




Statistics as Fundamental Information Infrastructure for Society

-Disseminating relevant and reliable Statistics to Various Users
in a Timely and User-Friendly Manner -



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Introduction

- Major Challenges for strategic goals of official statistics:
 - To increase relevance of official statistics
 - To improve cost effectiveness of statistical work
 - To ensure participation in statistical surveys
 - To improve usability of statistical data

Framework

□ Revision of Statistics Act in 2007

major changes:

- from statistics for administration to statistics as the social information infrastructure
- to develop statistics relevant for the society
 - Development of Business Register
- to promote effective use of statistical data
 - Provision of tailor-made tabulation and anonymous data
- to strengthen planning and coordination functions

⇒ the Master Plan

Framework

□ The Master Plan Concerning the Development of Official Statistics

Basic perspectives in designing measures:

- Systematic development of statistics
- Responsiveness to socio-economic changes
- Effective use of statistical data
- Efficient production of statistics and effective use of statistical resources

To increase relevance of official statistics

(To provide Statistical Frame of Establishments and Enterprises)

Background

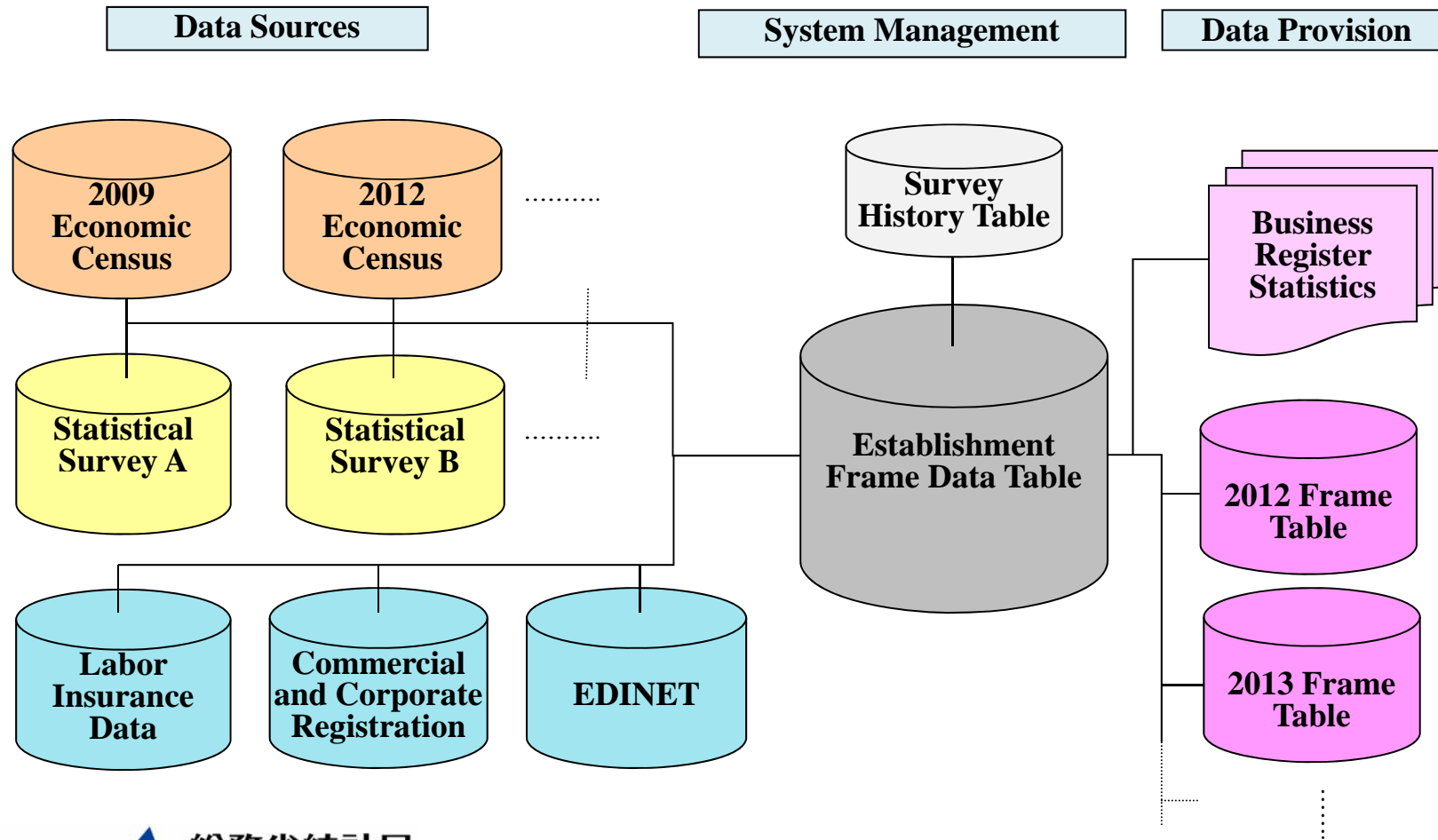
- In order to make high quality statistics with limited budget, integrating the establishment and enterprises information precisely has been an urgent issue in Japan.
- In article 27 of the revised Statistics Act in 2007, it is stipulated that the Minister for Internal Affairs and Communications shall develop an establishment frame database. to reduce the burden on respondents



To increase relevance of official statistics

Development of Business Register

System Configuration



To increase relevance of official statistics

(To provide Statistical Frame of Establishments and Enterprises)

Function of Business Register

- to provide population information for sampling surveys
- to reduce the burden on respondents
- to generate new statistics

Time schedule

2012 to build the system of Business Register

to start the operational test of Business Register

2013 to start the full-scale operation of the new Business Register

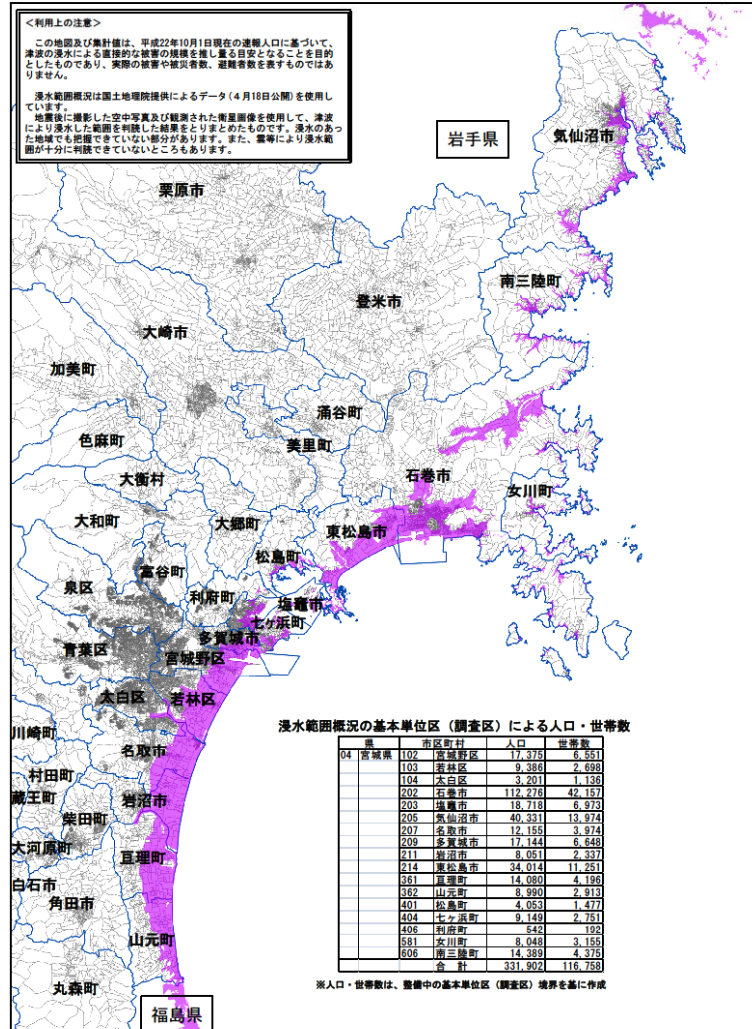
To increase relevance of official statistics (*To provide relevant statistical information for emergency measures*)

- ❑ Great East Japan Earthquake occurred in March 2011, and caused heavy damage to Japan.
- ❑ In the beginning of April 2011, SBJ tried to provide user-focused information for emergency measures timely and speedy such as producing statistical maps on population and households in the area flooded with Tsunami by compiling data of the Population Census into geographical information system and put them on the SBJ's website.

To increase relevance of official statistics (To provide relevant statistical information for emergency measures)

Map of Flooded Areas of Tsunami

宮城県内の浸水範囲概況にかかる基本単位区(調査区)による人口・世帯数



出典 平成22年国勢調査(速報集計)

総務省統計局 統計調査部地理情報室

SBJ contributed to providing information about The Great East Japan Earthquake

The maps and the population data for the flooded areas were provided to the local governments according to their needs.

The flood areas were demarcated on the basis of aerial photos and satellite imagery by the Geospatial Information

Authority of the Government.

The population of the flooded areas were compiled for each municipality from the enumeration areas, the smallest area units of the Census.

To increase relevance of official statistics
(To provide relevant statistical information for emergency measures)

Major information pertaining to the disaster

Contents of provided information	Areas of aggregation (Prefectures)	Surveys; Data sources
Population and the number of households with respect to each basic unit district of tsunami inundation area	Aomori, Iwate, Miyagi, Fukushima, Ibaraki, Chiba	2010 Population Census
Population and the number of employees with respect to each subregion block	Iwate, Miyagi, Fukushima	2010 Population Census
Number of establishments and employees by municipality	Aomori, Iwate, Miyagi, Fukushima, Ibaraki, Chiba	2009 Economic Census for Business Frame
Data of east Pacific Ocean coast region and data related to disaster	Aomori, Iwate, Miyagi, Fukushima, Ibaraki, Chiba	*1

*1 The rearranged data sets based on "the system of social and demographic statistics" published by MIC and the information of affected areas released by Fire and Disaster Management Agency and the related institutions

To improve cost effectiveness of statistical work
(Optimization of operations and systems for government-wide statistical work)

Background of Optimization

□ **The Building e-Government Plan** (in 2003)

to realize the simple government with effective budget, cost effectiveness

to improve efficiency and effectiveness by use of ICT

Main measures:

- eliminating the duplication of government works
- sharing the common system for common works and similar works
- unifying the system
- utilizing outsourcing of routine tasks



To improve cost effectiveness of statistical work

(Optimization of operations and systems for government-wide statistical work)

“The Optimization Plan of Operations and Systems for Statistical Work” decided in 2006

Aims

- improve public statistical services
- provide convenience of responses by survey respondents
- reduce statistical work load
- save public statistical expenditure
- centralize the statistical information systems

➔ ***The statistical information systems of different ministries were integrated into the “Inter-Ministry Information System for Official Statistics” (IMISOS)***



To make more cost effectiveness on statistical work

(Optimization of operations and systems for government-wide statistical work)

Effects

The total effect of the whole government measures including each ministry's measures

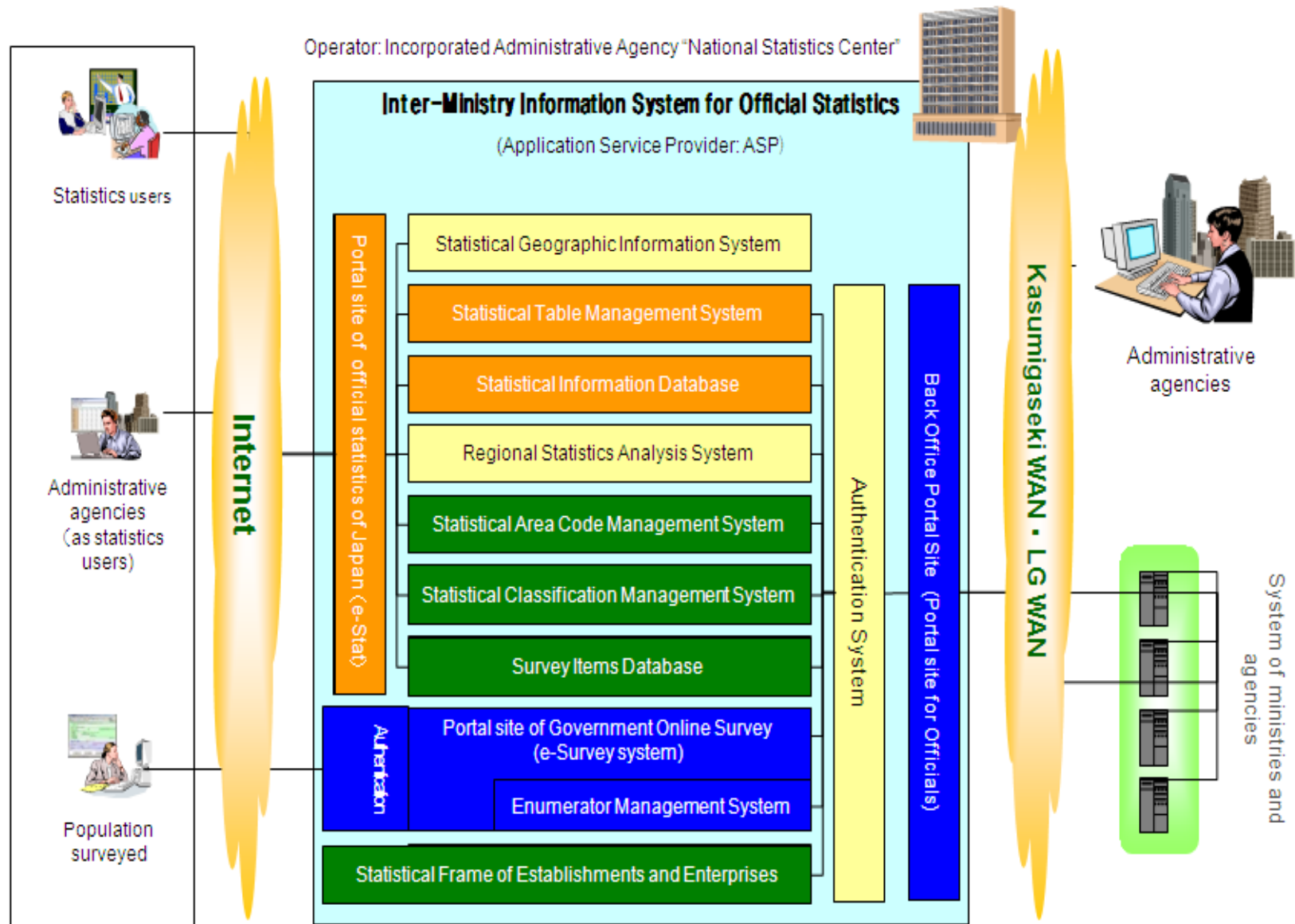
- ❑ a saving of 1.84 billion yen per year
- ❑ a saving of 479 thousand person-days per year

The effect of the common measures by all ministries

- ❑ a saving of 480 million yen per year
- ❑ a saving of 145 thousand person-days per year



Concept of IMISOS



※ A S P : Application Service Provider

To improve cost effectiveness of statistical work

(Optimization of operations and systems for government-wide statistical work)

Effects of IMISOS

- ❑ Rationalization of system investment
- ❑ Control of future investment
- ❑ Simplification and rationalization of management
- ❑ Concentration of security
- ❑ Improvement of utilization

➔ System development cost : 90 million yen per year will be saved

Effects of Integrating online surveys



390 million yen per year will be saved from the expense of mail collection and enumerators cost

To ensure participation in statistical surveys
(To provide the most appropriate multi-mode data collection methods)

□ In 2010 Population Census

SBJ introduced multi-mode data collection methods.

Mail response method.

Online response method (at only Tokyo area)

Finally, 529,000 responses (8.3% of Tokyo).

□ For the next 2015 Population Census

SBJ is considering to improvement and optimization of multi-mode data collection methods such as:

expansion of online survey

redesign of enumeration procedure

improve access to hard-to-count groups

improve the use of administrative data

To ensure participation in statistical surveys

(Involvement of census supporters)

- The 2010 Population Census Advisory Meeting for the 2010 Census
- Headquarters for implementation of the 2010 Population Census
- 2010 Census Cooperative Meeting

To improve usability of statistical data

To provide tailor-made tabulations and anonymized microdata under the new Statistics Act

- The new framework of using data has been set up based on the statistics act revised in 2007.

Aim: to contribute to the development of academic research and the development of higher education

- **SB is offering two services :**
 - ✓ **Production and Provision of anonymized Microdata** (the questionnaire information which has been so arranged as not to identify the investigated individuals)
 - ✓ **Tailor-made tabulation** (the provision of statistical tables which are made using the questionnaire information as ordered by the requestors.)

These services were started in April 2009.

To improve usability of statistical data

To provide tailor-made tabulations and anonymized microdata under the new Statistics Act

2012

Statistical surveys used for anonymized microdata :

National Survey of Family Income and Expenditure Survey

Survey on Time Use and Leisure and Activities

Employment Status Survey

Housing and Land Survey

Statistical surveys used for tailor-made tabulation:

Population Census

Survey on Time Use leisure and Activities

Housing and Land Survey

National Survey of Family Income and Expenditure Survey

Family Income and Expenditure Survey



To improve usability of statistical data

To provide tailor-made tabulations and anonymized microdata under the new Statistics Act

- Cooperation between the NSC and academic research organizations

Cooperation agreements with :

- Hitotsubashi University in December 2010
- The Research Organization of Information and Systems
(Inter-University Research Institute Corporation)
in March 2012.

To improve usability of statistical data

To provide tailor-made tabulations and anonymized microdata under the new Statistics Act

- Cooperating with academic research organizations in training for users

Workshop on the utilization of micro-data of official statistics

jointly organized by:

National Statistics Center

Hitotsubashi University

Kobe University

Hosei University

Research Organization of Information and Systems

In November 2012

To improve usability of statistical data

To provide One-Stop-Service for statistical information

◆ The “e-Stat” site provides “One-Stop-Service”

- collects and integrates statistical information from the websites of all ministries
- provides various statistical services via Internet

- ▶ [RSS Feeds](#)
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URL by e-mail](#)

To improve usability of statistical data

To provide One-Stop-Service for statistical information

◆ Statistical datasets in IMISOS

- The e-Stat system delivers the data of 454 surveys and 889 thousand of statistical tables
- Almost all of the main statistics in Japan have been stored in IMISOS

◆ The number of accesses from users to e-Stat

- The number of accesses has increased each year
- The number in FY 2011 was more than 51 million

To improve usability of statistical data

To provide One-Stop-Service for statistical information

◆ IMISOS proved to be successful

- Users can obtain their desired statistical information
- Users can access to various useful functions which make good use of dissemination technology
- Convenience of Survey respondents can be provided
- Statistical work load and cost can be saved
- Good cooperation of all ministries is built

Conclusion

In order to meet the needs arising from socio-economic changes and advanced information communication technology, SBJ will continue its efforts to provide more relevant and reliable statistics in a timely and user-friendly manner.