



Current status of data provision to international Organization, usage monitoring and improvement management plan in Korea

Youn Young Park

Statistics Korea, Daejeon, Korea – younyoungp@korea.kr

Byeong Hyeon Kim/Sungkyu Choi

Statistics Korea, Daejeon, Korea – isd@korea.kr

As countries enter into international organizations such as the UN, the OECD, the IMF etc, member countries are obligated to provide national data and monitor usage management of national data in a proper way. The purpose of this paper is to find the problems and suggest improvement plans for compiling the results of data provision and monitoring “Korea numeric data” in international organization’s DB, publication, research paper etc. According to the data provision results, 15 statistical agencies in Korea, such as the Statistics Korea, the Ministry of Science, ICT and future planning were providing 69 sets of statistics to 12 international organizations. The OECD was the main client for 39 sets of statistics, whereas 10 statistical agencies provided 30 sets of statistics to non-OECD organizations. Due to the difference of production standards and classification, some items had not been submitted.

Usage monitoring of submitted data was uniquely implemented in Statistics Korea as a pilot scheme. Statistics Korea checked recent statistics which were submitted to international organizations and monitored whether “numeric data” had been used in the correct way or not. The purpose was to prevent national image being falsely represented in the international community as a result of incorrect data usage. Monitoring had been implemented in 3 types of table forms such as data usage manner, recent numeric data’s usage review and international comparison of production standards. For data usage manner, we screened international organizations, usage classification, web-site, re-processing, publication time and submitted data. As for recent numeric data usage reviews, we checked between KOSIS data and international organization’s data whether it was consistent or not. Lastly, we reviewed whether our production standard was consistent with international recommendations or other countries in survey scope, items, survey periods etc.

In the process of data provision and monitoring, we discovered some issues in this system. On the data provision side, we figured out some problems such as data provision’s legal basis absence, formation of work blind area, no standardization documentation for data provision management and no evaluation equipment for work improvement. On the data usage monitoring side, we observed that there was no manual or training for dispatched officials who are working for international organizations. Also, we found that currently there was no automatic searching tool which would efficiently support the monitoring of Korea’s numeric data in the international society.

From 2015, Statistics Korea is going to implement an improvement plan which was drawn from the data provision and monitoring management process. On the data provision side, we are going to create ordinance related data provision issues in the Statistics Law, clarify the international organizations which are liable for data provision, equip the process procedure for non-publishing data, standardize the format for data entry and exit management, accelerate the service degree of KODAPS, which is supporting system for data provision to international organizations, and introduce evaluation systems for data provision work. By doing so, we plan to seek a substantial governance system in data provision to international organizations. Also, on the side of data usage monitoring, we plan to develop training manuals for dispatched officials working for international organizations, educate them and monitor numeric data which is being used by international organizations on a regular scheme and develop an automated searching and monitoring tool system. The ultimate goal is to raise the trust of numeric data in the international society as well as upgrade the global image of Korea.

Keywords: International Organization; Data Provision; Usage Monitoring; global image.



1. Introduction

As countries enter into international organizations such as the UN, the OECD, the IMF etc, member countries are obligated to provide national data and monitor usage management of national data in a proper way. The purpose of this paper is to find the problems and suggest improvement plans for compiling the results of data provision and monitoring “Korea numeric data” in international organization’s DB, publication, research paper etc.

The thesis of this study starts with 2 assumptions. Firstly, data provision management could be very important as a duty of member country in international organizations. Secondly, false usage of national data could impact on the dignity of a country’s image in the international society. In light of these assumptions, four research questions will be addressed in this paper.

Q1: Could whether data provision to international organizations be verifiable in Korea?

Q2: Could whether monitoring about Korean numeric data be implemented?

Q3: Could whether problems be identifiable in the work process for data provision and monitoring?

Q4: Could whether an improvement plans be activated based on the problem-solving?

In order to answer these research questions, this paper will use multiple approaches to discover answers.

2. Verification of data provision to international organizations

Statistics Korea is annually compiling information about data provision to international organizations from statistical agencies which are in charge of producing and servicing formal statistics in Korea. According to the survey which was conducted in 2014 for reference year 2013, statistics agencies provided 69 sets of statistics to 12 international organizations in 2013. The status of data provision could be classified by OECD and non-OECD organizations.

For the OECD, 12 statistical agencies provided 39 sets of statistics in 2013. More specifically, Statistics Korea provided 9 sets of statistics such as national account’s related statistics, structural and demographic business statistics, income inequality statistics, regional statistics, employment statistics, main economic indicators, purchasing power parities, real expenditure and business cycle index. Ministry of Strategy and Finance provided 4 sets of statistics such as revenue statistics, official development assistance statistics, international direct investment statistics and taxing wages. The Ministry of Public Administration and Security provided 1 set of statistics for the usage statistics of electric government services. The Ministry of Labor and Employment provided 1 set of statistics for the expenditure statistics for labor market policy. Ministry of Trade & Industry and Energy provided 9 sets of statistics such as annual petroleum statistics, monthly petroleum statistics, monthly crude oil import, quarterly petroleum price statistics, annual gas supply and demand, monthly gas supply and demand, annual renewable energy supply and demand, annual electricity & heat supply and demand, energy efficiency statistics.

The Ministry of Science, ICT and future planning provided 4 sets of statistics such as quarterly internet joining statistics, quarterly research and development activities statistics, informatization statistics, technology trade statistics. The Ministry of Education provided 1 set of statistics for the annual education statistics. The Ministry of Health and Welfare provided 2 sets of statistics such as health statistics and index for health care quality. The Ministry of Ocean and Fisheries provided 1 set of statistics for the fisheries industry statistics. The Financial Supervisory Service provided 1 set of statistics for the private pension statistics. The Bank of Korea provided 5 sets of statistics such as annual national accounts, quarterly national account, quarterly balance of payments, annual trades in



services and quarterly money flow statistics. The Ministry of Environment provided 1 set of statistics for the environment index.

In 2013, 10 Statistical Agencies provided 30 sets of statistics to Non-OECD organizations. As for the UN (United Nations), Statistics Korea, along with the Bank of Korea, the Ministry of Trade & Industry and Energy and the Korea Customs Service were providing 8 sets of statistics such as monthly business statistics, annual population dynamic statistics, annual population projection statistics, annual international migration statistics, quarterly mining and industry production index, annual services trade statistics, annual foreign direct investment statistics and annual trade statistics.

As for the IMF (International Monetary Fund), Statistics Korea, along with the Ministry of Strategy and Finance and the Bank of Korea were providing 8 sets of statistics such as monthly special data dissemination standard, annual national debt statistics, monthly national account, monthly monetary and financial statistics, annual monetary and financial statistics, quarterly international investment position statistics, quarterly balance of payments, monthly prices and volume index.

For the ADB (Asian Development Bank), Statistics Korea provided 1 set of statistics for the annual national main index. For the WB (World Bank), the Bank of Korea provided 1 set of statistics for the external debt statistics. For the SEACEN (South East Asian Central Banks), the Bank of Korea provided 1 set of statistics for the quarterly balance of payments. For the ADB (Food and Agriculture Organization), the Statistics Korea, along with the Korea Forest Service and Ministry of Ocean & Fisheries provided 4 sets of statistics such as annual crops and livestock production statistics, annual forest products statistics, forest resources statistics by quinquennial basis and annual fishery industry statistics.

For the IALA (International Association of Lighthouse Authorities), the Road Traffic Authorities provided 1 set of statistics for the annual navigational mark statistics. For the APEC (Asia Pacific Economic Cooperation), the Ministry of Trade & Industry and Energy provided 2 set of statistics such as monthly international cooperative petroleum statistics and quarterly energy supply and demand.

For the IRTAD (International Road Traffic Accident Data), the Road Traffic Authorities provided 1 statistic that of annual transportation accident statistics. For the ILO (International Labour Organization), the Ministry of Labour and Employment provided 1 set of statistics for the labour statistics. For the ITU (International Telecommunication Union), the Ministry of Science, ICT and future planning provided 2 sets of statistics such as annual wire-wireless brief statistics and annual wire-wireless general statistics.

The above collected information is limited to reported data from statistical agencies, so it should be noted that this paper does not provide all submitted data information for Korea.

3. Implementaion of monitoring for Korea numeric data

The use of false numeric data in international organizations could harm their national image. The Statistics Korea monitored numeric data which had been submitted by the Statistics Korea for the first time. Usage monitoring of submitted data was uniquely implemented in the Statistics Korea as a pilot scheme. The Statistics Korea checked recent statistics which were submitted to international organizations and monitored whether “numeric data” had been used in correct way or not.

The purpose was to prevent national image being falsely represented in the international community as a result of incorrect data usage. Monitoring had been implemented in 3 types of table forms such as data usage manner, recent numeric data usage review, international comparison of production standard. For data usage manner, we screened the international organization, usage classification, web-site, re-

processing, publication time, submitted date. As for recent numeric data usage review, we checked between KOSIS data and International Organization's Data whether it was consistent or not. Lastly, we reviewed whether our production standards such as survey scope, items, survey periods etc, were consistent with international organization recommendation or other countries' standard.

According to the results, 10 divisions of the Statistics Korea monitored 21 sets of statistics about 6 international organizations such as the OECD, the UN, the ILO, the WHO, the FAO and the IMF. A few statistics such as fatality statistics had been used in 3 international organizations such as the OECD, the UN and the WHO. Thus, 21 sets of statistics had been screened 44 times in various ways among international organizations. As the below table shows, the usage types of statistics were statistical DB, publication, internal material, report and public release orderly.

<Table 1.1> Usage type of submitted statistics in international Organization

Total	Usage of type				
	Statistical DB	Publication	Internal Material	Report	Public Release
44	21	20	1	1	1

We also checked whether data had been reprocessed or not. The OECD reprocessed 14 sets of data among 26 submitted sets of data whereas the UNSD, the FAO, the IMF and the WHO didn't reprocess any data.

<Table 1.2> Re-processing status of data

International Organizations	Total	Re-processing	
		O	x
Total	44	18	26
OECD	26	14	12
UNSD	8		8
FAO	2		2
UNPD	2	2	
IMF	2		2
UNDP	2	1	1
WHO	1		1
ILO	1	1	

Provisionally, we discovered that most of the data was used in an appropriate way. But, some numeric data was used incorrectly. As shown in the below table, the UNPD was using population census data instead of projection data, which is our formal number for population. We cordially asked the UNPD to use our formal data following on from the monitoring result.

<Table 1.3> Numeric data misuse case of UNPD

Data	Sources	Finding			
Population projection	UNPD : World population projections: the 2012 Revision	Statistics Korea did not submit data to UNPD, UNPD is using Population Census Data for their data → Statistics Korea is using Projection Population for formal data → We will ask UNPD to use our Projection Data ※ Statistics Korea is submitting projection data annually to the UNSD (Unit : thousand Persons)			
		2005	...	2009	2010
		48,138	...	49,182	49,410
		47,033	...	48,165	48,454

Furthermore, we discovered that the employment rate for 2013 was wrongly stated as 64.6% although actual data was 64.4% in the OECD publication *‘Reducing Income Inequality and Poverty and Promoting Social Mobility in Korea’* published in July.24.2014’. Rice, paddy data in the FAO STAT DB was also different to KOSIS between 2011 and 2012. Likewise, we cordially asked FAO to replace our data using KOSIS.

<Table 1.4> Numeric data misuse case of FAO

	2011	2012	2013
KOSIS	5,615,916	5,405,155	5,631,689
FAO	6,034,300	5,934,000	5,631,689

4. Identification of problems around the management of data provision and monitoring

Although there was no guidance to identify problems for data provision and monitoring work processes, we found some problems focusing on core issues. Firstly, there is no legal basis to gather provision information to international organizations from statistical agencies. Currently, the Statistics Korea has asked statistical agencies to provide information which was submitted to international organizations through the cooperation. Secondly, we have experienced the formation of work blind area which could be untouched in the work process. We have not identified the exact scope and list of international organizations as an object of data provision. Thirdly, we have discovered that unclear documents could be an obstacle to managing the work process of data provision. Fourthly, there is no evaluation equipment to improve this function. In order to improve work performance, evaluation results would be very helpful to prepare a strategy. Fifthly, we have observed that there is no manual or training for dispatched officials who are working for international organizations. Finally, we found that currently there is no automatic searching tool which would efficiently support the monitoring of Korea’s numeric data in the international society.

5. Activation of improvement plan drawn from problem-solving method

From 2015, the Statistics Korea is going to implement an improvement plan which was drawn from the data provision and monitoring management process. The first thing to do in the data provision side is to create ordinance related data provision issues in the Statistics Law. The second thing is to clarify the international organizations which are liable for data provision. Also, Statistics Korea will equip the process procedure for non-publishing data. The third thing is to standardize the format for data entry & exit management and accelerate the service degree of KODAPS, which is the supporting system for data provision to international organizations. The fourth thing is to introduce evaluation systems for data provision work. By doing so, we plan to seek a substantial governance system in data provision to international organizations. Also, the fifth thing on the side of data usage monitoring is to develop training manuals for dispatched officials working for international organizations, educate them and monitor numeric data which is being used by international organizations on a regular basis. The final thing is to develop an automated searching and monitoring tool system. The ultimate goal is to raise the trust of numeric data in the international society as well as upgrade the global image of Korea.





6. Conclusion

In order to find answers, this paper started with four questions. The first assignment was to verify the data provision status to international organizations. After, we checked the implementation of monitoring about Korea Numeric Data. Next, we identified the problems in the process for data provision and monitoring. Lastly, we drew up an improvement plan based on the problem solving method. Through this study, we have realized the importance of data provision management as the duty of member countries in international organizations. Also, we have to prevent the false usage of data in the international society in terms of preserving the global image of country. Hopefully, this study will bridge the gap between national authority and international organizations in the area of the effective management for data provision and monitoring.

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