequent rapid economic development, the development of statistics on tertiary industries, which have rapidly gained in relative importance in recent years, is rather limited. This tendency is particularly marked with respect to statistics that provide a comprehensive view of tertiary industries and statistics on newly developed areas of business or areas under the jurisdiction of a number of different ministries.

Apart from the fact that statistical surveys are often conducted on a continuous basis to capture changes in time, there are several factors responsible for this tendency, such as: In a system that allows each ministries to develop statistics required to achieve its own policy objectives, statistics on business areas covered by more than one department are likely to lack uniformity and consistency; and statistics on areas that are not directly covered by the policies of ministries tend to be disregarded.

### (ii) Responses to Changes in the Survey Environment

So-called survey statistics that are obtained from population census and business census conducted at intervals of several years and from dynamic statistical surveys conducted on a monthly or quarterly basis constitute important part of the statistics system in Japan. These statistical surveys require identifying the locations of research targets and enlisting the cooperation of business operators and individuals who respond to surveys.

However, under the current circumstances where IT has made remarkable progress and forms of business have diversified, statistical surveys targeting business establishments are faced with increasing difficulties as a result of various factors, such as increases in the number of business establishments that are difficult to discern from their appearances, like SOHOs (small offices and home offices), adoption of a centralized business management system by many companies, and the streamlining of the personnel system of management divisions that serve as contact points for statistical surveys. It is also becoming increasingly difficult in recent years to obtain cooperation of survey respondents as more and more individuals and companies gain awareness of privacy issues and the need for business information management. Thus, decreases in response rate and increases in the number of unanswered questions raise serious concerns about the accuracy of information obtained from statistical surveys.

### (iii) Responses to Diversified and Advanced Use of Statistical Information

Due to the need to protect the confidentiality of survey respondents, the use of statistical information has been limited to summary tables provided by government departments in charge of creating statistical data. Individual users have rarely been allowed to re-aggregate or process data for their own purposes.

Nowadays, however, rapid progress in IT and information processing technologies has improved users' data processing abilities. Meanwhile, technologies are also available for providers of information to design data in such a way to satisfy the diversified needs of users. Many countries have developed systems designed to enable policy makers and researchers to access raw sample data, with personal identification information removed from questionnaires (anonymous sample data or micro-data), in order to analyze them freely in accordance with their own objectives and interests, or systems that allow public organizations to reorganize data to meet users' needs (tailor-made data tabulation or on-demand data tabulation).

If we are able to satisfy these users' needs while protecting the confidentiality of respondents, it will become possible to use statistical data effectively for purposes other than those originally intended by departments in charge of statistics. Such use of statistics may lead to new analyses and applications that meet policy needs and purposes that were not originally intended. It will also contribute to the streamlining of administrative processes by eliminating the need for similar statistical surveys and the deepening of the understanding of statistical surveys among business operators and individuals.

The statistics system of Japan provides various summary tables in digital form on websites and allows some statistical data to be processed freely by users to meet their needs to a certain extent. Nevertheless, with the exclusion of some pilot programs for certain statistical data, it lags behind in developing systems designed to respond to the need for diversified and advanced use of questionnaire-level data while protecting the confidentiality of respondents. This is partly because the basic framework of the current legal system does not assume such use of data.

### (iv) Responses to Restrictions on Various Resources Required for the Development of Statistics

In the years immediately following World War II, there was an urgent need to develop basic information required for the recovery of the national economy and social that had been devastated by the war. Accordingly, the development of statistics was counted among the highest priorities of national politics, with various resources (including personnel and budgets) mobilized to accelerate the development of the statistical system in Japan. However, a series of administrative and fiscal reforms subsequently implemented called for streamlining the use of these resources. And the need for speedy decision-making in policy and business management to cope with rapid changes in the national economy created an increasing demand for the prompt release of statistical data and restricted the use of another resource, i.e., the amount of time allowed to compile statistics.

In order to develop a system of high-quality statistics in response to these demands, it is necessary to allocate resources efficiently based on a long-term strategy for the overall development of statistics designed to adapt to changes in the industrial structure and policy needs. Nevertheless, such allocation of resources has not been achieved, causing the difficulties mentioned in (i). In terms of both the number of statistics personnel available for various ministries and budgets for statistical surveys by types of economic activities, resources are far from being adequately allocated for areas that require the development of statistics.

These are perhaps the immediate negative effects of the decentralized statistical system of Japan. Some of the major reasons for these negative effects include: that medium and long-term strategies and policies for the development of statistics formulated by the Statistics Council and conferences of the heads of statistical departments of related ministries are not shared by all members of the government, including members other than those directly involved in the compilation of statistics; and that coordination regarding statistics, focused mainly on individual statistical surveys, is provided through discrete instructions and approval procedures that are not grounded in medium and long-term perspectives or perspectives covering the entire system of statistics including processed statistics.

In contemporary society, important decisions regarding government policies, including economic and fiscal policies, and assessments of these policies need to be made rationally on objective grounds based on an adequate understanding of the overall state of the national economy and social. Needless to say, individual administrative strategies also need to be formulated, implemented, and assessed on objective grounds based on a proper understanding of the targets of these strategies and within the overall framework of government policies and the national economy and social. Policy approaches like these share the same ideas as "evidence-based policy making," which is attracting the attention of the global society as a basis of future policy making. These approaches are likely to be adopted as standards that meet the need to ensure the transparency of policy-making processes and accountability to the public. Against such background, it is becoming more and more necessary to develop not just statistics that meet individual policy needs but a coherent system of statistics that reveals the picture of the national economy in a comprehensive and objective way and to use these statistics as the basis for the policy management of the national government and local public entities.

Under the current circumstances where social and economic conditions are rapidly changing, making it difficult to foresee the future, the private sector is also facing challenges that do not allow decision-making based on past experiences or intuition. Companies are required to make judgments using objective indices in various situations. These circumstances lead us to believe that the demand for statistics that are easily accessible for business operators and the public at large and provide objective and accurate pictures of the national economy and social will continue to grow in the future.

Furthermore, in the global society where enduring relationships are being developed among its members, statistics are also used as the most objective indices that show the situations of different countries. Statistics provide basic information in policy areas that require international cooperation and play an important role in deepening mutual understanding. In the contemporary world where economies are being globalized and information is exchanged through networks with astonishing speed, it is the responsibility of Japan as a member of the global society with one of the largest economies in the world to provide timely information on its actual state based on objective statistical data.

In view of these roles of statistics and the growing need for statistics in the public and private sectors both inside and outside the country, the statistical system of Japan is no longer allowed to remain as it has been. There is a need to drastically revise the past strategy on developing statistics, which was focused on using statistics for individual government policies without regard to systematic relationships between statistics or accessibility for business operators and the public. We need to develop statistics that serve as a information basis for the development of society and are provided by the government as part of its basic administrative service.

While Japan was counted among the countries with the most advanced systems of statistics in the world, other advanced countries with a greater awareness of the important social roles of statistics have stepped up their efforts to develop and improve their statistical systems. Japan is still counted among the countries with advanced statistical systems in the world,

but with its current system of statistics, it is unable to successfully compete with other advanced countries. In order to improve our position in the global society and contribute to its development, it is necessary to implement initiatives aimed at reforming the current system of domestic statistics.

### (3) Basic Perspectives for the Reform

Under the current situation where we are faced with an urgent need to establish a foundation for growth in new conditions surrounding Japan, such as the population decline and changes in the global environment, the improvement of statistics is indeed the most fundamental task of all.

We need to accept the reform of the statistical system as one of the highest priority policy tasks of the government and implement it as part of the process that completes the structural reform and as a step toward new development for the future.

The problems of the current situation mentioned in (2) lead us to believe that the following perspectives are required to implement the reform:

#### (i) Statistics as *Public Assets*

Statistics compiled by the government need to be considered as *public assets* intended to be used for a wide range of purposes and the government should play a leading role in providing these statistics. Statistics used by ministries for administrative purposes should also be produced and provided by the government as part of an information infrastructure widely used by business operators and individuals.

Taken as a whole, these statistics regarded as *public assets* form an indispensable part of the information system of our society. Government statistics in contemporary society are not merely a collection of secondary information compiled for individual administrative projects but are part of the basic administrative service to be provided by the government. Government statistics should fulfill certain theoretical and global standards, form a coherent system and meet the rational needs of a wide range of users. Used as tools for understanding current conditions and assessing policies, government statistics should also remain neutral to political powers or policy management.

#### (ii) Development of a System of Statistics Including Processed Statistics

As a result of the circumstances mentioned in (2), general and basic primary statistics, especially economic statistics, have not been fully developed even in some of the areas of activities where there are strong political and social needs for statistics. Statistics of Japan also lack coherence as a system, as exemplified by the lack of consistency between the SNA (system of national accounts) and statistics that form its basis.

In order to provide the government, local public entities, business operators, individual users, the governments of other countries and international organizations with accurate information on the national economy and social, it is necessary to create a system of

national accounts (SNA) based on a theoretical framework that allows international comparison and to develop a coherent system of government statistics around the SNA by effectively combining important processed statistics, including GDP-related statistics and input-output tables, with primary statistics that form their basis. There is also a need to develop all primary and processed statistics required to meet political and social needs based on a coherent system of statistical concepts.

Despite some attempts to construct *social indices*, there are as yet no social statistics comparable to the SNA that can provide a basis for the development of a system. There is a need to develop social statistics in accordance with international standards and provide accurate data on social conditions, such as changes in lifestyles and the decline in the birthrate, so as to prepare for the advent of a society with a decreasing population.

### (iii) Enhancement of the "Headquarters" Function of the Statistics Division within the Government

In order to develop and improve a statistical system, it is essential to develop statistics as *public assets* and build a coherent system of statistics, including processed statistics, and to make the maximum use of resources allocated for the development of statistics.

To that end, it is necessary to take advantage of the characteristics of the existing decentralized statistical system, such as flexible responses to individual policy objectives and expertise accumulated in organizations engaged in compiling statistics. At the same time, we need to enhance the "headquatters" function of the statistics division within the government and review the entire range of statistics compiled by ministries from medium and long-term perspectives in order to promote the planned development of a statistical system while making adjustments in the overall system and individual statistics as needed.

### (iv) Initiatives Including Revisions of the Legal System

Past initiatives for the development and improvement of statistics, formulated mostly within the framework of existing legal systems including the Statistics Act, have been unable to fully address legal issues involved in the development of statistics.

The current reform should be undertaken in accordance with the initiatives for the development of individual statistics outlined in Section 2, with the aim of revising the institutional frameworks and legal systems that form a basis for individual statistics to adapt to changes that have occurred since the establishment of these systems and the trends of international programs.

## 2. Matters Concerning the Development of Statistics

The major problem of the statistical system of Japan as a whole which urgently needs to be resolved is, in short, the lack of coherence in the development of statistics.

In order to create a coherent system of statistics that reveal an accurate picture of the national economy and social, we need to promote the development and improvement of the following statistics designed to provide a comprehensive understanding of the national economy and meet political and social needs.

### (1) Economic Census (Tentative Title)

#### General guidelines:

Industrial statistics of Japan are currently compiled basically for each industry and by each ministries concerned. Accordingly, the periods and cycles of surveys vary from one survey to another in an environment where establishments and enterprises open and close at a rapid pace. There are also no consistent definitions of concepts and terms used in surveys. For these reasons, it is impossible to gain an overall picture of economic activities in all industrial areas at any single point in time even if all the results of existing statistical surveys are brought together. Consequently, primary statistics that provide an overall picture of the economic activities are not fully developed in Japan, which not only creates difficulties in the use of statistics but also causes serious limitations on estimating the GDP, which is used as an important index when making decisions on economic, financial and other policies.

In order to improve these circumstances, there is an urgent need to eliminate, integrate and simplify existing surveys that are mutually related, and conduct an Economic Census (tentative title) covering all establishments and enterprises in all industries, which is designed to provide accounting information that represents the actual state of economic activities. Economic Census (tentative title) surveys will be conducted to obtain basic accounting data such as sales figures. These data, which may be used as a source of census population registers of establishments and enterprises, will provide considerable support for designing statistical surveys on tertiary industries (service industries) that have not yet been fully developed and for improving the accuracy of these surveys.

Economic Census (tentative title), which cover all establishments and enterprises and serve as a basis for the industrial statistics of Japan, will provide a benchmark for analyzing economic activities based on accounting data such as sales figures. This will also play an important role in compiling population registers of establishments and enterprises. Therefore, there is a need to take great care not to miss any survey target when conducting these surveys. In recent years, there has been an increase in the number of establishments and enterprises, such as SOHOs, that are difficult to discern by the visual inspections of enumirators. Since the percentage of these establishments and enterprises is likely to increase in the future, it is essential to obtain accurate data on these survey targets using

various administrative records, including corporate registers that provide basic information on the names and locations of companies.

Actions to be taken:

There is a need to achieve consensus on the framework of the Economic Census (tentative title) by the end of this year in accordance with the general guidelines drawn up in March 2005 by the Panel Concerning the Establishment of an Economic Census System (chaired by Masahiko Shimizu, Professor at the Department of Economics, Keio University) organized by related ministries. Based on the consensus, we need to conduct a survey aimed at collecting basic information on existing establishments and enterprises in 2009 and use the information obtained from the survey to conduct another survey aimed at obtaining accounting data in 2011. Meanwhile, ministries concerned should create a unified system for survey administration and budgeting to regulate the relationship between national government and local public entities. At the same time, there is a need to streamline the survey system by eliminating and integrating existing statistical surveys associated with the Economic Census that are annually or periodically conducted covering establishments and enterprises.

In order to obtain accurate data on all existing establishments and enterprises, including those that are difficult to discern by visual inspections of enumerators (such as SOHOs), administrative records on the names and locations of corporations should be effectively used in Economic Census. With a view to ensuring smooth implementation of surveys, ministries concerned should take measures aimed at enabling survey organizations to use administrative records at pre-survey stages so that accurate information can be obtained to cover all survey targets.

### (2) GDP-related Statistics (SNA)

General guidelines:

Various statistics in the system of national accounts (hereinafter referred to as “SNA”), including GDP-related statistics, which present a comprehensive picture of the economic activities of a nation and are compiled in different countries on the basis of a common system recommended by the United Nations, provide very useful information that can be used for international comparison.

These statistics are likely to increase in importance in the future and continue to be used as essential information by ministries when formulating economic, fiscal and other important policies and by business operators and individuals inside and outside the country when making decisions in their economic activities. Accordingly, we need to continue to make efforts to improve their reliability, quality and content.

Meanwhile, the SNA not only gives useful information in itself but requires a large number of primary statistics for its compilation and estimation. As a result, it makes it possible to

review the development of primary statistics and also serves as an important tool for providing a basic perspective for the systematic development of economic statistics.

In view of these characteristics and roles of the SNA, the Cabinet Office (Economic and Social Research Institute), which is in charge of compiling GDP-related statistics (the core of the SNA), and ministries in charge of compiling basic statistics should work in close communication with each other in a number of areas such as: developing data required for GDP-related statistics; improving the method of compilation suited to the actual state of basic statistics; developing and organizing concepts used in both GDP-related statistics and basic statistics; and promptly releasing preliminary GDP estimates based on global trends. Their collaboration in these areas will contribute to further improvements in the accuracy of SNA data and the systematic development of basic statistics.

Since April last year, the National Economic Accounting Survey Conference has held discussions about measures to be taken for revising national accounting standards in order to improve the adequacy of the current SNA. Since June, based on the New Directions in the Development of Government Statistical Services (official agreement of the Meeting of the Heads of the Statistical Departments of the Cabinet Office and Ministries in June 2003), the Specialized Conference Concerning the Development of Statistical Systems Related to the SNA (chaired by Fumio Funaoka, Professor at the Economics Department, Shinshu University), organized by related ministries, has reviewed the development of basic statistics from the viewpoint of the SNA and held discussions about the development of statistical systems among the members of the government, calling for reviews by scholars and related ministries. Among processed statistics, the SNA requires skills of the highest level to meet theoretical and academic requirements under specific circumstances regarding basic statistics. It is therefore expected that discussions held by these conferences will lead to substantive results and contribute to the development and improvement of both the SNA and basic statistics.

### Actions to be taken:

The Cabinet Office should release information on the method used for the estimation of the SNA and work in closer communication with the organizations engaged in compiling basic statistics. It should also improve the method of estimation based on the discussions of scholars at the National Economic Accounting Survey Conference and other meetings and provide information on the limits of estimation and statistical inconsistencies caused by the insufficient development of basic statistics along with the release of survey results.

Ministries in charge of compiling basic statistics should take the initiative in providing supplementary information that may affect the accuracy of the SNA (such as revisions of standards related to basic statistics, sampling errors, and replacement of samples) to the Cabinet Office in advance. They also need to create a system designed to exchange such information on a periodic basis, or as needed.

In order to improve the accuracy of input-output tables, which play an important role as basic information for GDP-related statistics, the Ministry of Internal Affairs and Communications should expand the range of structural surveys conducted to obtain basic

data and make efficient use of the results of these surveys for the compilation of input-output tables for 2005. Meanwhile, in view of the possibility that the development of e-government systems at national and local levels will enable relevant organizations to submit reports on fiscal expenditures of national government and local public entities earlier and more efficiently, the Cabinet Office should study methods of using data obtained on a cash basis to improve the accuracy of the SNA estimates obtained on an accrual basis.

The Cabinet Office should make appropriate use of the results of theoretical and empirical studies on the concepts, measurements and calculation of the SNA conducted inside and outside Japan in order to develop statistics and work in collaboration with the Ministry of Internal Affairs and Communications and other related ministries to take an active part in international discussions for the revision of the 93 SNA in 2008.

### (3) Statistics on Service Industries

#### General guidelines:

Tertiary industries (service industries) account for about 70% of the economic activities in Japan on a GDP basis and about two-thirds on an employment basis. In order to provide an accurate picture of the national economy of Japan, it is necessary to develop accurate statistics on service industries.

However, as shown in the Statistics Map (Service Industries) created by the Ministry of Internal Affairs and Communications, which provides an overview of the development of statistics on tertiary industries (service industries) by business area and by survey subject, statistics on service industries, compiled under the jurisdiction of a number of different ministries organizations, are developed under the decentralized statistical system for each business area, just like mosaics. The Survey on Service Industries, which is conducted by the Ministry of Internal Affairs and Communications at intervals of five years, is one of the large-scale surveys on service industries conducted on a periodic basis. Statistical surveys conducted annually or periodically by ministries targeting respective business area placed under their supervision include a considerable number of surveys, such as the Survey of Selected Service Industries conducted by the Ministry of Economy, Trade and Industry every year or at three-year intervals targeting service industries under the ministry's jurisdiction. Although these surveys (including the Survey on Service Industries) provide considerable information on respective survey targets, their targets are still only a small part of service industries as a whole. For this reason, they are incapable of providing an accurate overall picture of service industries. Meanwhile, there are almost no statistical surveys conducted on a monthly or quarterly basis, with the exclusion of the Dynamic Survey of Selected Service Industries by the Ministry of Economy, Trade and Industry on industries under its jurisdiction.

These circumstances not only create difficulties in the use of industrial statistics but also seriously limit the accuracy of various data, including GDP-related statistics and input-output tables, due to the overwhelming share of tertiary industries in the economic activities

of Japan. There is an urgent need to improve these circumstances in order to develop a coherent statistical system. There are particularly high expectations that the scope of monthly statistics, which is currently limited to some business categories, will be expanded to cover all service industries so as to provide basic data for quarterly estimates (QE, or quarterly GDP preliminary estimates).

Since statistics to be developed in service industries are likely to include items that are difficult to access by inspections due to restrictions of the survey environment, there may be a need to use administrative records and statistics provided by private companies to collect data that are difficult to obtain.

Actions to be taken:

In order to improve the accuracy of economic indices, including quarterly estimates, the Ministry of Internal Affairs and Communications should work in collaboration with related ministries to establish a council comprising scholars as soon as possible, with the aim of developing dynamic statistics that provide monthly data on production and employment in service industries where dynamic statistics are not fully developed. These dynamic statistics should be used along with existing statistics in order to develop a statistical system designed to reveal an overall picture of service industries as a whole. There is a need to achieve consensus on the basic framework of these statistics by the end of fiscal 2005.

Once appropriate population registers have been compiled by the Economic Census (tentative title), structural statistics need to be developed that will provide a wide range of information on service industries obtained from sample surveys designed to analyze the structural aspects of service industries and improve the accuracy of GDP-related statistics and input-output tables.

### (4) Stock Statistics

General guidelines:

There has been an increase in recent years in the percentage of assets in the GDP, with the possession and transactions of assets having increasing effects on the economy as a whole. As stock economies develop, the possession and use of facilities and equipment in enterprise are gradually separated from each other through leases and rentals, causing significant changes in the roles of stocks in economic activities. These changes are exemplified by the increasing importance of intellectual property (software, patent right and copyrights) and other intangible assets as sources of added value. In order to accurately analyze national economies and adequately understand industrial structures, it is therefore essential to obtain sufficient data on stocks in businesses and household economies, including land, buildings and equipments.

However, while information on land and buildings has become available to a considerable extent through various statistical surveys on companies and households developed in the

past, statistics on equipment stocks and intangible assets of bisinesses still leave much to be desired.

In the Annual Report on National Accounts (Stock Series) and the Gross Capital Stock of Private Enterprises (Preliminary Quarterly Estimates and Annual Report), which are representative stock statistics of Japan, the benchmark method is employed based on the National Wealth Survey conducted in 1970. However, since coefficients obtained from the National Wealth Survey are used to make estimates based on the assumption that there are no long-term changes in these coefficients, these stock statistics involve the risk of decreased accuracy. Considering the cost and the burden of survey respondents involved, it is not feasible to conduct a survey comparable to the National Wealth Survey under the current circumstances. It should also be noted that the estimation method known as the Perpetual Inventory Method is the globally accepted standard today. These considerations lead us to conclude that revisions need to be made to capital stock statistics in general.

When developing capital stock statistics, it is necessary to maintain overall coherence with respect to various factors, including concept definitions, estimation methods, series of data to be released and the treatment of intangible fixed assets, and also to pay attention to international standards shown in the 93 SNA. It is particularly important to maintain cooperation between government officials in charge of statistics and researchers. The Capital Stock Advisory Committee (chaired by Shintaro Takagi, Professor at the Faculty of Economics, Seikei University), organized within the National Accounts Survey Council, needs to take an active part in sorting out priorities and making steady improvements in capital stock statistics.

#### Actions to be taken:

The Capital Stock Advisory Committee of the National Accounts Survey Council needs to make thorough examinations of capital stock statistics, including estimation methods, in order to improve the quality of data. There is a need to take into account the results of projects and research conducted in other countries, and based on these results, to define concepts about capital stocks required for the compilation of the SNA, develop methods for estimation and data collection designed to reduce the risk of decrease in accuracy, and study how to estimate intangible fixed assets.

### (5) Other Statistics

There are many statistics other than those mentioned in (1) through (4) that will be required for the development of economic and social statistics, including those whose importance is mentioned in the New Directions in the Government Statistical Services (e.g., IT-related statistics, employment-related statistics and environmental statistics). In this section, we will focus on tourism statistics, which, although not mentioned in the above report, are of particular importance for the future statistical system, and discuss how to create flexible organizational systems required for the development of statistics.

### (i) Systematic Development of Tourism Statistics

#### General guidelines:

The government chose Tourism-Oriented Country as one of its priority policies and drew up an action plan for the policy at the meeting of the Conference of Related Ministers held in July two years ago. Various initiatives have been developed, including a report made in November last year by the Committee for the Nation Building Strategy Based on Tourism (chaired by Jiro Ushio, Chairman of Ushio Inc.) organized by the Conference of Related Ministers, which proposed four challenges and made fifty-five proposals to develop strategies for Tourism-Oriented Country.

In European countries and the United States, where tourism is counted among the most important industries, tourism statistics are considered as providing information infrastructure that supports government policies on tourism. Countries like Spain are collecting data on the number of tourists by month and by area and incomes from tourism for each quarter period in order to reflect these statistics in their tourism policies.

In comparison to statistics in these countries, tourism statistics in Japan have a number of shortcomings such as: that tourism statistics in Japan produced by various public and private organizations for their respective purposes are fragmentary and unable to provide comprehensive information on tourism; that due to the lack of unified standards, it is difficult to make comparisons between different statistics; that samples chosen for statistical surveys are small in size; and that the frequency of data release and periods of compilation vary between surveys. For these reasons, comprehensive and reliable tourism statistics that can serve as a basis for policy formulation have yet to be developed.

As pointed out in the report by the Committee for the Nation Building Strategy Based on Tourism published in November last year, there is an urgent need to develop a system of tourism statistics as a foundation of tourism policies in order to formulate effective tourism strategies for different industries and areas. The national government and local public entities and private groups should work in collaboration to implement effective initiatives. The World Tourism Organization (WTO), which is specialized organization of the United Nations started two years ago to formulate unified global standards regarding statistics on foreign tourists. There is a need to pay careful attention to these global trends from the perspective of international comparison when developing tourism statistics in the future.

#### Actions to be taken:

Based on the results of past reviews and advanced examples of foreign countries, the Ministry of Land, Infrastructure, Transport and Tourism should draw up general guidelines on tourism statistics (including concept definitions, survey targets, survey methods, data release frequency, and roles of the government and private sectors) as soon as possible at the Round-table Conference Concerning the Development of Tourism Statistics (chaired by Hirotaka Yamauchi, Professor at the Graduate School of Commerce and Management, Hitotsubashi University) in order to develop a system of tourism statistics, including conducting necessary statistical surveys by the end of 2006.

### (ii) Development of Statistics That Require Flexible Responses

#### General guidelines:

Since statistical surveys normally require designing surveys, making adjustments with existing statistical surveys, making organizational arrangements, obtaining budgets and gaining approval, it is difficult to make changes to survey content in response to the needs of the moment.

However, flexible policy management has become necessary today to meet the changing needs of the national economy and social and data that are not provided by existing statistics are often urgently required in order to make policy judgments. Under the decentralized statistical system of Japan, such circumstances are likely to arise in newly developed business areas, areas that have not been directly covered by government policies, and areas that are placed under the jurisdiction of more than one ministry. It therefore becomes necessary to consider how to develop statistics designed to meet urgent needs that require actions across different ministries.

In such cases, it is possible to raise the level of flexibility of statistical surveys and systems by making additions or changes to the content of existing monthly surveys in response to changing needs. However, since such additions or changes are often ineffective in meeting the specific needs of the moment, one possible option is to create a framework for surveys that are conducted as urgent policy needs arise, just like opinion polls conducted with themes chosen in accordance with changing policy needs of the times.

#### Actions to be taken:

In order to meet urgent policy needs, it is necessary to create a framework designed to flexibly conduct statistical surveys by making additions or changes to the content of existing monthly surveys.

When creating such a framework, there is also a need to establish standard procedures, including identifying policy needs, choosing survey items, designing survey questionnaires, giving directions to survey organizations, conducting surveys and releasing results, and to streamline the procedures required for the approval of changes and additions made to the survey items.

The Ministry of Internal Affairs and Communications and other related organizations should also consider how to obtain resources required for statistical surveys conducted without predetermined survey themes in order to meet urgent policy needs that require actions across different ministries.

## 3. Matters Concerning Statistical Systems

In order to resolve problems of the statistics of Japan, it is essential not only to develop and improve individual statistics mentioned in Section 2 but also to establish a solid organizational foundation that supports these statistics when reforming the statistical system.

In view of the various problems facing the statistical system of Japan mentioned in Section 1, the most important institutional issues to be considered are the following:

### (1) Systematization of Statistics

#### General guidelines:

As mentioned in Section 1, rapid changes in the environment surrounding the economy and social of Japan have made it necessary for the government and private sector to make decisions based on objective and rational grounds, thereby creating the need for the development of statistics that provide a comprehensive picture of the actual state of the economy and social as a whole.

However, under the current decentralized statistical system of Japan, many statistics are developed primarily to be used for the purpose of individual policies of ministries, causing primary statistics to be developed in a mosaic-like fashion reflecting the separate jurisdictions of various ministries. In addition, the system of national accounts (SNA), which forms the core of economic statistics that represent a comprehensive picture of the national economy and social of Japan, is not well coordinated with primary statistics that provide a foundation for the system. Accordingly, statistical concepts and terms used in the entire system are not systematically related to each other.

The Statistics Law, which was enacted in 1947, mentions the “development of a system of statistics” as one of its objectives in Article 1. Although the “statistics” in this act are not explicitly limited to survey statistics, the legal system as a whole is established mainly for the development of survey statistics. Accordingly, the importance of processed statistics, including the SNA, is not fully realized in the act. The situation is basically the same with the Statistical Reports Coordination Law, making it difficult to incorporate processed statistics in the statistical system or establish connections between processed statistics and primary statistics, including survey statistics, under the current acts regarding statistics.

The national statistical system, which is supported by limited resources, needs to be developed by eliminating statistics that have become obsolete as a result of changes in the industrial structure and social environment and by creating statistics that respond to new needs. The system of designated statistics stipulated in the Statistics Act, which occupies a major role in the development of the statistical system, is not fulfilling active roles in its development for the following reasons: that the system of designated statistics is implemented merely to approve and designate statistics in response to requests submitted by those who conduct statistical surveys; that there are no established procedures for abolishing statistics once they have been designated; and that there is no consensus based

on medium and long-term perspectives among members of ministries on basic strategies for the development of a statistical system.

In order to develop statistics for the future, it is essential to adopt a basic policy aimed at developing a statistical system in response to changes in the industrial structure and social environment. There is a need to establish a systematic relationship between processed statistics and survey and statistics derived from administrative records from medium and long-term perspectives using various means, including making revisions to the existing procedures and legal systems mentioned above, in order to create a statistical system that provides the national government, local public entities, establishments and the public at large with an accurate picture of the national economy and social of Japan.

Meanwhile, to create a coherent system of economic statistics, we need to follow the following guidelines: creating a system of national accounts within a theoretical framework that allows international comparison, which serves as the basis of the entire system, to establish a systematic relationship between GDP-related statistics and input-output tables and primary statistics; and producing all primary statistics required to meet political and social needs. In the area of social statistics, there is no established basis which is comparable to the SNA in economic statistics, but we still need to develop a coherent system of social statistics designed to provide accurate data on changes in lifestyles and the decline in the birthrate.

Actions to be taken:

To develop a statistical system by the government based on a plan formulated from medium-term perspectives, we need to make a medium-term basic plan (the Basic Plan) for comprehensive and planned development of statistics, including processed statistics.

The Basic Plan should be formulated based on views of scholars and users of statistics in order to provide basic guidelines for the development of statistics over the period of about five years and to specify particularly important areas where statistics need to be developed, and should also propose programs to be implemented by the government over these five years. The specific roles and content of these programs need to be specified in conferences and meetings mentioned in Section 4.

## (2) Enhancement of the “Headquarters” Functions of the Statistics Staff and Statistical Organizations in Japan

### (a) Statistical Organizations of the National Government

General guidelines:

The decentralized statistical system of Japan has the following advantages: It is capable of providing statistics tailored to the individual policy needs of ministries; and each ministries in charge of statistics is able to train its own experts on statistics and accumulate its own expertise on statistics. At the same time, however, it also has the following disadvantages, as pointed out in Section 1: The use of statistics for individual policies of ministries in

charge of compiling statistics is likely to be given priority over other purposes, preventing the systematic development of statistics and the efficient use and flexible allocation of limited resources. Under the current circumstances surrounding statistics, these disadvantages of the system appear more serious than its advantages.

In laws on statistics and laws on the establishment of ministries, the general coordination functions in statistical administration are defined as tasks to be performed by the Ministry (Minister) of Internal Affairs and Communications with practical support provided by the Statistical Standards Department of the Statistics Bureau (scheduled to be transferred to the Director-General for Policy Planning in summer this year) and the Statistics Council. However, coordination functions performed by these organizations are no more than reviews and approval of individual statistical surveys and remain passive in nature. These statistical organizations do not perform active roles, such as presenting future guidelines for statistical systems and the development of statistics for the government as a whole from medium and long-term perspectives and formulating plans for the development of individual statistics based on such guidelines.

Reviewing the current problems of the statistics of Japan makes us realize that the bulk of these problems result from the decentralized statistical system and the coordination functions of the system. There is an urgent need to overcome the shortcomings of this decentralized system. However, the actual state of statistical administration in Japan and examples of statistical systems in other countries lead us to believe that it is not feasible to create an entirely centralized system in which all administrative functions regarding statistics are concentrated in a single government organization.

Therefore, what is actually needed is a “headquarters” system designed to enhance the core functions currently performed by the Ministry of Internal Affairs and Communications (the Statistics Bureau, the Statistics Council, etc.) and the Cabinet Office (the Department of National Accounts of the Economic and Social Research Institute, the National Accounts Survey Council, etc.), including coordination and review functions, and functions to develop the SNA system, establish statistical standards and conduct basic statistical surveys.

Whether this “headquarters” system should be a “virtual” organization created within the current organizational framework of the Ministry of Internal Affairs and Communications and the Cabinet Office by enhancing and combining the functions of existing organizations or a “real” organization provided with all or some of the functions of existing organizations is left for further discussion.

In any case, our basic guidelines mentioned above, existing coordination procedures in other government-wide administrative areas, and examples of statistical systems and their operations in other countries lead us to believe that the following functions should be included among the major functions to be performed by the “headquarters” system:

(1) Designing and planning of basic matters regarding statistical systems

(2) Formulation of medium-term basic plans for the development of statistics

(3) Establishment of statistical standards (including classification)

(4) Development of a comprehensive system of national accounting (SNA)

(5) Coordination (including designation and approval, etc.) regarding the compilation of individual statistics and implementation of statistical surveys

(6) Planning and implementation of government-wide statistical surveys

(7) Development and provision of information on populations shared by statistical surveys conducted by various ministries.

(8) Improvement of the professional skills of statistics staff

The “headquarters” system should perform not only passive coordination functions such as designation and approval of individual statistics (surveys) but also more flexible coordination functions, such as providing existence and future guidelines for statistical systems based on the views of users, reviewing the actual development of the system of primary statistics through the compilation of processed statistics such as the SNA, and enlisting the cooperation of ministries in charge of compiling statistics. It should also take the initiative in designing and conducting government-wide statistical surveys and assume the final responsibility for compiling statistics that are required in order to meet political and social needs but are prevented by the decentralized statistical system from being compiled by existing ministries. The development of information on populations that serve as common bases for various statistical surveys is another important role to be performed by the “headquarters” system.

The following conditions should be taken into consideration when examining how this “headquarters” system should be developed: Various functions of the system should be coordinated with each other so that they can be effectively performed; responsibilities within the system should be clearly specified; and the system should have no difficulty in securing and training personnel with professional expertise.

Compared with other administrative areas, statistical administration involves high levels of technical and professional knowledge and requires maintaining political neutrality by its nature. Therefore, third-party organizations composed of scholars, such as the current Statistics Council, occupy a crucial role in the “headquarters” system. The “headquarters” system should be organized in such a way as to enable these third-party organizations to actively state their views required for the development of the statistical system as a whole through their participation in providing guidelines for the development of statistics from medium and long-term perspectives, implementing government initiatives, and compiling individual statistics.

### Actions to be taken:

Based on the above guidelines and taking into consideration legal and organizational issues, we need to formulate specific strategies for the statistical system designed to enhance the “headquarters” functions of the government at meetings and conferences mentioned in Section 4 and achieve consensus by the summer of 2006.

### (b) Local Statistical Organizations

#### General guidelines:

Local statistical organizations play important roles as basic infrastructure for statistical surveys in Japan, such as making implementation of large-scale surveys conducted by the government, implementing statistics projects in local communities, and compiling local statistics.

These functions of local public entities will continue to be indispensable for smooth implementation of large-scale statistical surveys. However, due to serious political and financial situations facing local public entities, increases in the level of complexity and sophistication of statistical surveys, and changes in the survey environment, it is becoming more and more difficult to conduct statistical surveys. Accordingly, local statistical organizations also require reform.

Meanwhile, as has already been mentioned, there is a need to improve the current situation where the development of statistics is lagging behind in tertiary industries, despite the fact that they account for a very high percentage of economic activities in Japan. It is especially necessary to examine how statistical data should be provided in areas (such as service industries) where there is an urgent demand for the new development of statistics.

Organizations in charge of conducting surveys required for these statistics need to be examined in the process of drawing up detailed plans aimed at providing accurate data on the state of local communities. If we can gain the consent of some of the statistics staff in agriculture, forestry and fisheries to work in other areas, we will be able to continue to effectively use the abilities and expertise of those who have been engaged in work related to statistics in these areas, which need to reduce statistics personnel by about 1,100 persons in the five years from 2005.

#### Actions to be taken:

Based on the above guidelines, the Ministry of Internal Affairs and Communications and other related ministries should examine how to create efficient organizational systems, including the employment of existing personnel engaged in work related to statistics, with the aim of promoting the development of statistics in new areas such as service industries.

### (c) Training and Recruitment of Personnel Engaged in Compiling Statistics

#### General guidelines:

Even if the “headquarters” functions of the national government are enhanced and local survey systems are fully developed, statistics of Japan will not show any dramatic improvement unless there is a sufficient number of personnel with qualities and abilities required for the management of these systems. Although it is difficult to make a direct comparison between the statistical organizations of Japan and other advanced countries because of differences in administrative and personnel systems, the actual number and composition of personnel in statistical organizations of advanced countries lead us to

conclude that relative to the size of economy and population, statistics personnel in other advanced countries are not only greater in absolute number, but the percentage of those who have completed technical statistics courses in university is also higher.

To train their personnel, major ministries in charge of compiling statistics are currently using on-the-job training or training programs provided by professional training institutions, such as the Statistical Research and Training Institute (Ministry of Internal Affairs and Communications), in rotation among a wide range of organizations. However, since the number of technical personnel who choose statistics as their main career is highly limited, these organizations have not obtained or trained a sufficient number of professional staff with a wide range of expertise.

Compared with other administrative areas, statistical administration requires high levels of theoretical knowledge, technical expertise and practical skills in various processes, including planning, designing, implementation, aggregation, processing, review and analysis. Various attempts to develop statistics are being made in international organizations and in order to have a proper understanding of these attempts and reflect their results in domestic policies and to make positive contributions to these attempts, it is essential to obtain and train personnel who are able to take an active part in professional discussions in international conferences with experts in statistics of other countries.

Job experience in more than one statistical organization (in related divisions, such as primary statistics compilation divisions, processed statistics compilation divisions, coordination and review divisions, survey implementation divisions) will not only improve the abilities of individual staff members but also bring benefits to their organizations through the exchange of experiences and know-how between staff members. If personnel with expertise in statistics are allowed to have experience in divisions in charge of making policies and implementing projects, they will be able to have a deeper understanding of the needs of users of statistics and acquire administrative knowledge required for statistical administration, including knowledge about acts, budgeting and accounting, thereby expanding the range of knowledge as experts in statistics. Divisions in charge of policy making that employ personnel with expertise in statistics will also be able to make more effective use of quantitative and objective statistics when formulating and evaluating policies.

Personnel in administrative areas other than statistics will not be able to acquire skills to fully use varieties of statistics just by receiving on-the-job training provided as the need arises. There will be a need to have them attend courses provided by professional statistics training institutions and to incorporate experience in statistics-related divisions into their career paths in order to improve their basic abilities for jobs in divisions engaged in making policies or implementing projects. Due consideration must be given to the need for training in the personnel management of these staff members.

### Actions to be taken:

Ministries closely related to statistical administration should encourage expert statistics personnel to gain experience in divisions engaged in making policies and implementing

projects. They should also formulate training policies and plans to allocate personnel so that statistics personnel can develop high levels of professional skills in various divisions, such as primary statistics compilation divisions, processed statistics compilation divisions, coordination and review divisions, and survey divisions. Ministries should promote active personnel exchange on a continuous basis between these statistics-related ministries.

### (3) Use of Administrative Records

#### General guidelines:

The idea of using administrative records, which are kept by ministries based on reports and applications for approval, for the purpose of creating statistics and compiling population registers for statistical surveys was first proposed in the New Medium and Long-term Strategies for Statistical Administration (March 1995) by the Statistics Council. Since then, relevant ministries have been reviewing the idea for more than a decade. As a result, administrative records have been used in some of the statistical surveys conducted by ministries to simplify survey procedures. On the whole, however, the use of administrative records for statistical surveys remains relatively limited in Japan.

There are several reasons for this, such as that administrative records used to compile statistics often entail legal or operational restrictions, including the prohibition of use for unintended purposes and the obligation to protect confidential information, and that due to the lack of uniformity in the range and content of information available in administrative records, these records are not easily usable for statistical purposes.

However, changes in the survey environment in recent years (such as increases in the number of establishments and enterprises that are difficult to discern by visual inspections of enumerators), the need to reduce the burden of survey respondents, and serious administrative and financial circumstances lead us to believe that using various administrative records as basic material to compile population registers for statistical surveys and to supplement information on uncooperative respondents or missing survey data will bring great benefits, such as improving the efficiency of survey procedures, reducing the burden of respondents, improving the accuracy of information obtained, and helping release statistics earlier. For these reasons, we need to step up our efforts to promote the use of these records.

At present, services and systems are being optimized at a rapid pace as part of the process of developing e-government systems in various areas, such as the acceptance of electronic applications and the provision of statistical survey services. As a result, many of the problems of data processing that have prevented the use of administrative records are likely to be eventually resolved. Therefore, we need to continue our efforts in accordance with the progress in administrative optimization.

The principal purpose of prohibiting the use of administrative records for unintended purposes and protecting confidential information is to gain public trust in administrative services. There is no doubt that these rules are justifiable on certain grounds. However, we

need to consider that administrative records on individuals will be released as statistical figures with all identification information removed. It is also worth mentioning that using administrative records for official statistical purposes is one way to use these records for the greatest public benefits. These considerations lead us to conclude that one possible option to solve the conflict of interests is to specify the legal responsibility of statistical organizations to present clear grounds for using administrative records and to prohibit using these records for purposes other than compiling statistics. In other countries, various administrative records are actively used for statistical purposes, mainly to collect data on establishments and enterprises. There are countries that are working to make rules on administrative records in laws and regulations regarding statistics in order to legalize their use.

Administrative records can be used not only to develop population information or to supplement data for statistical surveys but also as sources of processed statistics that provide valuable information on areas that are not currently included as targets of statistical surveys. There is a need to actively promote the use of administrative records for statistical purposes, which is required for the development of the statistical system.

#### Actions to be taken:

In order to make more extensive use of administrative records for statistical purposes, we need to consider making rules about the use of these records in laws and regulations regarding statistics at conferences and meetings mentioned in Section 4.

To promote the use of administrative records, the Ministry of Internal Affairs and Communications should encourage related ministries to study how to assess the quality and timeliness of data, cost involved and the burden of respondents when designing statistical surveys.

### (4) Diversified and Advanced Use of Statistical Information

#### General guidelines:

Today, when the use of resources becomes more and more limited, we need to make maximum use of various statistical information possessed by the government to meet the diversified needs of users, while at the same time protecting the confidential information of survey respondents.

Information collected by the government through statistical surveys is provided to a wide range of users in a variety of statistical tables via the Internet and publications. However, it is difficult to predict all the diversified needs of the users of statistics in advance. Even if such predictions were possible, it is not practical for the government to aggregate data in such a way to cater to all these needs.

Meanwhile, rapid progress in IT and information processing technology in recent years provides users of statistics with a means of freely performing advanced analyses from various perspectives without disclosing confidential information of survey respondents.

Therefore, if users are allowed to perform analysis on their own, they will be able to not only produce basic materials for making flexible policies but also contribute to social and scientific development through their original analyses. The flexible use of existing statistics may also help to simplify statistical survey procedures and to improve the usability of statistics by adding relevant supplementary data, thereby reducing the burden of survey respondents and promoting the effective use of limited resources.

Some practical measures aimed at meeting users' needs for diversified and advanced use of statistics are being introduced even under the current statistical system, such as unified service for providing statistical information through the Internet (the Portal Site of Official Statistics of Japan, etc.) and the use of questionnaires for unintended purposes with the approval of the relevant ministers, including the Minister of Internal Affairs and Communications (Statistics Act, Article 15 and Article 15, Paragraph 2). Other countries, such as the United States, the United Kingdom and Canada, while taking great care to protect the confidential information of survey respondents, are adopting the policy of using micro data (anonymous sample data: questionnaire data with identification information, such as area codes and household numbers, removed to prevent individual identification) for policy making and scientific research. Combined with tailor-made statistics (data provided by ministries and other research organizations by compiling summary tables using questionnaire data to respond to the individual needs of users) and statistical data archives that support the use of tailor-made statistics, the use of micro data plays an important role in meeting users' needs for diversified and advanced use of statistical information.

The need to promote the use of micro data, tailor-made statistics and statistical data archives has often been pointed out in Japan by advisory groups such as the Statistics Council. However, due to the need to ensure the protection of confidential information of respondents and the lack of established rules in the laws regarding statistics in Japan, the use of micro data has not yet been adopted as part of the government policy.

Japan's acts regarding statistics, enacted in the late 1960s and early 1970s, are not made on the assumption that statistical information may be used in this way. Such use of statistics has been made possible by applying rules regarding the use of questionnaires for unintended use (including the Statistical Law, Article 15). However, these rules were originally made under the circumstances in the wake of the war, where the economy was still under government control and survey questionnaires were the only basic material to be used for the allocation of agricultural products and fertilizers. Accordingly, they are far from providing an appropriate means of meeting contemporary needs mentioned above, which need be met without disclosing the confidential information of survey respondents.

### Actions to be taken:

The development of programs aimed at legalizing the use of micro data needs to be accelerated based on the results of past experimental programs, reviews by related ministries, and programs in other countries. In addition, discussions about measures to develop tailor-made statistics, including organizational frameworks required for providing

these statistics, coverage of cost and billing procedures, need to be accelerated based on the results of past discussions.

To that end, the Ministry of Internal Affairs and Communications should take legal measures in accordance with the conclusions of the Study Group on the Statistical Legal System (chaired by Takeshi Hiromatsu, Professor at the Graduate School of Arts and Science, The University of Tokyo). The study group has been reviewing how to promote the secondary use of statistical information. When legalizing the new ways of using statistical information, it is necessary to take all possible precautions to protect confidential information and implement measures to ensure the protection to avoid causing unnecessary concern among survey respondents who cooperate with statistical surveys.

As part of the process of creating e-government systems, services for providing official statistics should be further unified and systematized. Accordingly, the link between the websites of ministries and the portal site of government statistics should be strengthened in such a way as to share page designs and technical terms, and new databases and analysis tools should be provided to develop a unified environment for users of official statistics.

### (5) Outsource statistical survey

#### General guidelines:

Various measures have been implemented to outsource management work involved in government statistical surveys (especially approved statistics and notified statistics) to private agencies. To effectively use limited resources required for the compilation of statistics and to encourage the creativity of private organizations, we need to adopt basic strategies designed to further promote outsourcing while ensuring the accuracy and reliability of statistics and protecting the confidential information of respondents.

To that end, we need to follow the Guidelines on the Outsourcing of Statistical Surveys to Private Organizations (official agreement of the Heads of the Statistical Departments of the Cabinet Office and Ministries on March 31, 2005) and consider initiatives for implementing comprehensive outsourcing of designated statistical surveys based on a careful examination of the sizes, methods and targets of surveys, as well as the effects of outsourcing on data accuracy.

It should be borne in mind that even in designated statistical surveys, in which relevant agencies are allowed to impose a legal obligation to report facts on respondents with penalties for false reports, accurate reports are difficult to obtain without the trust of survey respondents. Extra care needs to be taken when conducting statistical surveys targeting households, in which the willingness of respondents to cooperate is affected by factors other than institutional measures for protecting confidential information, including psychological factors such as the feeling of trust and security with survey agencies and enumerators. It should also be kept in mind that considerable cost is involved in surveys (cost, time and energy) and that statistical surveys are conducted to investigate facts at a specific point in time or during a specific period of time. For these reasons, we are not allowed to take a

trial-and-error approach in large-scale surveys, especially in designated statistical surveys that form the core of the current statistical system.

These considerations lead us to conclude that in order to implement comprehensive outsourcing of designated statistical surveys to private agencies, it is necessary to conduct small-scale pilot surveys targeting establishments and enterprises to check in advance how survey results, including the accuracy of data, are affected by differences in survey organizations (the government, local public entities or private agencies) and survey methods (direct interview surveys, mail surveys or Internet surveys).

When outsourcing government statistical surveys (including designated statistical surveys) to private agencies, care should be taken not to cause unnecessary concern and doubt among business operators and individuals that are chosen as respondents, thereby undermining public confidence in government statistics as a whole. There is a need to take appropriate measures, including those proposed in the above Guidelines, to avoid any risk that private agencies in charge of conducting surveys or aggregating data may gain unfair profits or cause disadvantages to respondents by using questionnaire responses or aggregated results before they are released to the public. In order to promote the outsource statistical surveys, there is also a need to introduce new legal measures in addition to presenting official views on the current rules and regulations regarding statistics and clarifying the relevant procedures.

### Actions to be taken:

Based on the 3-Year Program to Promote Regulatory Reform and Private-Sector Access (revised edition) (cabinet agreement on March 25, 2005), the Ministry of Internal Affairs and Communications and other related ministries should conduct the above-mentioned pilot surveys designed to compare and analyze effects of outsourcing on survey results (including data accuracy) and empirically study how to develop environments required to outsource surveys to private agencies (such as requirements for selecting private agencies and procedures for monitoring survey processes) by no later than the end of fiscal 2006. Based on the results of these pilot surveys and progress in system building for the outsourcing of statistics, related ministries should take all necessary measures, such as explicitly specifying the scope of designated statistical surveys to be outsourced by ministries and requirements for outsourcing in the above Guidelines.

The Ministry of Internal Affairs and Communications should also take legal measures to resolve legal issues involved in promoting outsourcing statistical surveys to private agencies based on the conclusions of the Study Group on the Statistical Legal System.

## (6) Review of the Legal System Regarding Statistics

### General guidelines:

The current legal system regarding statistics is composed of the Statistics Act (Act No. 18, 1947), the Statistical Reports Coordination Low (Low No. 148, 1952) and other related

regulations (including cabinet order and ordinances). The roles and duties of ministries regarding statistical administration are specified by laws on the establishment of respective ministries.

More than fifty years have passed since these laws were enacted. There have been enormous changes in the survey environment over these years and the needs for statistics have both advanced and diversified as a result of dramatic progress in information processing technology and IT. Nevertheless, revisions to laws regarding statistics during the same period were made mostly in response to external circumstances, such as reorganizations of administrative systems and establishment of related laws (e.g., regulations concerning the protection of personal information by government institutions), and remained passive in nature. More active revisions aimed at reorganizing the statistical system as a whole have yet to be undertaken. Existing laws regarding statistics, which were made mainly for survey statistics, maintain the original framework of the statistical system created under circumstances surrounding statistics different from those of today, causing institutional deterioration and fatigue in adapting to changes over these years. And although the Statistics Law, which was enacted to ensure the validity of statistics and develop the statistical system and which provides the foundation for the legal system regarding statistics, specifies the powers of the Minister of Internal Affairs and Communications required to ensure the achievement of the goal of the law, these powers, especially powers required to take positive actions toward those who conduct statistical surveys, are not properly fulfilling their functions.

In this report, we have presented general guidelines for the development of economic and social statistics in the future and issues for the development of individual statistics and the improvement of the statistical system. The most important issues, discussed in Section 3 (2) (a) of this report, concern the enhancement of the “headquarters” functions of the government and organizations that perform these functions. When examining these issues, we need to consider what functions and systems are required in the legal system regarding statistics in order to achieve our goals. Issues discussed in this report include those that need to be reflected in laws and regulations regarding statistics or established as systems, such as the formulation of government plans for medium- and long-term initiatives, the development of the statistical system including processed statistics, and the use of administrative records and microdata.

How the new legal system regarding statistics is developed will have important effects on the policy administration and the life; it is also a challenge to be faced by all organizations across the government. Accordingly, there is a need to undertake initiatives by effectively using the knowledge and views of outside scholars and users of statistics.

### Actions to be taken:

The current legal system regarding statistics needs to be drastically revised based on the guidelines shown above. There is a need to review the issues discussed in Sections (1) through (5) at conferences and meetings mentioned in Section 4 in order to consider how

the new legal system should be developed, and achieve clear consensus about basic policies and guidelines.

## 4. Initiatives for the Future

In this report, we focused on issues that are particularly important for the development of economic and social statistics in order to single out organizations to be in charge of initiatives and show schedules for the future to the extent possible.

The Economic and Social Statistics Development Promotion Committee was established by the Cabinet Office with the cooperation of the Ministry of Internal Affairs and Communications. This report, written by the Committee to discuss mainly government-wide issues concerning the development of statistics and the statistical system, presents the Ministry of Internal Affairs and Communications and the Cabinet Office as the leading organizations in charge of various initiatives. The Ministry and the Cabinet Office are requested to take up their challenges in accordance with the guidelines and procedures presented in this report. Other ministries should also take effective actions to implement strategies presented in the New Directions in the Development of Government Statistical Service, sharing common interests and working in collaboration in order to achieve the goals proposed in this report.

The goals presented in this report are all very important. In order to make the reform project a success, the Cabinet Office needs to promptly establish an organization and its secretariat to succeed this Committee with the cooperation of the Ministry of Internal Affairs and Communications and follow up on the initiatives aimed at achieving these goals. Of particular importance is how to develop a new statistical system with enhanced “headquarters” functions. How and in what time frame the new system is developed will be an important key to the success of the statistical reform. In order to create the new system, the succeeding organization mentioned above needs to draw up a specific plan designed from legal and organizational perspectives and achieve consensus by around the summer of 2006.

There are many initiatives other than those discussed in this report that are essential for the development of statistics in the future, such as improvement of the levels of statistics provided to the public, improvement of local statistical systems, training of statistics personnel, reduction of the burden of survey respondents, and promotion of international cooperation. Most of these initiatives are proposed in the New Directions in the Development of Government Statistical Service. If these initiatives are effectively implemented along with the initiatives proposed in this report, they will greatly contribute to the development of statistics in Japan. From a long-term perspective, these initiatives will be highly effective in developing the public understanding of the roles and importance of statistics and increasing the willingness to cooperate with statistical surveys by helping to spread the knowledge and information about statistics and to educate the public on statistics.

To implement the guidelines of the New Directions in the Development of Government Statistical Service, the Meeting of the Heads of the Statistical Departments of the Cabinet Office and Ministries needs to present schedules for the strategies discussed in the guidelines and develop programs with a view to making an effective general assessment of the development, which is scheduled to be made five years after the formulation of the guidelines (2008).

“Those who are insensitive to changes and content with the status quo are doomed to failure and end in tragedy, just like a frog boiled in water that is gradually heated”—this is a quote from *Japan’s 21st Century Vision*, a report submitted to the Council on Economic and Fiscal Policy in April 2005.

In order to avoid such a tragedy, we need to make persistent efforts to improve statistics, which provide the most objective information on changes in the trends over time.

We hope that all those engaged in work related to statistics will make further efforts to achieve their goals, the understanding and cooperation of various groups and increased public interest in statistics.

# Appendices

## The Economic and Social Statistics Development Promotion Committee

November 4, 2004

Director-General for Policy Planning of Cabinet Office
(Economic and Fiscal Management)
Economic and Social Research Institute

1. Purposes

In order to formulate effective strategies to adapt to economic and social changes, it is essential to develop various economic and social statistics that provide a foundation for such strategies. Accordingly, *Basic Policies 2004* provide guidelines aimed at drastically revising existing statistics and improving the statistical system.

Based on these guidelines, we will establish the Economic and Social Statistics Development Promotion Committee (hereinafter referred to as "the Committee") in order to promote and support the initiatives implemented by the Ministry of Internal Affairs and Communications and other related ministries and to promote the development of economic and social statistics.

2. Members

The Committee will be chaired by a member of the Council on Economic and Fiscal Policy and organized by the staff members of related administrative organs and scholars working in areas related to economic and social statistics, including members of related councils.

| | |
|---|---|
| ◎ Hiroshi Yoshikawa: | Professor at the Graduate School of Economics, The University of Tokyo; Member of the Council on Economic and Fiscal Policy |
| Tatsuo Inoue: | Director of the Japan Statistical Association |
| Senichi Obayashi: | Director-General of the Statistics Bureau, Ministry of Internal Affairs and Communications |
| Masahiro Kuroda: | Regular Director of Keio University; Professor at the Faculty of Business and Commerce, Keio University; Chairman of the National Economic Accounting Survey Conference |
| Yutaka Kosai: | President of the Economic and Social Research Institute |
| Masahiko Shimizu: | Professor at the Faculty of Economics, Keio University; Member of the Statistics Council |
| Kiyohiko Nishimura: | Professor at the Graduate School of Economics, The University of Tokyo; Member of the Statistics Council (until March 31, 2005) |
| Fumio Funaoka: | Professor at the Faculty of Economics, Shinshu University; Member of the Statistics Council |

(Note) Occupational titles are those of November 4, 2004.

3. Content of Discussion and Meeting Schedule

The Committee will discuss measures to promote the development of the statistical system, including making plans for implementing the guidelines proposed in the New Directions in the Development of Government Statistical Service (official agreement of the Meeting of the Heads of the Statistical Departments of the Cabinet Office and Ministries in June 2003) in order to draw up the schedule for these guidelines by the time when the Basic Policies 2005 (scheduled to be submitted in June 2005) is formulated.

4. Office Work

The office work of the Committee will be carried out by the Economic and Social Statistics Development Promotion Office, Cabinet Office, with the cooperation of the Statistics Bureau, Ministry of Internal Affairs and Communications.

(Note)

Basic Policies for Economic and Fiscal Management and Structural Reform 2004 (excerpts)

(Cabinet Decision on June 4, 2004)

Part One: Major Reforms during the Priority Enhancement Period

2. Enhancement of the Government Reform

(3) Administrative Reform

• In order to collect accurate information that reflects the changes of the times and promptly provide such information, national government and local public entities will make drastic revisions to the existing statistical system, including the disproportionate allocation of personnel to certain areas, such as statistics on agriculture, forestry and fisheries.

At the same time, national government and local public entities will promote the development of priority areas that are urgently required in order to improve the statistical system.

# Meeting Agendas

○ First meeting

- Date and time: Wednesday, December 1, 2004, 10:00 to 12:00
- Agenda:
  (1) How to manage meetings
  (2) Progress regarding the New Directions in the Development of Government Statistical Services
  (3) Discussion topics for the Committee and discussion procedures
  (4) Other topics

○ Second meeting

- Date and time: Monday, December 20, 2004, 10:00 to 12:00
- Agenda:
  (1) Development of statistics in response to economic and social changes
  (2) Promotion of the development of the statistical system
  (3) Public use of statistics
  (4) Other topics

○ Third meeting

- Date and time: Wednesday, January 26, 2005, 17:00 to 19:00
- Agenda:
  (1) Development of statistics in response to economic and social changes (interviews with members of the Bank of Japan and Nippon Keidanren, followed by exchange of opinions)
  (2) Promotion of the development of the statistical system
  (3) Other topics

○ Fourth meeting

- Date and time: Tuesday, February 22, 2005, 17:00 to 19:00
- Agenda:
  (1) Development of statistics in response to economic and social changes (interviews with members of the Cabinet Office, the Ministry of Internal Affairs and Communications and the Ministry of Economy, Trade and Industry, followed by exchange of opinions)
  (2) Promotion of the development of the statistical system
  (3) Other topics

○ Fifth meeting

▪ Date and time: Thursday, March 31, 2005, 10:00 to 11:50

▪ Agenda:
(1) Development of statistics in response to economic and social changes (interviews with members of the Ministry of Agriculture, Forestry and Fisheries; the Ministry of Land, Infrastructure, Transport and Tourism; and the Statistical Standards Department of the Statistics Bureau, Ministry of Internal Affairs and Communications, followed by exchange of opinions)
(2) Promotion of the development of the statistical system
(3) Other topics

○ Sixth meeting

▪ Date and time: Thursday, April 21, 2005, 10:00 to 11:05

▪ Agenda:
(1) Development of statistics in response to economic and social changes
(2) Promotion of the development of the statistical system
(3) Other topics

(Image of the organization of the Committee Report and topics of discussion (draft))

○ Seventh meeting

▪ Date and time: Monday, May 30, 2005, 10:00 to 11:20

▪ Agenda:
(1) Development of statistics in response to economic and social changes
(2) Promotion of the development of the statistical system
(3) Other topics

(Draft of the Committee Report)

○ Eighth meeting

▪ Date and time: Friday, June 10, 2005, 10:00 to 11:30

▪ Agenda:
(1) Development of statistics in response to economic and social changes
(2) Promotion of the development of the statistical system
(3) Other topics

(Summary of the Committee Report)

# Shares of the GDP and Employment by Category of Economic Activities and Related Statistical Surveys

Economic and Social Statistics Development Promotion Office, Cabinet Office

| Category / Economic activities | | Nominal GDP for 2002 | | Employment in 2002 | | Related statistical surveys | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sum (in billion yen) | Percentage | Employment (in 10,000 persons) | Percentage | Major related statistical surveys | No. of surveys | Annual budget (see notes below; in 1,000 yen) | Percentage | Ministries in charge of surveys |
| 1. Industry | Agriculture, forestry and fisheries | 6,613.0 | 1.3 | 388.3 | 6.0 | Census of Agriculture and Forestry, Statistical Research of Farm Economy, etc. | 21 | 4,454,831 | 26.7 | Ministry of Agriculture, Forestry and Fisheries; Ministry of Health, Labour and Welfare, etc. |
| | Mining | 622.8 | 0.1 | 6.9 | 0.1 | Current Statistical Survey on Macadam, Survey on Trends in Mining in Japan, etc. | 6 | 17,718 | 0.1 | Ministry of Economy, Trade and Industry |
| | Manufacture | 102,299.0 | 19.7 | 1,148.6 | 17.6 | Census of Manufacturers, Statistics of Production by Pharmaceutical Industry, etc. | 27 | 1,891,150 | 11.3 | Ministry of Economy, Trade and Industry; Ministry of Health, Labour and Welfare, etc. |
| | Construction | 34,318.2 | 6.6 | 647.7 | 9.9 | Statistical Survey on Construction, Survey on Supply and Demand of Labor in Construction, etc. | 9 | 163,235 | 1.0 | Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Health, Labour and Welfare, etc. |
| | Electricity, gas and water | 14,134.8 | 2.7 | 42.8 | 0.7 | Current Production Survey on Gas Utility Industry | 1 | 11,846 | 0.1 | Ministry of Economy, Trade and Industry (Agency for Natural Resources and Energy) |
| | Wholesale and retail | 68,482.0 | 13.2 | 1,166.7 | 17.9 | Census of Commerce, Current Survey of Commerce, etc. | 23 | 1,903,888 | 11.4 | Ministry of Economy, Trade and Industry; Ministry of Agriculture, Forestry and Fisheries, etc. |
| | Finance and insurance | 33,944.1 | 6.5 | 192.6 | 3.0 | — | 0 | 0 | 0.0 | — |
| | Real estate | 68,398.8 | 13.2 | 93.0 | 1.4 | — | 0 | 0 | 0.0 | — |
| | Transportation and communications | 31,546.4 | 6.1 | 391.8 | 6.0 | Survey on Motor Vehicle Transport, Transport Census of Metropolitan Areas, etc. | 19 | 486,026 | 2.9 | Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Internal Affairs and Communications, etc. |
| | Service | 103,536.8 | 19.9 | 1,992.9 | 30.6 | Survey of Selected Service Industries, Unincorporated Enterprise Survey, etc. | 31 | 784,585 | 4.7 | Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications, etc. |
| | (Multiple categories) | — | — | — | — | Establishment and Enterprise Census, Monthly Labour Survey, etc. | 59 | 5,821,356 | 34.9 | Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare, etc. |
| | (Industry total) | 463,895.9 | 89.3 | 6,071.4 | 93.2 | — | 196 | 15,534,635 | 93.1 | |
| 2. Producers of government services | | 46,039.8 | 8.9 | 355.7 | 5.5 | Survey on Port and Harbour, School Basic Survey (for Public Schools), etc. | 56 | 729,132 | 4.4 | Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Education, Culture, Sports, Science and Technology, etc. |
| 3. Producers of private non-profit services to households | | 9,825.7 | 1.9 | 87.1 | 1.3 | Survey of Medical Care Activities in Public Health Insurance, School Basic Survey (for Private Schools), etc. | 18 | 423,212 | 2.5 | Ministry of Health, Labour and Welfare; Ministry of Education, Culture, Sports, Science and Technology, etc. |
| Total | | 519,761.4 | 100.0 | 6,514.2 | 100.0 | — | 270 | 16,686,979 | 100 | — |

Notes: 1. The sum for the nominal GDP for 2002 does not include taxes and customs imposed on imports and imputed interest (deductions) and is not the same as the gross domestic product.

2. All surveys found in the List of Statistical Project Plans by Government Bodies (compiled every year by the Statistical Standards Department of the Statistics Bureau, Ministry of Internal Affairs and Communications) targeting establishments or enterprises are included among related statistical surveys. Surveys targeting households and individuals, such as Population Census, are not included.

3. For surveys conducted at intervals of less than a year, budgets allocated at the beginning of fiscal 2004 were used as annual budgets. For surveys conducted at intervals of two years or more, budgets allocated at the beginning of the closest year when the surveys were conducted divided by the number of interval years were used as annual budgets.

4. This table is based on material distributed at the third meeting of the Committee.

## Number of Statistics Personnel by Government Body (as of April 1, 2004)

Economic and Social Statistics Development Promotion Office, Cabinet Office

(in persons and percentage)

| Category / Government body | Headquarters | Local branches | Total (percentage) |
|---|---|---|---|
| Cabinet Office | 63 | 0 | 63 (1.0) |
| National Police Agency | 6 | 0 | 6 (0.1) |
| Ministry of Internal Affairs and Communications | 590 | 0 | 590 (9.4) |
| Ministry of Justice | 10 | 0 | 10 (0.2) |
| Ministry of Finance | 20 | 65 | 85 (1.4) |
| Ministry of Education, Culture, Sports, Science and Technology | 20 | 0 | 20 (0.3) |
| Ministry of Health, Labour and Welfare | 351 | 0 | 351 (5.6) |
| Ministry of Agriculture, Forestry and Fisheries | 323 | 4,351 | 4,674 (74.5) |
| Ministry of Economy, Trade and Industry | 257 | 86 | 343 (5.5) |
| Ministry of Land, Infrastructure, Transport and Tourism | 91 | 15 | 106 (1.7) |
| National Personnel Authority | 24 | 0 | 24 (0.4) |
| Total | 1,755 | 4,517 | 6,272 (100.0) |

Notes: 1. This table is based on material distributed at the third meeting of the Committee.

2. Due to rounding errors, the percentages for government bodies do not add up to 100.

3. The figures for the Ministry of Agriculture, Forestry and Fisheries include the statistical staff of the Agriculture, Forestry and Fisheries Division of the Okinawa General Bureau, Cabinet Office. The figures for the Ministry of Economy, Trade and Industry include the statistical staff of the Economy and Industry Division of the Okinawa General Bureau.

# Diversified and Advanced Use of Statistical Data in Other Countries

| Category | U.S.A. | Canada | U.K. | Germany | Australia | New Zealand |
|---|---|---|---|---|---|---|
| Statistical Organization | Census Bureau | Statistics Bureau | National Statistics Bureau | Federal Statistics Bureau | Statistics Bureau | Statistics Bureau |
| Range of accessible anonymous sample data | Survey data on individuals, households and houses, including population census data<br>(PUMS: Public Use Microdata Samples) (Note 1) | Data obtained from population census surveys, labor force surveys, income surveys, general social surveys, etc.<br>(PUMFs: Public Use Microdata Files) (Note 2) | Data obtained from population census, labor force surveys, household surveys, etc. | Data obtained from Micro Census surveys (statistics on population and labor force), income and expense surveys, household surveys, etc. | Data obtained from population census, house surveys, household surveys, etc.<br>(CURFs: Confidentialised Unit Record Files) | Statistical records approved by the Statistics Bureau |
| Data on individuals and households | ○ | ○ | ○ | ○ | ○ | ○ |
| Data on offices and businesses | — | — | — | — | — | ○ |
| Restrictions imposed on users | No restrictions | User restricted | User restricted | User restricted | User restricted | User restricted |
| Restrictions concerning the purpose of use | — | — | • Academic or administrative purposes (Note 3) | Academic or administrative purposes | Statistical purposes | • Academic or statistical purposes |
| Restrictions concerning the status of users of statistics | — | — | • Researchers (Note 3) | Those who work for higher education institutions or institutions entrusted with independent scientific research and those who have taken a special oath of public office | Staff members of administrative organs, researchers at universities and other institutions, etc. | • Staff members of government organs<br>• Those who have taken an oath to protect confidential information (including researchers of private organizations) |
| Restrictions other than the above | — | • Users are obligated to sign permission and submit it to the Statistics Bureau. | • Users are obligated to sign a registration of permitted users | — | Permitted users are obligated to submit a written pledge | • Researchers of private organizations are normally allowed to use data only within the buildings of the Statistics Bureau. |
| Legal grounds | • Application of the reverse of the provision in the Census Act that data on individuals and offices should not be disclosed in such a way that they may be identified | • Application of the reverse of the provision that prohibits the public disclosure of questionnaire data in such a way that individuals may be identified (Statistics Act) | • Provision that personal census information should not be disclosed in such a way that individuals or households may be identified (Census Act) | • Use of individual data on personal circumstances or physical conditions is prohibited<br>• The concept of *de facto* anonymity that data are anonymous if "the identification of individual pieces of data is impossible without spending an excessive amount of time, cost or energy" (Statistics Act) | Information contained in individual statistical records is allowed to be disclosed with the approval of the Director of the Statistics Bureau on the following conditions (Statistics Act):<br>• Individual identification information, such as names and addresses, should be eliminated.<br>• Information should be disclosed in such a way that specific individuals or organizations associated with the information are unidentifiable.<br>• The Director of the Statistics Bureau should obtain a written pledge to issue an approval based on this provision. | • Government organs are allowed to use microdata by act (Statistics Act).<br>• Since there is no explicit stipulation to allow researchers of private organizations to use data, they are given permission based on a legal interpretation that they can be regarded as staff members of the Statistics Bureau if they have taken an oath to protect confidential information. |

Note 1: Apart from PUMS, the Census Bureau has a system to provide detailed sample data (including business data) to persons with a specially sworn status (SSS) with strict restrictions (such as restrictions on the location of use). In order to be accorded the special status, users must satisfy certain requirements, such as having knowledge that is useful for the activities of the Census Bureau or being employed by institutions that provide service to the Census Bureau.

Note 2: Data can be specially aggregated from master files on request of users (tailor-made statistics).

Note 3: Restrictions on the purpose of use (academic or administrative purposes) and status of users (researchers) are imposed depending on data provided (statistical survey).

(Table created based on material of the Statistics Bureau, Ministry of Internal Affairs and Communications)