

An Example: Quality Assurance of Statistics of Japan

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National Statistical System of Japan

Point 1

Quality assurance depends on society, culture, custom and the system of the government of the country.

National Public Service Act

October, 1947

Section 7 Service Discipline

Article 96

Every official, as a servant of all citizens, shall serve the public interest, and exert his/her utmost effort in the performance of his/her duties.

Article 98

Officials shall, in the performance of their duties, comply with laws and regulations and faithfully observe the orders of their superiors in the course of their duties.

Article 100

An official shall not divulge any secret which may have come to his/her knowledge in the course of his/her duties. This shall also be applied after he/she has left his/her position.

Executive Branch of the Government of Japan

Cabinet

Cabinet Office (CAO)

National Public Safety Commission (National Police Agency)

Ministry of Internal Affairs and Communication (MIC)

Ministry of Justice

Ministry of Foreign Affairs (MOFA)

Ministry of Finance (MOF)

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Ministry of Health, Labour and Welfare (MHLW)

Ministry of Agriculture, Forestry and Fisheries (MAFF)

Ministry of Economy, Trade and Industry (METI)

Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

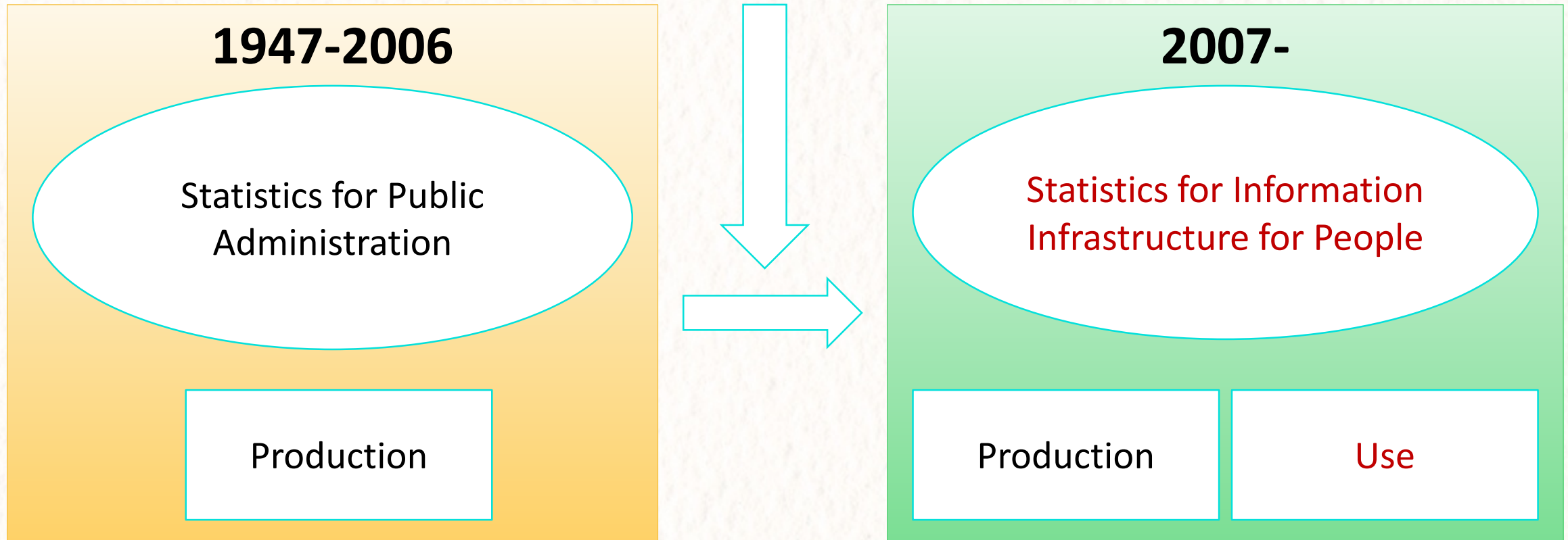
Ministry of Environment

Ministry of Defense

Board of Audit

Principles of the Statistics Act

Fundamental Principles of Official Statistics
by the UN in 1994



Purpose of the Statistics Act: Article 1

Recognizing that official statistics are critical information for the citizens in their reasonable decision-making, the purposes of this Act are **to promote systematic and efficient development of official statistics and to ensure the usefulness thereof through specifying basic matters concerning the production and provision of official statistics, and thereby to contribute to the sound development of the national economy and enhancement of the living standards of citizens.**

What are Official Statistics ?

Official Statistics

Statistics produced by administrative organs, local public entities, or incorporated administrative agencies, etc.

Survey statistics

Administrative statistics

Processed statistics

Statistical survey

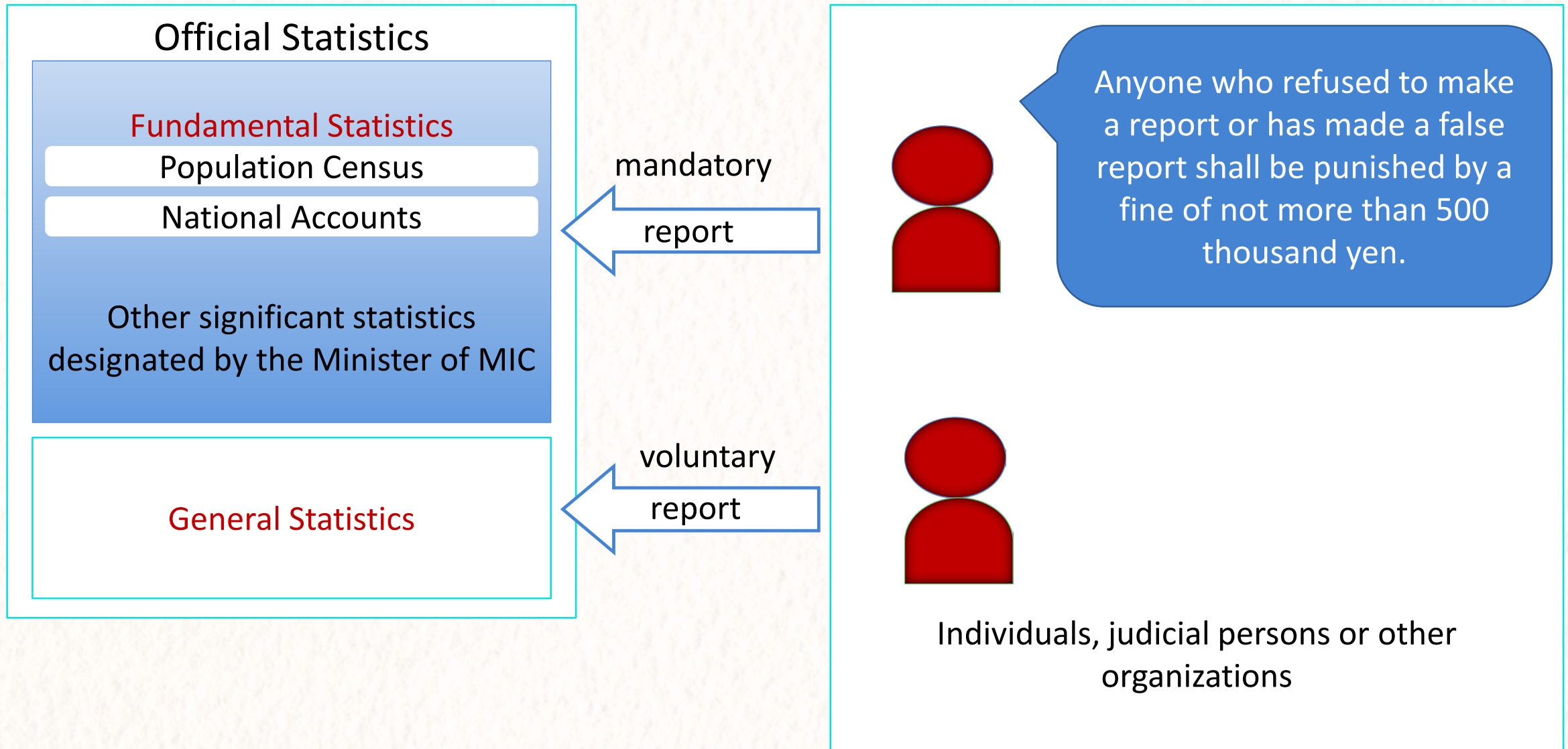
Administrative data

Private data

Fundamental Principles of the Statistics Act: Article 3

- (1) Official statistics shall be developed systematically through mutual cooperation and the appropriate sharing of roles among administrative organs, etc.
- (2) Official statistics shall be produced with appropriate and reasonable methodologies, so as to ensure **neutrality** and **reliability**.
- (3) Official statistics shall be provided widely for the citizens so that they are easily **accessible** for their effective use.
- (4) Confidential matters concerning individuals or juridical persons, or other organizations that were used for producing official statistics shall be protected.

Characteristics of the Statistics Act



List of Fundamental Statistics

Cabinet Office

- National Accounts

MIC

- Population Census
- Population Estimation
- Housing and Land Survey
- Labour Force Survey
- Retail Price Survey (Consumer Price Index)
- Family Income and Expenditure Survey
- Unincorporated Enterprise Survey
- Survey of Research and Development
- Fact-finding Survey on Salary of Local Government Employees
- Employment Status Survey
- National Survey of Family Income and Expenditure
- Survey on Time Use and Leisure Activities

MEXT

- School Basic Survey
- School Health Survey
- School Teachers Survey
- Social Education Survey

MOF

- Financial Statements Statistics of Corporations by Industry
- Statistical Survey of Actual Status for Salary in the Private Sector

MHLW

- Vital Statistics
- Monthly Labour Survey
- Statistics of Production by Pharmaceutical Industry
- Survey of Medical Institutions
- Patient Survey
- Basic Survey on Wage Structure
- Comprehensive Survey of Living Conditions
- Life Tables
- The Financial Statistics of Social Security in Japan

MAFF

- Census of Agriculture and Forestry
- Statistics on Milk and Dairy Products
- Statistics on Crops
- Statistics on Marine Fishery Production
- Census of Fisheries
- Statistics on Lumber
- Statistics on Farms Management and Economy

METI

- Census of Manufacture
- Current Survey of Production
- Census of Commerce
- Current Survey of Production Concerning the Gas Industry
- Current Survey of Petroleum Products, Supply and Demand
- Monthly Report on the Current Survey of Commerce
- Survey of Selected Service Industries
- METI's Statistical Survey of Energy Consumption in the Selected Industries
- Basic Survey of Japanese Business Structure and Activities
- Indices of Industrial Production

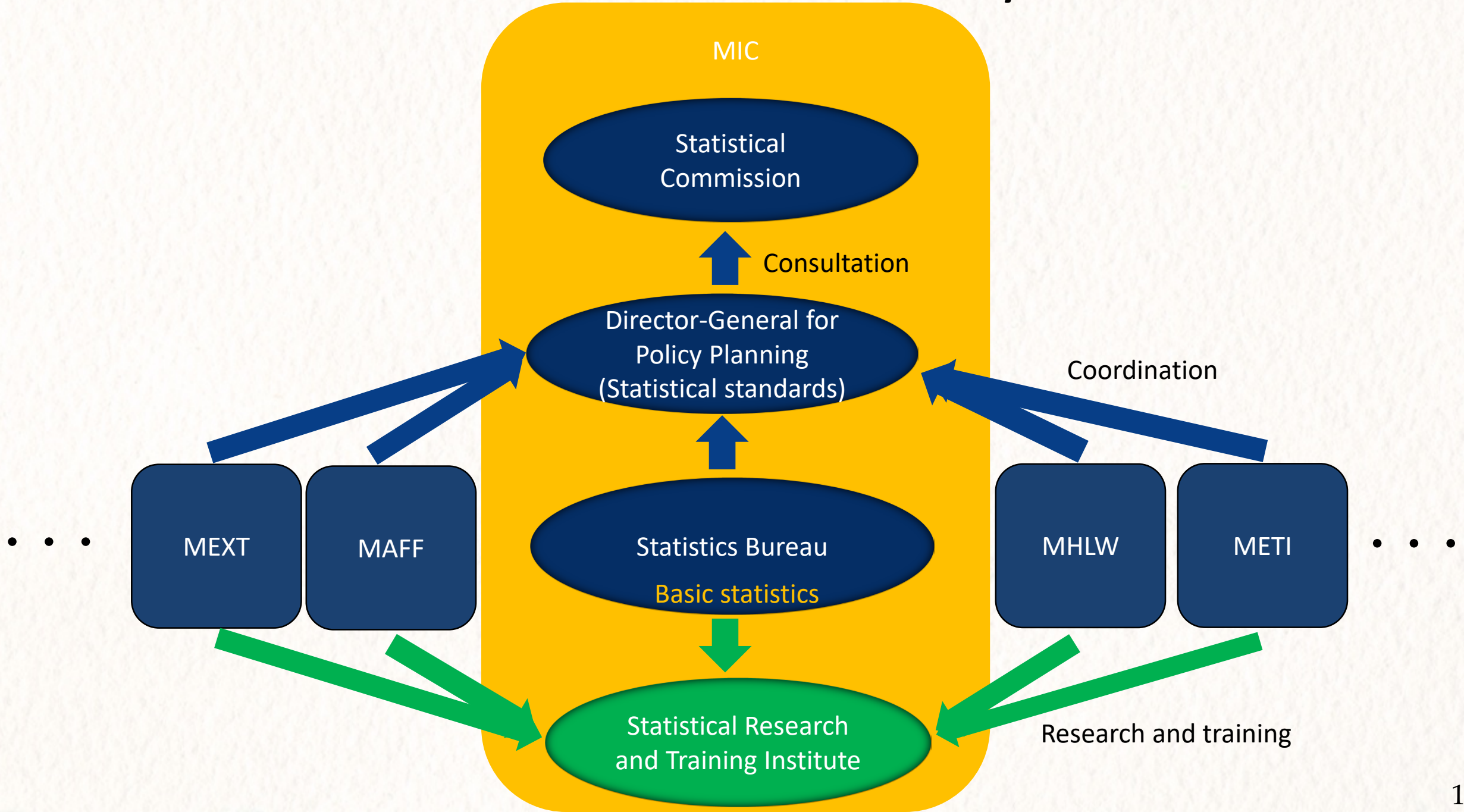
MLIT

- Survey on Ports and Harbours
- Survey on Shipbuilding and Engineering
- Statistics on Building Construction Started
- Survey on Current Rolling Stock Production
- Statistics on Construction Works
- Survey on Seamen's Labour
- Survey on Motor Vehicle Transport
- Survey on Coastwise Vessel Transport
- Corporations Survey on Land and Buildings

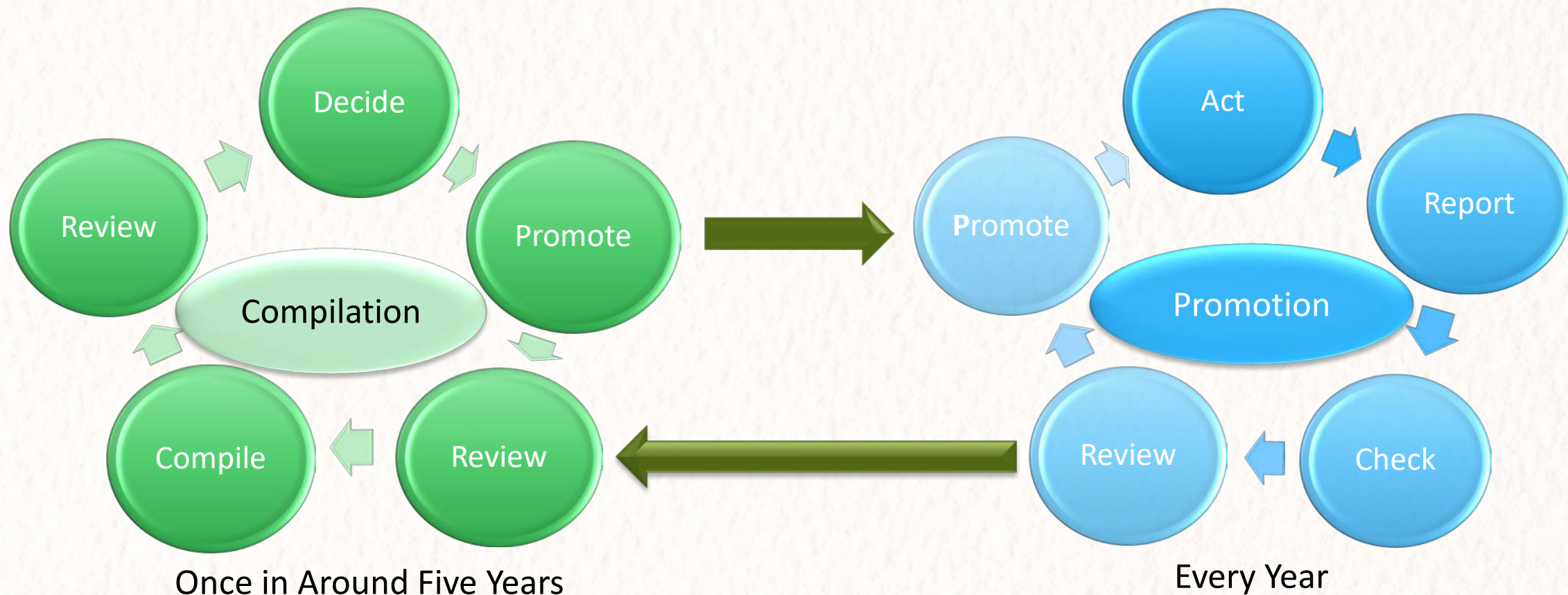
Cojurisdiction

- Economic Census for Business Activity (MIC and METI)
- Input-Output Tables (10 ministries and agencies)

Overview of the National Statistical System



Flowchart of the Master Plan Concerning the Development of Official Statistics

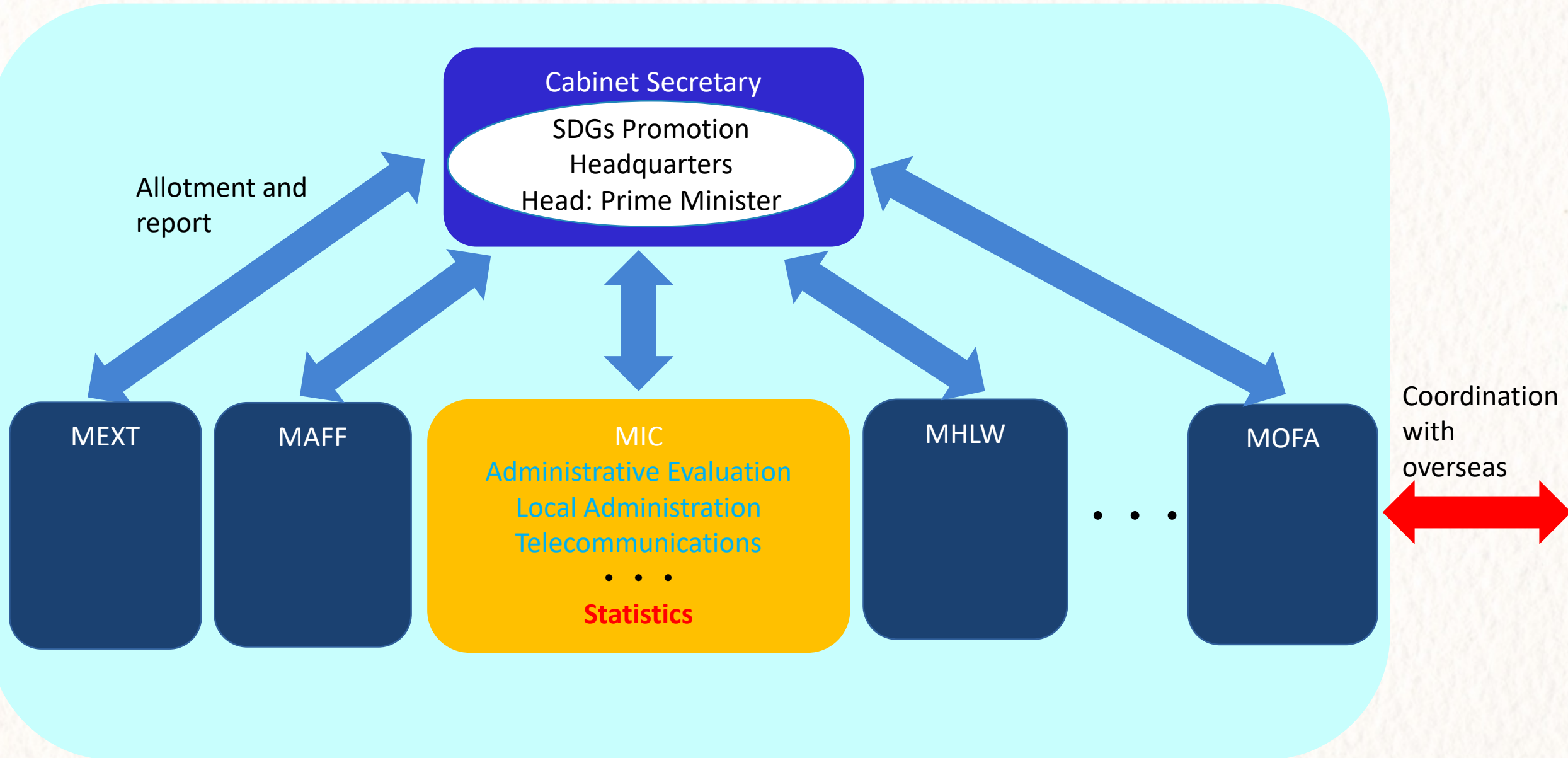


Once in Around Five Years

Every Year

Role of Organizations		
Statistical Commission Check Review	Director-General for Policy Planning on Statistical Standard Compile Decide Promote	Ministries Act Report

System for SDGs Promotion



Quality Assurance Framework of Japan

Quality in the 3rd Master Plan (April 2018-March 2023)

III. Institutional arrangements required

2. Quality of statistics

- Statistical standards, comparability
 - Consider revision of statistical standards once in around five years
 - Advance comparability among statistics
- Quality of outsourcing to the private sector
- Research and support to line ministries
- Promotion of Statistics Business Process Re-engineering and quality management

Statistics Business Process Re-engineering

What is it?

- Monitoring official statistics

Purposes

- Promotion of the use of official statistics
- Lessening the burden on data providers
- Ensuring effective business
- Enhancing and ensuring the quality of statistics

Objects

- All official statistics
- Each reviewed once in three to five years

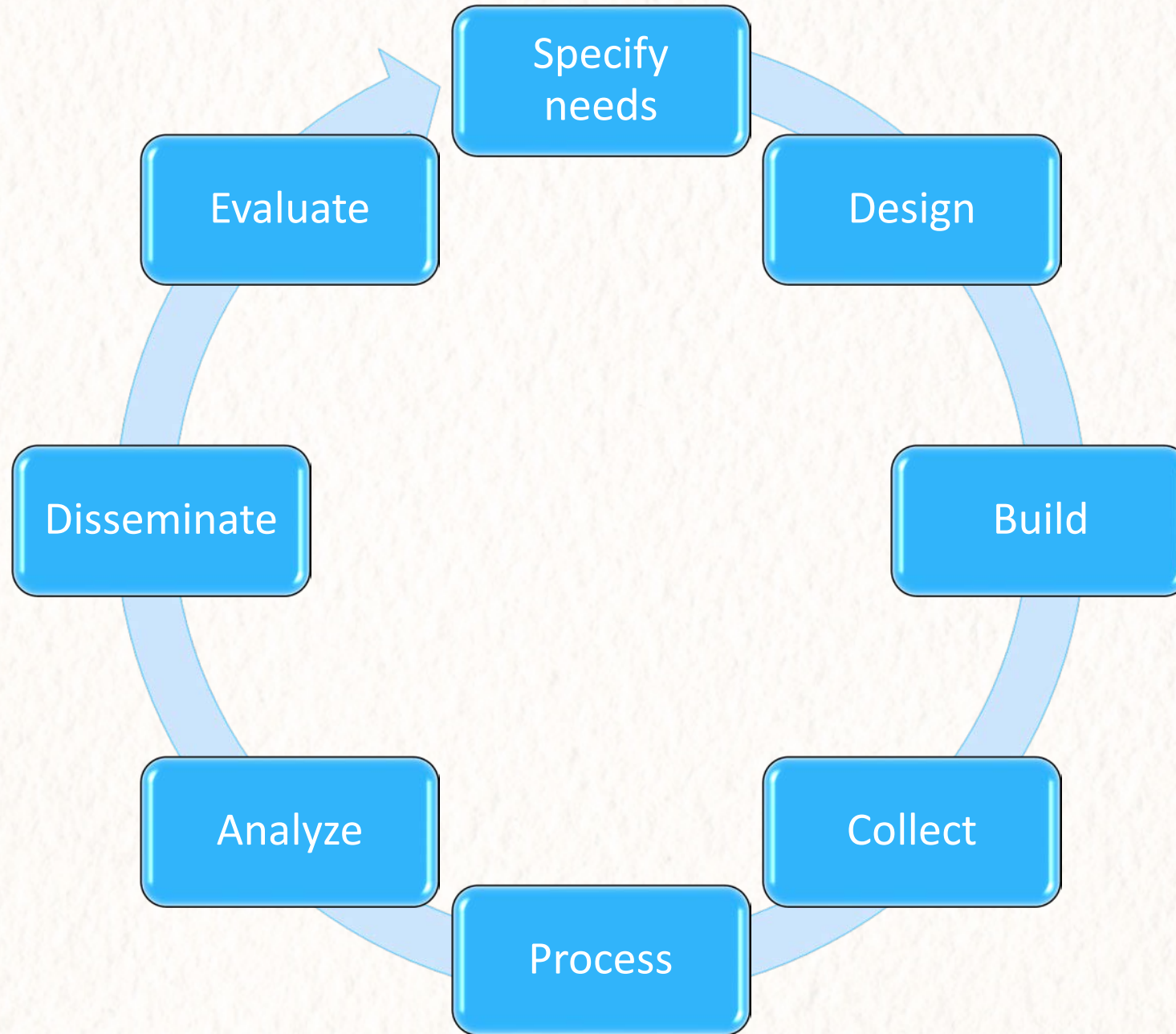
Who does it?

- A team under the Statistical Commission

When did it start?

- April 2018

Check Points of Statistics Business Process Re-engineering



Point 2

Monitoring the process of official statistics as one of business processes is also being strengthened in Japan.

Guidelines for the Quality Assurance of Official Statistics

Agreed on in March 2010, last revised in February 2016 by *the Conference of the directors in charge of statistics of line ministries*

1. Purpose
 2. Background
 3. Principles
 4. Coverage
 5. Implementation methods
 6. Systematic implementation
 7. Notes
- Annex

Guidelines for the Quality Assurance of Official Statistics

Quality of official statistics

- A concept built on the relevance to **users' needs**, the **timeliness** of dissemination, and the **interpretability** of statistical data as well as **accuracy**

Purpose

- Aimed at improving the **usefulness** and **reliability** of official statistics through compilation and dissemination as well as through indication, evaluation and improvement of quality of statistics in administrative organs in order to satisfy **user's needs**

Principles of Guidelines for the Quality Assurance of Official Statistics

Examples of factors of the quality of official statistics

- Accuracy
- Relevance to needs
- Timeliness

The quality assurance of official statistics

- The line ministries are required to enhance the indication of the quality of official statistics and conduct self-evaluation of quality.
- This does not preclude the line ministries from implementing the current measures or effective planned measures based on the characteristics of each type of official statistics.

Guideline review

- Regularly reviewed based on:
 - Results of the line ministries' approaches,
 - Results of research by related academic societies, and
 - International trends of related approaches.

Implementation Methods of Guidelines for the Quality Assurance of Official Statistics

Implementation system

- Systems that can secure both objectivity and specialty

Indication of quality

- Metadata indicating quality of official statistics
- The optimization of operations and systems for statistical work
- Regularly review the contents of the quality indication

Evaluation of quality

- Quality assurance of official statistics:
 - Implemented from a comprehensive perspective
 - Published for ensuring objectivity and transparency
 - Address the refinement and improvement
- Quality evaluation for the conducting process of a statistical survey
 - Request reports on the conducting processes entrusted or mandated to local offices of national agencies, local administrative organs and organizations from the private sector
 - Carry out self-evaluations on the quality of processes of statistical surveys
 - Address the refinement and improvement of the statistical surveys

Notes of Guidelines for the Quality Assurance of Official Statistics

Information sharing and discussions among the line ministries

- Efforts on quality assurance of official statistics based on the Guideline should be promoted efficiently, and the sharing of practices and discussions will be continued by the Working Group on Quality Assurance of Official Statistics and Utilization of Private Sector for refinement of the Guideline.

Permission for access to statistical data before the release date

- Leaking official statistics before the release date would betray peoples' trust in official statistics as a whole.
- Therefore, the line ministries should decide the rule by internal regulations which identify who may have access to statistical information before its official release date and should publish the rule in accordance with the "Guideline about the access and procedure for statistical information sharing before its release date".

Elements of Guidelines for the Quality Assurance of Official Statistics

Main elements

- Relevance to needs
- Accuracy
- Timeliness
- Interpretability/Clarity

Sub elements

- Reliance
- Coherence/Comparability
- Accessibility
- Efficiency

Metadata Indicating Official Statistics Quality of Guidelines for the Quality Assurance of Official Statistics

Statistical Surveys

- Outline of the survey
- Results of surveys
- Release schedule
- FAQ
- Contact information

Statistics not Based on Statistical Surveys

- Outline of the statistics
- Results of tabulation or estimation
- Release schedule
- Contact information

Participation in IMF Data Quality Framework from Japan

Participation in SDDS plus

- Participated in SDDS in June 2000 and SDDS plus in April in 2016
- Opened the National Summary Data Page in the Website to disseminate designated data in 27 categories
- Among 9 categories, disseminated 8 categories and is considering the remaining one category

Advance Release Calendar

Data Category	Component	Lag	Date			
			May	June	July	August
Real Sector	National Accounts (GDP)	2 months	20			9
	Production index	1 month	31	28	30	30
	Sectoral stocks of financial assets and liabilities	4 months			31	
	Labor market: employment and unemployment	1 month	31	28	30	30
	Labor market: Wages/earnings	2 months	10	7	9	6
	Price index: Consumer prices	1 month	24	21	19	23
	Price index: Producer prices	1 month	16	12	10	13
Fiscal Sector	General government operations					
	General government gross debt	4 months			31	
	Central government operations	3 months		28		
	Central government debt	2 months	10			9

Advance Release Calendar (Continued)

Data Category	Component	Lag	Date			
			May	June	July	August
Financial Sector	Depository corporations survey	1 month	15	11	9	9
	Central bank survey	1 month	9	5	3	5
	Other financial corporations survey and Debt securities	4 months			31	
	Regulatory Tier 1 capital to risk-weighted assets, Regulatory Tier 1 capital to assets, Nonperforming loans net of provisions to capital, Nonperforming loans to total gross loans, Return on assets, Liquid assets to short-term liabilities, Residential real estate prices	4 months			NLT28	
External Sector	Balance of payments	2 months	14	10	8	8
	Official reserve assets and Reserves template	1 month	7-13	3-7	1-5	1-7
	Merchandise trade	1 month	30	27	30	29
	International investment position and External debt	3 months		10		
Socio-demographic Data	Population	None	20	20	22	20

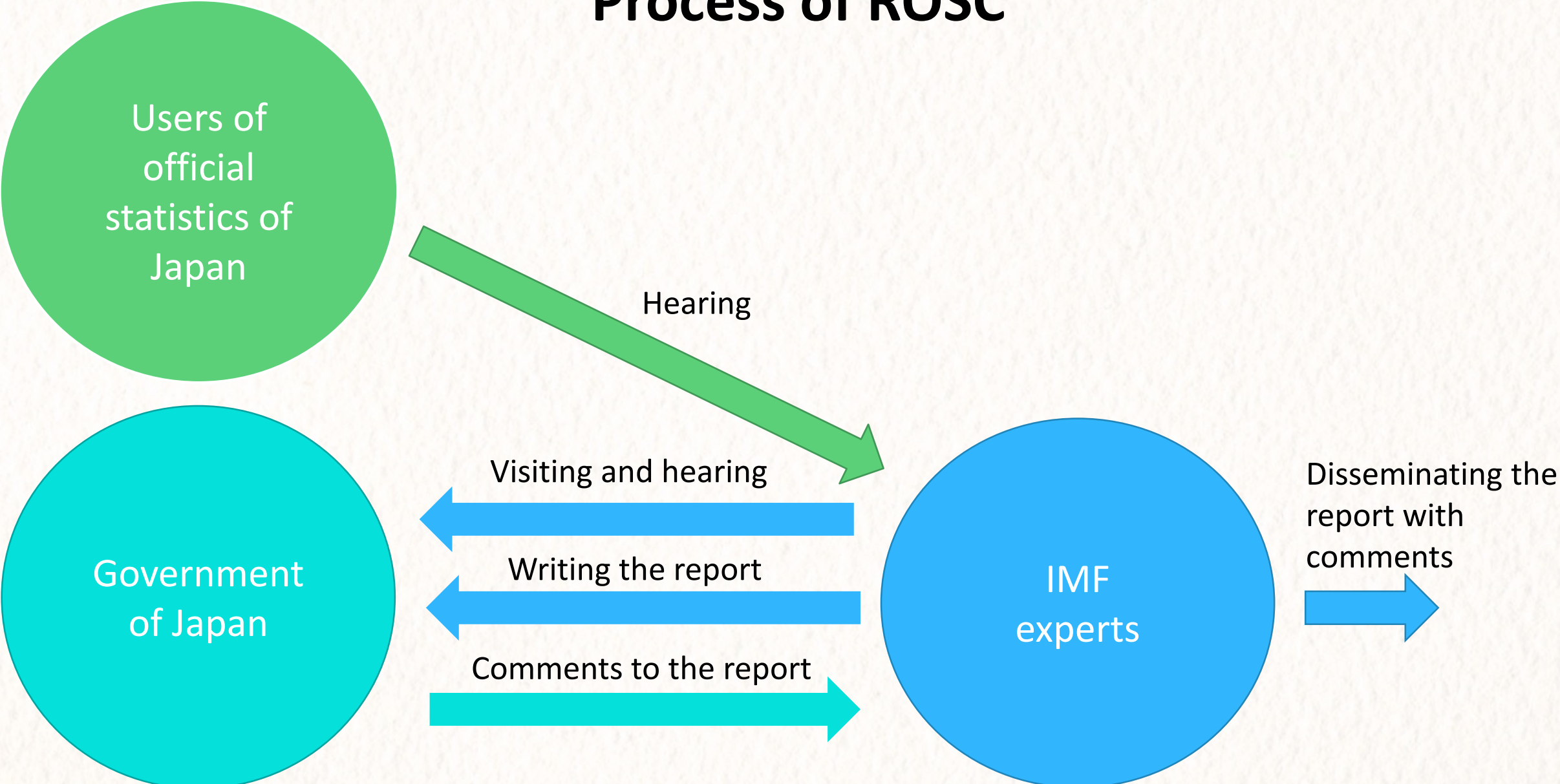
Point 3

Prior commitment will lead to ensure and enhance the quality of statistics domestically and internationally.

Report on the Observance of Standards and Codes (ROSC) —Data Module

- Prepared by the Statistics Department, IMF in March 2006
- Provided an assessment of Japan's macroeconomic statistics against the Special Data Dissemination Standard (SDDS), complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework, July 2003 version (DQAF)
- The datasets assessed in this report are: **national accounts, consumer price index, producer price index, government finance statistics, monetary statistics and balance of payments statistics.**
- Based on publicly available information and on information provided prior to, and during, a staff mission from the IMF's Statistics Department during September 12–28, 2005

Process of ROSC



Data Quality Assessment Framework July 2003—Summary Results

		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Prerequisites of quality	Legal and institutional environment	O	O	O	LO	O	LO
	Resources	LNO	O	O	O	O	O
	Relevance	O	O	O	O	O	O
	Other quality management	O	O	O	O	O	O
Assurances of integrity	Professionalism	O	O	O	O	O	O
	Transparency	O	O	O	O	O	O
	Ethical standards	O	O	O	O	O	O

Key to symbols:

O = Practice Observed;

LO = Practice Largely Observed;

LNO =Practice Largely Not Observed

Data Quality Assessment Framework July 2003—Summary Results (Continued)

		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Methodological soundness	Concepts and definitions	O	O	LO	O	LO	O
	Scope	O	LO	O	LNO	LO	O
	Classification/sectorization	O	O	O	O	LO	LO
	Basis for recording	O	O	O	O	LO	O

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Data Quality Assessment Framework July 2003—Summary Results (Continued)

		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Accuracy and reliability	Source data	LO	O	LO	LO	O	LO
	Assessment of source data	LO	O	O	O	O	O
	Statistical techniques	O	LO	LNO	O	O	O
	Assessment and validation of intermediate data and statistical outputs	O	O	O	O	O	O
	Revision studies	LNO	O	O	LO	O	O

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Data Quality Assessment Framework July 2003—Summary Results (Continued)

		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
Serviceability	Periodicity and timeliness	O	O	O	LNO	O	O
	Consistency	O	O	O	LO	O	O
	Revision policy and practice	O	O	O	O	O	LNO
Accessibility	Data accessibility	O	O	O	O	O	O
	Metadata accessibility	O	O	O	O	O	O
	Assistance to users	O	O	O	O	O	O

Key to symbols:

O = Practice Observed;

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An Example of the Recommendation by ROSC

Recommendation

Review the current level of staffing of the national accounts data, given that it is somewhat low for operational and developmental purposes.

Answer from the Government of Japan

The CAO recognizes the shortage of human resources in meeting the increasing need for national accounts statistics, and will strive to enhance the level of staffing both in quality and in quantity, through various measures, including collaboration with the research section, provision of appropriate training, and a request for an increase in staff.

An Example of the Recommendation by ROSC (Continued)

Recommendation

Expand the scope of the CPI to include one-person households with concomitant developments in the source data for doing so.

Answer from the Government of Japan

As the number of one-person households has been increasing recently, the index based on the basket of total households, including one-person households, is also compiled for reference annually beginning in the 2000 revision. The official index in general is only 0.1 point higher than the index for total households in 2005. To meet various user requests, a monthly index for total households is scheduled to be included in the indices for reference in the 2005 revision. Further, it will be reviewed to include one-person households in the scope of the CPI in the future, giving consideration to comments by users.

An Example of the Recommendation by ROSC (Continued)

Recommendation

Include the price of items “on sale” for seven days or less.

Answer from the Government of Japan

Collected prices represent monthly prices although they are collected on a specific weekday; either on Wednesday, Thursday or Friday. The price of items “on sale” for seven days or less may not be the price for the largest sale in the month. For example, if a product were to be “on sale” only on Friday each week, that price cannot be regarded as representative. So it should be excluded.

Point 4

International evaluation will be a drive to improve statistics domestically.

Point 5

Establishing the National Quality Assurance Framework and monitoring the quality of statistics following international standards will be an international trend for enhancing official statistics.

**End of An Example: Quality
Assurance of Statistics of
Japan**