

**MALAYSIA'S ECONOMIC CENSUS 2011
AND THE STRENGTHENING OF THE BUSINESS REGISTER
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ABSTRACT

To enhance the nation's progress, the Government and its citizens need information to measure and monitor the performance of development policies and programmes. In Malaysia, the Government has set a new economic vision towards a high-growth and high income nation by 2020. A number of programmes have been formulated such as Economic Transforming Programmes (ETP) and National Key Economic Area (NKEA). Comprehensive and timely statistics are thus needed by policy makers at large to chart the country's development process. The role of the national statistics office as the compiler of official statistics has become more important to ensure the availability, reliability and on-time social and economic statistics for policy makers and users. In line with the aspiration of the government, the Department of Statistics Malaysia (DOSM) conducted the Economic Census (EC) 2011. It covers all economic activities in Malaysia and also incorporates a Census on Small Medium Enterprises (SMEs). The Census provides comprehensive information on the growth and profile of businesses, as a benchmark for the compilation of national accounts and Input-Output Tables, rebasing of various indices and updating the database on SMEs. In addition, it also plays an important role as the pivotal source to update the national frame for future surveys/censuses. The Business Register which is known as Establishment Enterprise (EE) Frame comprises establishments/ enterprises operating in Malaysia and is the backbone to the successful implementation of censuses/surveys. Information in the BR besides the operating status includes the name, address, activity, legal status, sales value, number of employment and enterprise structure. In 2010, DOSM restructured the approach of the EE Frame

from 'silos' to 'integrated' system through the National Enterprise-Wide Statistical System. The source of updating EE Frame relies on information from the economic census and regular surveys, information obtained through the branch offices of DOSM and regular access to administrative records of statutory bodies, government agencies, and associations. This paper will discuss the role of the Economic Census 2011 in strengthening the EE Frame and the approach undertaken.

1. Introduction

As stipulated in the Statistic Act, the Department is tasked to produce official national statistics. Being the producer it is imperative for DOSM to ensure the availability, reliability and on-time social and economic statistics for policy makers and users. A number of programmes have been formulated such as ETP and NKEA by the Government to ensure the achievement of targeted vision towards becoming a high income country by 2020. In line with the aspiration of the government, the Department of Statistics Malaysia (DOSM) has conducted Economic Census (EC) and most recently the EC 2011. One of the utmost important objectives of EC is as the pivotal source to update the national frame for future economic censuses/surveys.

2. Economic Census (EC) 2011

DOSM as the premier government agency entrusted to produce national statistic, is responsive to the various challenges as it affects the structure and function of the Department. One of the challenges is to ensure the implementation of Development Policies and National Vision is on the right path.

In line with this aspiration, DOSM has carried out the EC 2011 with 2010 as the reference year which includes the collection of information on Small and Medium Enterprises (SMEs). The last EC was in 2006 (reference year 2005) while data on SMEs was collected through a Baseline Census of Establishments and Enterprises conducted in 2005 (reference year 2003).

The implementation of the censuses is in tandem with the international recommendations that the national economic census should be undertaken at regular intervals of time (within five years). The census was conducted under provision of the Statistics Act 1965 (Revised 1989).

The objective of the EC is to establish sound benchmarks of economic statistics. It also serves basically as benchmark data to the rebases of GDP, Indices and Input Output tables. It will provide comprehensive structure and

profile of the economy. The results of the census will also establish and supplement the business register. In addition the EC provides update on the SMEs database and compiles relevant statistics to assist policymaker to monitor the contribution to the overall economy. Finally it serves as official measures of output for industries and as the cornerstone of the country's economic statistics.

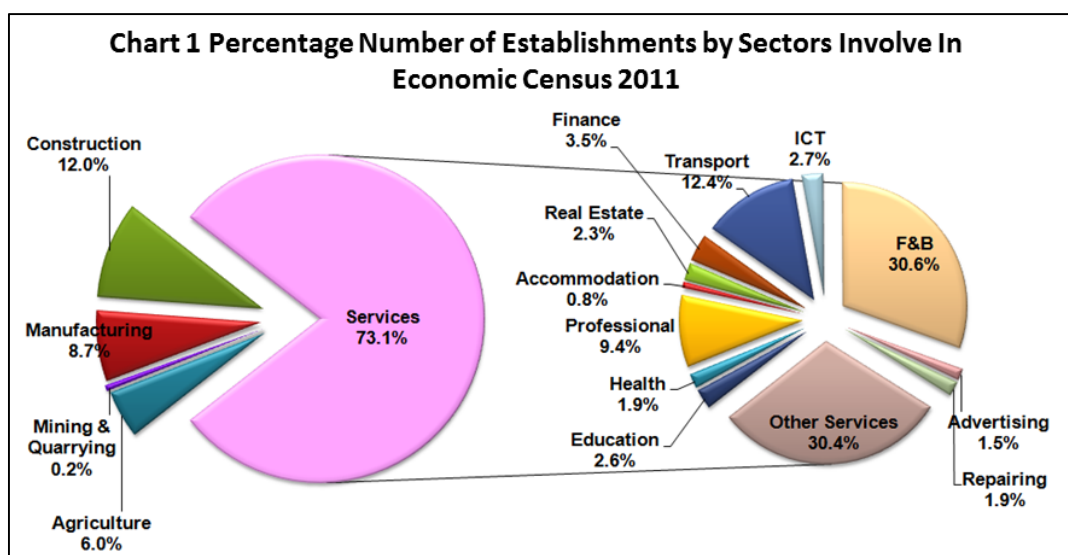
2.1 Scope and coverage

The EC 2011 covered all establishments engaged in Agriculture; Mining and Quarrying; Manufacturing; Electricity, Gas, Steam Air conditioning supply; Water supply, Sewerage, Waste management and Remediation activities; Construction and Services.

In comparison with annual/biennial surveys and previous censuses, the coverage of the sectors/industries is more exhaustive with the incorporation of Census on SMEs and the expansion of new industries especially in services sector. The definition of SMEs in Malaysia based on two criteria which are the total sales turnover/revenue by a business in a year or the number of full-time employees by a business. Generally, SMEs in Malaysia are defined as follows:

- Manufacturing sector: Sales turnover of less than RM25 million OR full-time employee of less than 150.
- Services and other sectors: Sales turnover of less than RM5 million OR full-time employee of less than 50

A total number of 943,526 establishments are covered in the census. Services sector accounted the largest with 73.1% (689,717) followed by Construction 12.0% (113,223) and Manufacturing 8.7% (82,087) as shown in Chart 1.



2.2 Classification of activities

The classification of economic activities follows the International Recommendations of Economic Activities (ISIC) of the United Nations. In Economic Census 2011, DOSM has used the updated version of MSIC that is the Malaysia Standard Industrial Classification (MSIC) 2008 version 1.0 in line with ISIC Rev.4. As for the classification of products by activity, the Malaysia Classification of Products by Activity (MCPA) 2009 based on the Central Product Classification (CPC) version 1.0 are presently being used.

2.3 Questionnaires and Information collected

There are two types of questionnaires introduced which tailored to specific industries and to new industries which are not covered in regular surveys such as Food and Beverages and Repairs and Maintenance. There are 270 set of questionnaires and Manufacturing accounts the most with 237.

The content of the questionnaire consisted of two parts; Part A which covered topic such as the company/business profile and economic activity, income from sales of goods and services, expenditure of goods, materials and industrial services, value of assets, employment and

salaries & wages while Part B focused on SMEs module which covered topics such as sources of financing and access to credit, innovation, marketing & promotion, import and export, usage of ICT and environmental compliance in businesses

2.4 Data collection and processing

In EC 2011, it is for the first time the implementation of two approaches, area listing and list frame (mail inquiry) approaches. The approach of area listing is specially implemented in the census of food & beverages and cybercafé services. As for the majority of the remaining activities are using the list frame approach.

In order to complete the census in time, well trained fields enumerators assist the respondents to complete the questionnaire either through telephone or field follow-up. The questionnaire for EC can also be downloaded through the website. In ensuring the quality of data, field enumerators were urged to manage and update status through Operational Information Control System. Intelligence Character Recognition Scanner (ICR) has been used to optimise in processing the questionnaires as well as computerized editing and coding has been practiced. Validation checks for completeness and consistency checks are obligatory procedures.

2.5 Findings

The number of establishments companies operated in the year 2010 was 662,939 establishments. The majority of the establishments categorized under Services sector (89.2%), followed by Manufacturing (6.0%), Construction (3.3%), Agriculture (1.3%) and the remaining sectors (0.2%) as shown in Chart 2.

Chart 2: Percentage Establishments by Sectors

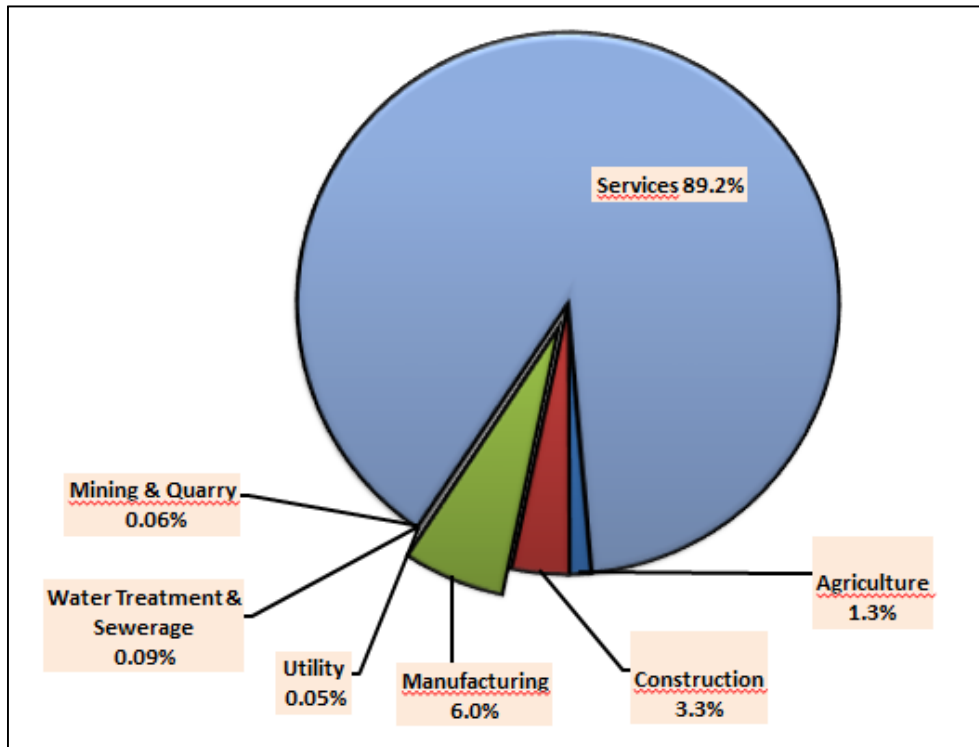
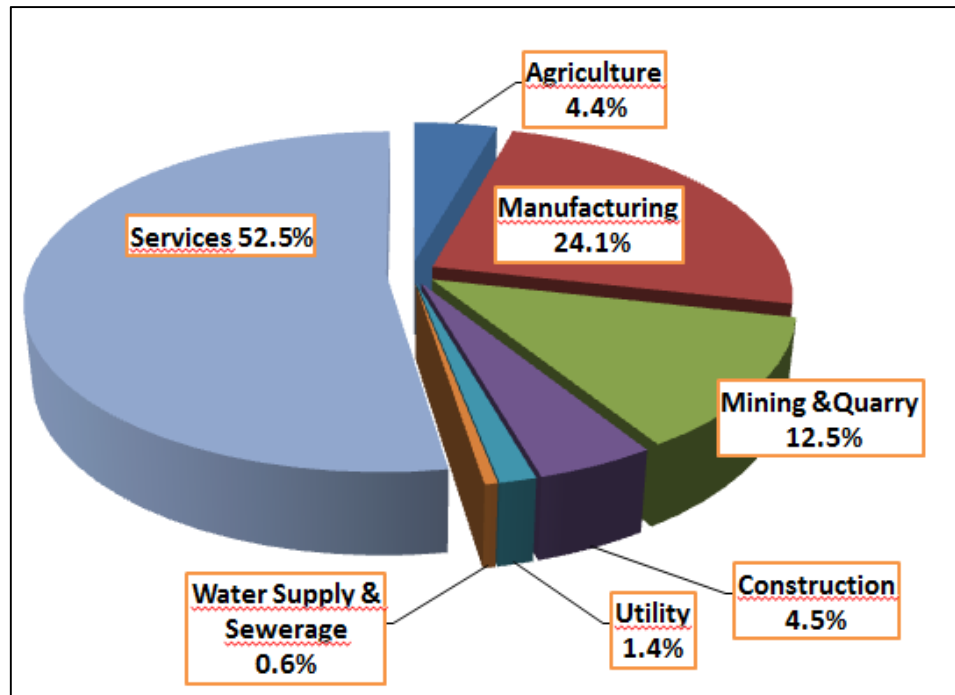


Chart 3 shows the overall contribution in term of value added was RM707.5 billion. Services sector continue to dominate the portion of the value added by 52.5%, while Manufacturing sector contributed 24.1% followed by Mining & Quarry (12.5%) and other sectors (10.8%).

Chart 3 : Percentage Value Added by Sectors



Data from the EC will be disseminated through twenty one publications and in terms of derived statistics to assist the Government in the formulation and monitoring of National Plans, SME Master Plan and economic policies.

3. Business Register (BR) / EE Frame

Business register comprises of establishments engage in various economic activities in Malaysia. The primary function of business register in Malaysia is to identify the target population for economic statistics which can be used as an enumeration list for Economic Census and for Survey Sampling Frame. The secondary function is to provide central storage of administrative data that serves as a control file for data collection and processing, provide data for statistical products and source for economic research and finally as a database to assist in respondent relation and the management of respondent burden.

It was called Central Register System (CRS) back then and the development was initiated in 1988 as an outcome of a study made by a Special Committee which looked into the possibility of establishing a unified frame for the

economic surveys and censuses. The CRS was set up in 1994 in a PC based system using Dbase IV and was upgraded in 1996 into a Local Area Network (LAN) environment. Further enhancements were made in 2002 with the upgraded to Wide Area Network (WAN) environment as well as incorporated features need from the users, requirement for new surveys and to accommodate new industrial codes.

At present, the department has developed an integrated and online system to replace the numerous non-integrated systems. It is named as the New Enterprise Wide Statistical System (NEWSS). Through the integrated proposed solution, it provides the main business functionalities of DOSM on pre-collection, collection, processing, analysis and dissemination. The web browser shall be the front end interface to this integrated system and it provides wider access capabilities anywhere and anytime through web based application. The business register which also known as Establishment/Enterprise (EE) Frame will be supporting the pre-collection, collection and processing module.

3.1 Types of Frames

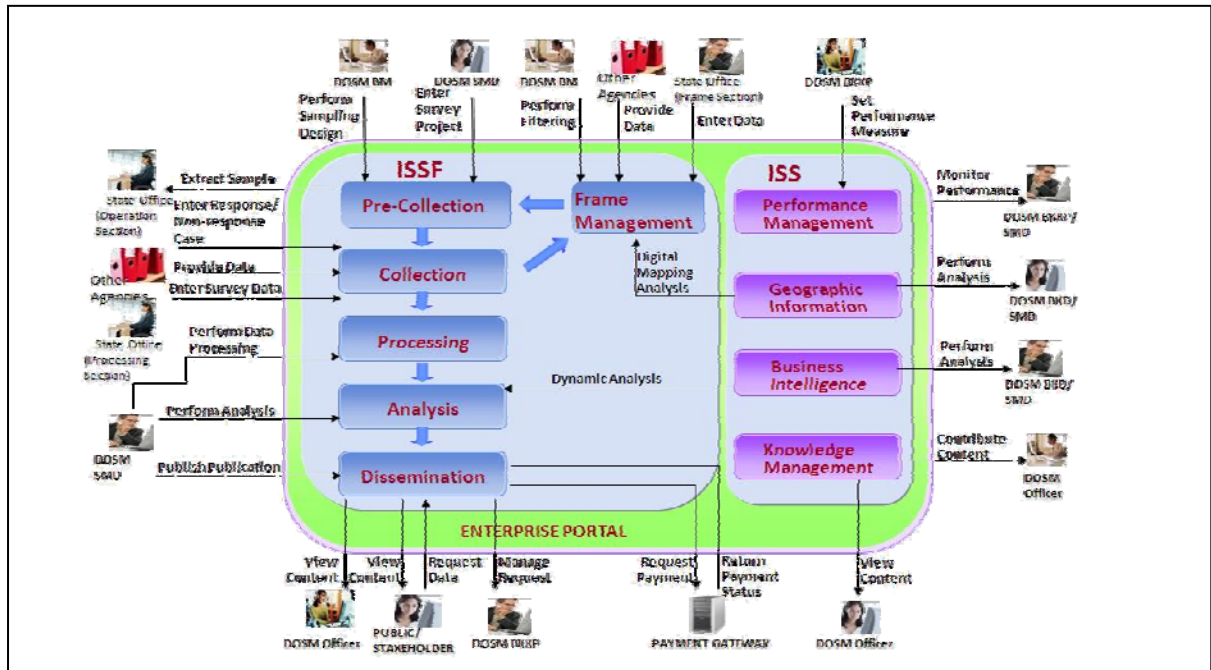
There are two distinctive types of frames which are List Frame and Area Frame. List frame is maintained under EE frame whereas an area frame is updated through the Household (HH) Frame Module.

3.2 Conceptual Framework

The frame management focuses on merging and consolidating information from other agencies and collection of the information by the team within DOSM with the main vision of providing latest information. It serves for all the censuses and surveys carried out by DOSM. The foundation and concept of the business register are driven by the needs of the System of National Account. It also supported the department business process module and in line with the Generic

Statistics Business Process Module (GSBPM) outlined by the UNECE. It is designed under the NEWSS platform which integrated proposed solution called as Integrated Statistical Systems Framework (ISSF) as shown in Figure 1.

Figure 1 : NEWSS Design Layout



Modules for implementing the management framework in Establishment/Enterprise Frame (EE Frame) are as follows:

Module	Function
Screening Agency information Business Profiles	Maintenance through list information from administrative sources.
Establishment/Enterprise Duplicate Data Collection Respondent Management Control	Maintenance of establishment and enterprise information
Report Business Intelligence (BI)	To generate monitoring reports and analysis tools
Geographical Information System (GIS)- EE	To monitor the number/type of establishments in an enumeration block.

3.3 Defining Statistical Units

Economic entities have numerous characteristics and varieties of data are required by activities and by geographical regions. EE Frame has identified two types of statistical units which are establishment and enterprise.

3.4 The Coverage of EE Frame

Standard industrial classification systems are an integral part of the conceptual framework for frame and business register. The industry classifications in the register are based on MSIC 2008 version 1.0 which is comparable to ISIC 4 of the United Nations. The register comprises all of establishments operating in Malaysia. The classifications are determined by the principal activity of the unit which is based on the value added/output/sales by the goods produced or services rendered.

3.5 Data Items in EE Frame

Kind of data in Malaysia BR are unique ID number that serves as the primary identifiers; company/establishment ID number created by source of agencies; contact information such as business name, postal and location address and others; activity and industry classifications; legal status and equity structure; basic financial information such as revenue, expenditure, salary, number of person engage and others; company and establishment organisation structure; and censuses/surveys control status indicators.

3.6 Updating the EE Frame

The main objective of BR is to provide censuses/surveys frame efficiently, reliable and timely. The key maintenance activities on Malaysia BR are identifying births, deaths, updating link between unit, updating contact and classification and removing duplicates.

The Methodology and Research Division at the headquarters and 14 state offices throughout Malaysia are responsible for maintaining the BR through integrated and online system in NEWSS.

There are three sources for updating information in EE Frame namely administrative data, censuses/surveys feedback and screening sources which are explained as below:

i. Administrative Data Source

Administrative sources present the most efficient source of information. To effectively utilise the administrative system it is pertinent to store in the register the identifier used by the administrative system.

DOSM has divided the sources into two categories which are central source and non-central source. Central source is a list of businesses whose profile is monitored by central agency whereas the non-central source is controlled at the states level.

ii. Censuses/Survey Feedbacks

Data from statistical censuses/surveys continue to play an important role in maintaining the EE Frame. It is been updated by 14 State Offices through Operational Information Control System via web based which directly update the status and content in EE Frame.

iii. Screening Source

Industries which are not covered in any censuses/surveys have to be updated in term of the detail activity and the company profiles. Questionnaires are being sent to respondents and the contents of the questionnaire are contact information, legal status, equities, activities, revenue, salary, person engaged and other basics information.

There are about 938 thousand active enterprises/establishments in Malaysia EE Frame. Administrative data source is the largest constituted of 59.8% followed by the Censuses/Survey Feedback 39.8% and Screening 0.4% as shown in Chart 4. Companies Commission of Malaysia (CCM) accounted for the largest portion for administrative data source followed by Small and Medium Enterprise Corporation 13.5% and Employees Provident Fund 8.5% as shown in Chart 5.

Chart 4 : Actives Enterprises/Establishments By Source

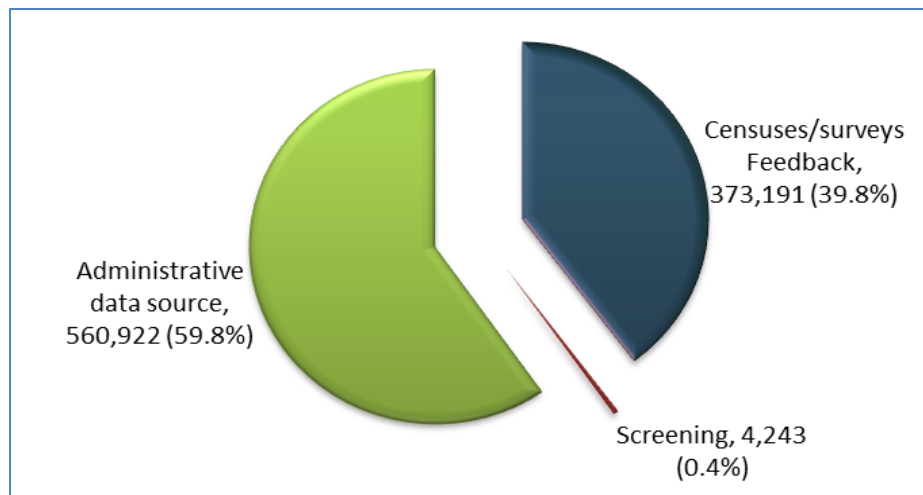
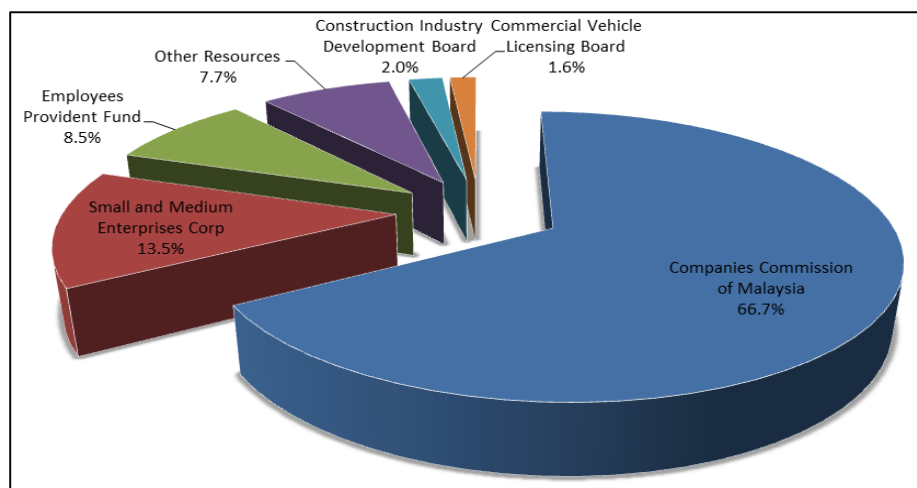


Chart 5 : Percentage Distribution of Administrative Data Source



4. Strengthening the EE Frame

The DOSM is responsive to the various challenges related to the National Development Policies/Vision and drastic change in Malaysia Economy. Hence, as the producer of national statistics, the direction and strategies should be flexible in tandem with the National Mission and the National Key Result Area (NKRA).

EE Frame as the backbone to the economic statistics should be responsive and sensitive especially to the changes in Malaysia economy which flourish with new industries. One of the main objectives of EC 2011 is to establish and supplement the business register to accommodate the changes in line with the aspiration of the department.

4.1 Strengthening the Business Process Model

The Generic Statistical Business Process Model (GSBPM) was developed by the UNECE and the Conference of European Statistician Steering Group on Statistical Metadata. Since its inception, in 2010 DOSM has taken step to strengthen the processes and quality assurance needed to produce official statistics by aligning according to the GSBPM.

One of the main differences between the maintenance of statistical business register and surveys/censuses is that register maintenance is usually continuous activity. Furthermore it is constantly updated from mixture of administrative and statistical sources. Being a backbone to economic statistics it is important to ensure the register is comprehensive, accurate, reliable and timely. Thus it is important to map the process according to the nine sub processes outline in GSPBM.

Specify needs, Design and Build will clearly define the sources according to the industries. This is to ensure the sources are relevant to the user requirement and aligned with the changes in Malaysia business landscape. Collect and Process phase can be applied to data obtained from censuses/surveys feedback, administrative records and

screening process. These will involve identifying the units and running the collection process according to suitable formats which can be integrated with the register. Analyse and Disseminate will prepare the output to be validated and made ready for the release. Finally the evaluation phase will provide the information to improve the quality of the register.

The benefit applying the GSPBM is the standardisation of terminology between processes and organisations. These will lead to increase the quality assurance of the register.

4.2 Enhancing the Use of Administrative Data Sources

The statistical business register identifies the universe of productive units active in the country, providing the information needed to support the production and analysis of economic statistics. EE Frame plays an important role to provide latest landscape of Malaysia businesses. The impact extends to all businesses inclusive SMEs through the conduct of EC 2011.

For this purpose, the register needs to contain latest information and structure of companies and businesses. Results from census will be the stepping stone to enhance the reliability and completeness of the coverage. It is to ensure the utmost accuracy in the data, particularly, those used as stratification variables in the sampling process for future surveys.

At present, DOSM has established strong collaboration with the main registrar of companies and businesses in Malaysia. There are two main agencies which are Companies Commission of Malaysia (CCM) and Employees Provident Fund (EPF). DOSM has taken step ahead by signing Memorandum of Understanding (MoU) to strengthen the relationship and smart partnership. Joint Technical Committee chaired

by Deputy Chief Statistician has been set up to ensure the outline drafted in the MoU mainly related to data sharing to be successfully implement.

Malaysia Corporate identity Number (MyCOID) which refers to the company incorporation number which is used as single source of registration and transaction purposes with other relevant Government agencies will be the department future agenda. Currently agencies involved are CCM, EPF, Taxation Office, Customs, SME Corp and Social and Security Organisation (SOCSO). These will be the future platform for coordinating and tapping data from agencies.

The collaboration continues at state and regional level as the demand on statistics on economic corridors and States GDP are widely requested by policymakers. DOSM has taken initiative to enhance the awareness to all the local council and local authority the important of economic statistics and ways to upkeep the business licenses according to the statistical needs. To leverage the use of ICT, the department is going to integrate information with all the local authority through web portal called ePBT which designed by Ministry of House and Local Government. Beside ministry and agencies, the department also has strong relationship with professional bodies, businesses associations, cooperatives and registrar of society which regularly update the status and profiles.

An important determinant of how a particular administrative source will be used is the perceived quality of the administrative records as compared to corresponding survey information. The quality issues associated with respect to coverage, timeliness, frequency, validity, reliability and consistency. NEWSS has established Agency Module System to match and screen the relevant data needed whenever received from agencies. The system through Business Intelligent allows user to analyse and evaluate the data.

All these efforts in future will make DOSM as the gateway for bringing all administrative data relating to businesses. Matching and validation process will be done centrally in the department which finally can be linked to the statistics unit for further analysis.

4.3 Keeping the EE Frame Up to Date

A perfect frame should reflect the real business world. This means the structures; classifications; linkages; data contents; availability status and contact information should be as close to reality as possible. Frame inadequacies can lead to operational hiccup, non-sampling errors and misleading interpretation of survey results. The deficiencies are generally due to lags in identifying births and deaths of businesses, inaccurate classification and outdated contact information.

Applying GSBPM in the business process will balance the need for accuracy, timeliness and stability of the registered data. It also can minimise the effects on time series of shocks arising from the updating process. In Economic Census 2011, through NEWSS the department has designed Operational Control Information System which interacts with the existing register interface. These assist the field enumerators at state offices to access and update the most current frame information in real time which it improves the timeliness and the efficiency of the updates. Beside it enhance the quality assurance of the information updated as it can be monitored by the subject matters along the operational flow. Regular updated through administrative sources also play an important role to keep the frame updated.

The department has taken step in applying geospatial data as source to update the frame. The department through Household Module has designed Integrated Listing Module (InLis) to accommodate the listing process for establishment/enterprises using maps beside the normal exercise for household. In future it will further update into geospatial

data through Geographical Information System Module. DOSM continues the effort by having engagement with Telekom Malaysia in using web geospatial portal known as TM Smart Map. The facility allows the department to access latest information mainly the location of businesses which really assist in reducing the non-response cases due to incomplete and outdated contact information.

4.4 Reduce Respondent Burden

An integrated system designed for data collection and the register can assist the department to improve its respondent relation. Business's respondent can find it irritating dealing with various people from the same department who do not seem to communicate with each other. Latest information in the register will increase the efficiency of data collection and reducing the frustration of respondents to answer the same questions on multiple occasions. This instance allows the field enumerator to better understand the business and in turn have a better context when communicating with respondent. Improving respondent relation will lead to greater quality responses and data collected.

4.5 Strengthening the Sampling Roles

The survey frame is important in conducting any surveys. For the preparation of economic surveys, all business populations are drawn using the same register. Completeness, consistency, reliability and up to date frame are important as it is going to be used as sample selection, stratification, imputation and estimation.

The register will provide the latest number of active population that is used to calculate the weights for blow-up process for variables of

interest. As such, the weights can be calculated based on responded samples to provide the estimated population figures for that particular variable. In this exercise, the non-response issues due to frame defect will be minimised. However, BR should minimize the number of frame defect to avoid the gap between the estimated figures and the actual population.

4.6 Establishing Business Demography Statistics and Business Profiling

Business Demography is a growing demand and most NSOs are using this platform to update the register. It involves statistics for specific events such as birth, death, survival and growth. DOSM at present together with CCM is working together to conduct research on the terminology, scope & coverage and data availability.

Information about units on the register must be kept up to date to facilitate the censuses and surveys. Business profiling is the method to analyse the legal, operational and accounting structure of an enterprise and enterprise group. It provides better understanding of the complex structure of the enterprise group in the country. Several NSOs have taken initiative to the response by introducing profiling. Profiling can be viewed as part of a broader, coordinated strategy for improving agency's economic statistics. DOSM has taken step by creating enterprise module in the NEWSS system which can facilitate the profiling activity.

5. Conclusion

To further nation's progress, policymakers and users need economic and social statistics to measure how the nation is performing so that policies can be made and their implementation can be monitored. The data need not to

stay static as the users' needs are keeping on increasing and timeliness in the production of statistical data.

The survey frame is a vital component in the censuses/surveys process. It provides the information needed for stratifying, sampling and contacting businesses. Frame inadequacies will lead to non-sampling errors and misleading interpretation of censuses/surveys results. The register is responsible in maintaining the establishment/enterprises list which is also as the backbone of Economics Statistics.

DOSM has taken steps to reengineer the register to meet the users' demand after the Economic Census 2011. It began with the changes from silos to integrate and online. To beef up its role as a national provider for economics statistics, the department has taken effort to strengthen the business process; enhancing the use of administrative data sources; keep the register up to date; reduce respondent burden, strengthening the sampling role; and establishing business demography statistics and business profiling.

For statistical organisation to stay relevant, an integrated and wholesome approach in statistical data collection has to be adopted. DOSM has taken active response to the challenges ahead and the need from the policymakers and planners through implementation of The Strategic Plan 2010 -2014. The plan is to ensure DOSM remains relevant with the function as outlined in the act and to achieve the vision to be the leading statistical agency internationally by the year 2020.