Service Enterprises Online Reporting System of China

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In order to improve the statistical work efficiency, reduce the burden of enterprises and grassroots statistical agencies, in 2010, National Bureau of Statistics of China (NBS) decided to apply modern information technology to implement the Online Reporting System to obtain enterprise data and continuously improve the quality of statistical data.

1. Instruction

1.1 Definition of the Online Reporting System

The Online Reporting System is a network system through which the surveyed enterprises may use computers or handheld electronic terminals to direct report the data to the NBS via the internet, and the statistical agencies at all levels can receive the data synchronously, share the primary data. The system should be safe, smoothly operating, convenient and efficient.

According to the general requirement which is to realize "Full-featured, Easy to Use, Uniform Standard, Friendly and Compatible", NBS and the two software companies (Tsinghua Tongfang, Jingyun Wanfang) developed an online reporting system, after several pilot tested and refined, finished the system which can make unified electronic design and layout for statistical system and has the functions of unified data management, data entry, checking, editing, reporting and tabulation..

1.2 Organization and management

China's administrative system is divided into national, provincial, municipal and county four levels, each county has a statistical agency, each level statistical agency should accept the management and guidance form its superior statistical agency. Enterprises submit the data directly to the NBS through the Online Reporting System, but urge the report, data check and other work is still carried out from the bottom to the top..

The major content of Chinese services statistics is the operation of enterprises, wholesale and retail trades, hotels and catering services and real estate industries include the activities content.

1.3 Development Process

The corporation enterprises which can reach a certain scale report their data via the Online Reporting System. The standard scale for the wholesale enterprises is the annual revenues greater than or equal to 20 million yuan, for the retail enterprises is annual revenues greater than or equal to 5 million yuan, for the hotels and catering services enterprises is the annual revenue greater than equal to 2 million yuan, for the key service enterprises is the annual revenues greater than or equal to 10 million or the number of employees more than 50 people. For the enterprise does not meet this standard, use sample surveys to conduct investigations.

In 2011, wholesale and retail trade, hotels and catering services, real estate first launched online reporting; 2012, transportation, storage and post services, information transmission, software and IT services, leasing and business services, scientific research and technical services industry, management of water conservancy, environment and public facilities, services to households, repair and other services, education, health and social work, culture, sports and entertainment industries are also included in the online reporting system; financial intermediation is in the charge of People's Bank of China, does not participate in the direct online reporting.

After two years of hard work, under the coordination of enterprises and statistical agencies at all levels, the online reporting system works smoothly. By the end of May 2013, there are more than 360,000 corporations reported data by the online reporting system, including 130,000 wholesale and retail trade enterprises, 40,000 hotels and catering services enterprises, 80,000 real estate enterprises, 90,000 key service enterprises. In addition to service enterprises, there are 330,000 manufacturing enterprises, 80,000 construction enterprises also take online reporting system.

2. Working process

The base of online reporting system is Business Register, all qualified enterprises should be registered in the Business Register, otherwise it will not use the online reporting system. The county level statistical agencies check the qualified enterprises on the spot, load the information of enterprises into the Business Register. The enterprises can submit data by online reporting system after the relevant approval, while the demise enterprises can also exit the online reporting system.

Once enterprises were identified for the online reporting, they must accept the management and guidance from the statistical agency. Statistical agencies will provide training for online reporting operations and indicator meaning, and also answer the questions. Then enterprises submit data by the specified time independently though the online reporting system.

Statistical agencies at all levels will make acceptance check respectively after receiving the online data simultaneously in accordance with the uniform requirements of NBS. Acceptance

work is carried out step by step from the bottom to the top, from the county level, through the municipal, the provincial statistical agencies, the final is the National Bureau of Statistics.

After acceptance check, statistical agencies at all levels can make data processing and statistical analysis according to their competence.

3. Data quality measurement

To guarantee the data quality, the NBS developed strict control measures, mainly in the following aspects:

3.1. Establish strict review formulas. In the online reporting system, we establish review formulas for the logical relationship between the indicators, the relationship between data of different phases and other aspects. The system will automatically reports errors, reminds to re-inspection.

Data have to meet all review requirements before being submitted.

- 3.2. According to the "Data Quality Measurement Program" issued by NBS, statistical agencies at all levels conduct the data quality measurement from different angles such as the internal data analysis and external data comparison. For abnormal data, check the data, find the cause of the problem.
- 3.3. NBS carried out data quality inspection work. NBS selects some enterprises irregularly to inspect data on the spot, and rectifies the found problems timely.
- 3.4. NBS convenes data quality measurement meetings regularly to evaluate and analyze the data coordination and other aspects.

4. Effect of the Online Reporting System

Since the implementation of the Online Reporting System, NBS had achieved good results, mainly in the following aspects:

- 4.1. Improved the data quality. The data is submitted by the enterprise statistical worker who is familiar with the situation of the enterprise, so the errors may occur in the intermediate links will be reduced, and realize the original data centralized management by NBS.
- 4.2. Reduced the burden of statistical agencies. Primary statistical agencies workers do not need to do door-to-door investigating, they can use the internet to urge the report and check the data, the workload and time had been significantly reduced.
- 4.3. Reduce the burden of enterprises. After training, enterprise can directly submit data in

the internet, the online reporting system is developed by advanced computer technology, it is convenient, compared with paper media reports, the time for data reporting is much reduced.

- 4.4. Statistical agencies at all levels can share the original data. After taking hold of the original data of the enterprises, and in view of the different user needs, the NBS will carry out in-depth exploration and development to provide better statistical services to all walks of life.
- 4.5. Promote the friendly relations between enterprises and government statistical agencies. Statistical agencies can easily use the online reporting system to feedback the industry development information the enterprises care about to the enterprises, provide services, interact with the enterprises, and obtains the high praise.

5. Questions and future challenges

There are some problems affecting data quality found in the process of online reporting, some have been begun to take measure to solve, and some are needed to be future researched:

- 5.1. Some enterprises do not actively report data, still need to urge report. Currently we had taken email, short message, telephone etc.
- 5.2 Data quality still has some questions, we have to detect the error data fast and accurately. NBS is currently researching a more comprehensive and efficient way to measure the data quality, such as the use of check templates.
- 5.3 Part of the users are unskilled for the online reporting system, the server's response speed and network bandwidth also affect the efficiency of the system. As the increasing number of enterprises, NBS will further improve network technology to improve the online reporting system performance.