# Integrated systems for official Statistics

From Stove Pipe  data producer to Information service. Chiba Japan 7-8 December 2011

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# Introduction, The Stove Pipe – the ghost from the past

- The topic and vision for modernisation for this conference should be welcomed
- The concept “standardisation” is important in official statistics but if the “stove pipe” is used as a description of the present status, this is misleading
- This paper shows several element in modern official statistics with the aim of producing an integrated system of official statistics as regards content.
- I recommend that these systems are taken as reference for where to move – not the stovepipe.

# Challenges

- Cost increase and budget cuts in many countries
- IT situation. From Main frame to PC /Unix in network. From Centralised IT to decentralised and now back again to centralised ( but not mainframe).
- Present vision : Standardisation of IT applications for official statistics at national level and if possible also international standardisation.
- Visions and strategies are aimed at cost reductions.
- Complex IT architecture may be costly. We have to guarantee cost reductions.
- Solutions and implementation should be based on studies of cost components, development cost, maintenance cost. The need for monitoring of development projects

# 2. Visions for official statistics – quality dimensions

- Quality have many dimensions, not only accuracy
- I will focus on consistency and coherence.
- Other statisticians may produce high quality independent surveys, perhaps even more cost efficient than the NSO, but it is only the system of official statistics where the ambitions of totality and consistence are so clear expressed
- Accounts (e.g. National Accounts) will further develop integration and consistence and they are included in official statistics

# 3. National accounts

- Results, the best statistics for monitoring the macro economic trends and business cycle
- Data input: NA are very data demanding.
- NA have influence on the basic/primary statistical surveys
- If the national system for official statistics ( business surveys etc) meet the demand for data from NA – then the basic/primary statistics are of high quality and are well coordinated.
- For each industry we produce two statistics, basic/primary statistics and NA. It is an example of inconsistency – but it is acceptable.

# 4. The archive statistical system

- The vision and ideas about the archive statistical system goes back to around the year 1960 Pioneer: Svein Nordbotten, Norway.
- The principles for the archive statistical system were:
- All units are identified with a unique ID number - and ID registers ( individuals and economic entities) are continuously updated
- All statistical information is stored based on the ID number. Statistical information may come from administrative sources or from statistical surveys.
- The information identifies the object, the time of the incident (or time period if that is relevant) and the attribute (if it is an incidence e.g. vital incidence, or school examination, or like account information like income per year, assets and wealth and so on

# Archive statistics today

- Often called register data or register based statistics. Also labelled administrative data
- It is important to observe that one task is to introduce and maintain the unique identifier. For some countries this is political sensitive.
- Storage and linking of all data – based on the identifier.
- Administrative data  are by tradition Government data, but access to private sector administrative data may very vauable
- All data are stored: administrative incidents, account and status data, business data, results from own statistical surveys

# Status

- ESS recommend more use of administrative data
- SN do not need to ask about educational level in surveys, get info from archives.
- Nordic countries perform 100 percent register based censuses. (Norway 19 Nov 2011)
- Reduced number of questionnaires in business surveys, Accounts and employment from administrative sources.
- Not only cross section but longitudinal data sets. Very useful for social research.
- Include these data in micro data sets for research.

# The way forward

- Two main types of data capture Institutional and functional .
- Institutional is the key to integration and consistency. Functional may be linked to institutional data via the identifier.
- New types of data ( Google) need to be linked to the traditional data
- There are many concerns about the future of official statistics. I will mention:
- Access to data – non response and cost of data collection.
- Lack of relevance - welfare and quality of life including subjective measurement
- Cost increases and budget cut for NSOs
- Cost of IT

# The way forward 2

- Integrated information service has to be developed based on the present situation – which is not the stove pipe, but integrated official statistics.
- IT and methods  to support archive statistics. Synthetic identifers ?
- Improve consistency and accounts  by improved IT solutions
- Cultivate our relative strength – not compete with all rapid information systems

# Thank you for your attention