Sixth Management Seminar for the Heads of National
Statistical Offices in Asia and the Pacific
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**Managing Statistical Development and Information
Technology for National Statistical Offices**

Country Paper: Brunei Darussalam

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Introduction:

In Brunei Darussalam, the Department of Economic Planning and Development (JPKE) through the Department of Statistics (DOS) is the agency responsible for the collection, compilation and dissemination of national statistics. As in any decentralise statistical system, there are other ministries and departments who also collect and compile statistics for their own purposes. DOS collates all these statistics and publishes them in JPKE annual and quarterly publications.

Apart from DOS there are four other departments under JPKE. They are Department of Planning (DOP), Department of Policy and Coordination (DOPC), Department of Implementation and Monitoring (DOI) and Department of Administration and Info-Communication and Technology (ICT) (DOA). The management and planning of ICT for all departments under JPKE including DOS is the responsibility of ICT Division which is placed under DOA. ICT Division has to collaborate closely with each department to enable them to plan the ICT activities required by the entire JPKE.

The core areas of responsibility of the ICT Division are as follows:

a) To provide and maintain the ICT infrastructure of JPKE, i.e. hardware, software and computer network,

b) To develop computer systems to support the routine and ad-hoc tasks of the departments under JPKE,

c) To provide other ICT support.

1 - Management issues of using ICT in DOS:

(a) ICT enhances DOS functions

JPKE is equipped with a computer network that enables staff to access the server; to share data among users; to access the internet, and to have internal mail. The availability of this ICT infrastructure has enhanced all aspects of DOS functions. These include:

1. Reducing the data processing time:

DOS like other NSOs has to deal with a large amount of data that requires processing from different data collection activities that DOS has conducted such as censuses, surveys and administrative data. Several in-house computer systems have been developed by the ICT Division. Among the recent ones are for:

a) Population and Housing Census 2001,

b) Economic Census 2002,

c) Household Expenditure Survey 2005,

d) Companies Information System (business register),

e) Quarterly Survey of Businesses,

f) Consumer Price Index,

g) Construction Statistics.

These systems help to reduce the data processing time particularly during data capturing and on-line validation stage of a major survey or census. In the recent Household Expenditure Survey (HES) 2005, the data processing took half of the time spent on processing the 1997/98 HES data.

2. Reducing the time for producing tabulations

The data that has been entered in the system is then downloaded to PC for further processing using the SPSS software, especially for producing tabulations. With the use of SPSS, processing time for producing the tabulations is substantially reduced. In addition, SPSS can be used by DOS's own statistical staff and thus reducing their dependence on the computer technical staff from ICT Division.

3. Producing quality statistics in time

Due to the improved ICT infrastructure, all DOS staff including the supporting staff (around 80 personnel) has their own computers. Before the year 2000 some statisticians had to share computers and this delayed the compilation time and hence the production time. Now statisticians are able to use software such as Excel and SPSS to compile their respective statistics. In addition, with the availability of intra-net enables easier and faster transfer of data from one DOS section to another. With all these facilities DOS is now able to produce more quality statistics on time. Before the year 2000 DOS only able to produce annual data (except CPI), now since 2006, DOS has started to produce quarterly data.

4. Easy access of statistics

The ICT Division is also responsible for developing JPKE's website (http://www.jpke.gov.bn). The website contains the latest statistics provided by DOS and this helps in the dissemination of the statistics.

(b) ICT Strategy in DOS

DOS always collaborate with the ICT Division in strengthening its ICT strategy. One of DOS ICT strategies that is on the pipe-line is to provide a JPKE database on-line to cater for the demand by the users in accessing data via the internet. This is to enable:

(i) Other ministries and departments to get access to our data base and at the same time for them to submit their statistics to JPKE on-line;

(ii) Respondents to complete any survey/census questionnaire on-line.

At the same time JPKE has to ensure security on the confidentiality of data submitted on-line.

The other ICT strategy is to equip DOS manpower with ICT skills. Everyone in DOS has to attend trainings in the use of relevant software in order to improve DOS performance as well as to increase its productivity.

(c) Priorities ICT projects

DOS ICT projects are priorities according to the schedule of each statistical project. Since the ICT Division has to serve all other departments in JPKE including DOS, all requirements for provision of a particular statistical system has to be submitted months before DOS embark on the project.

(d) Using ICT to improve DOS's intelligence

(i) Most of DOS technical staff has access to internet. They are encouraged to use the internet to monitor for any updates in the statistical area concerned. These include updates in the methodology, manual, and statistical classifications prepared by the international bodies such as UN, IMF, UNCTD, OECD and others. At the same time, DOS staff is using internet to look for other countries' statistics or compilation practices in different areas of statistics. The staff benefit from this exercise whereby it enhances and broadens their knowledge in respective areas of statistics.

(ii) ICT trainings are always encouraged as a way of gaining new skills or upgrading their skills in using relevant ICT software that will improve their working performance.

2. Managing ICT effectively and efficiently:

From DOS experience in implementing large scale statistical projects such as Population and Housing Census 2001, Economic Census 2002 and Household Expenditure Survey 2005, the investment and expenses spent on ICT is an important factor in producing quality statistics in time. By having a more than adequate ICT resources has resulted in a substantial reduction of the time spent for data processing, producing tabulations, analyzing and hence the overall time in producing the statistics and the report.

DOS works closely with ICT Division in organizing and managing ICT resources. In planning a statistical project, DOS always involve personnel from ICT Division especially in considering the target dates for each activity of a project and in preparing the budget proposal for the project. In-house or out-sourcing of some activities such as preparing the system and data processing have to be considered. One of the important factors for the project to be successful and to be delivered in time is to effectively and efficiently manage and organize the ICT resources that are available.

The availability of strong ICT resources as well as knowledgeable manpower enable more quality and timely statistics to be produced in order to cater the growing needs of more statistics by the users.

3. Government Support for Technology and DOS Strategy

The Government of Brunei Darussalam is implementing e-Government program which is one of the three core strategic drives of the National IT Strategic Plan. Under the e-Government project, JPKE is able to provide all its personnel with personal computers equipped with the current word-processing, spreadsheet and

presentation packages and other relevant software such as the SPSS statistical packages.

At the same time, the Government also provides ICT trainings to all civil servants. One of the government agencies that provide ICT trainings is the Civil Service Institute. This institute is responsible in providing training programs in several fields including management, public administration and ICT to all civil servants.

This Institute provides trainings in the use of Microsoft Word, Excel and Power-point to most of DOS's personnel, and specific trainings such as IT programming, IT Security and Website designs to ICT personnel from the ICT Division.

On top of that, the ICT Division, itself provides in-house trainings to DOS staff particularly in using the in-house systems that they have designed for the use of data capturing from surveys or censuses. There are also trainings in the use of SPSS statistical packages to DOS technical staff by other agencies. This particular training is very useful to DOS technical personnel since it is used to produce all tabulations needed in preparing statistical reports or extra tabulations requested by users.

All these training programs are well suited to the needs of the ICT in DOS. However, the on- the- job training is very important in sustaining their knowledge that they have acquired from the formal training.

4. Major Obstacles in the Use of ICT in DOS:

With the present situation, the major obstacles in the use of ICT in DOS are:

(i) keeping up with the rapid development of ICT;

(ii) the lack of experts in the use of statistical packages such as SPSS.

5. Final Remarks:

The Development of ICT has enhanced the statistical functions of DOS. In achieving its mission to provide quality, timely and accessible national statistics for policy formulation and planning, DOS must collaborate closely with ICT Division to determine the best solution for particular ICT needs.