VOORBURG GROUP ON SERVICE STATISTICS

NINTH MEETING

SYDNEY, 17 -21 OCTOBER 1994

A STRATEGY FOR PROVISION OF STATISTICS ON SERVICES

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STRATEGY FOR STATISTICS ON SERVICES

INTRODUCTION

All over the world there has been an increasing demand for data on services and statistical agencies have been subject to increased pressure to satisfy this demand. The services sector is a growing part of most economies. In Australia services comprise about 70% of GDP, employ 80% of Australia's workforce and comprise around 20% of exports. Over the past decade services exports recorded an annual growth of more than 15%, which is higher than the world average over the same period.

2.   In recognition of the increasing significance of services there have also been a number of government initiatives and studies in this field and these have highlighted the apparent deficiencies in available statistics. For example, from the White Paper on Employment and Growth - *Working Nation,* published in May 1994, in a discussion of key strategies for development, the following recommendations were made :

> " As the importance of the services sector to employment and trade increases, it is vital to improve the scope and detail of data on domestic and international services activity"; and
> ". . . the government will take steps to improve the collection of data on the services sector. "

3.   The services export study *"Intelligent Exports . . . and the silent revolution in services"* released in September 1994 also highlighted a perceived lack of data. Two of its recommendations suggested a need to:

> " Invest in improving data collected by the Australian Bureau of Statistics, both in terms of scope, depth and frequency"; and
> " Establish a group on service sector data . . . to co-ordinate the requirements of disparate groups".

4.   Whilst there has been a frequent demand for more statistics, there has not been a clear indication from users on their priorities. There are many options for statistical agencies to improve the range of data but resources are limited. At last year's Voorburg Group meeting Statistics Canada presented a paper, *A Strategy for the Development of Services Statistics,* which outlined that agency's response to the equivalent Canadian pressures to satisfy the growing demand for data in this field.

5.   It will not be possible to do everything that users want. ABS has therefore reached a similar conclusion to that of Statistics Canada that a strategy needs to be devised so that limited budgets can be directed to the most important areas.

6.   Most countries produce indicators that provide sub-annual data about various industry sectors of the economy. These include economy wide series such as

capital expenditure, stocks, employment and wages and salaries which produce data about services industries at a broad level. There are also industry specific indicators such as retail trade and tourist accommodation. This paper does not deal specifically with these short-term data but they are an important component of the information set available to users.

A MODEL FOR AREAS OF INTEREST

7.   A wide range of possible statistical indicators about services can be produced. These vary from "macro" data about the whole economy to detailed information about a single industry or even about activities in a particular small region. It is therefore considered helpful to look at a model of the likely data sets that would be of interest to users of the statistics. By examining the model it is possible to delineate those areas of interest that may have the highest priority and to put in place a collection program to best meet those needs.

8.   The services sector can be looked at from the perspective of supply and demand. The **supply** view covers the businesses and individuals that provide services whereas the **demand** view represents those businesses and individuals that use services. Statistics will be required to analyse both views.

SUPPLY	includes	PRODUCERS (WHO)
	and	PRODUCTION (WHAT)
DEMAND	includes	CONSUMERS OF SERVICES

Supply - Producers

9.   To present data for analysis of the supply of services there are three types of businesses that need to be considered. There are those that have service provision as their main activity, those that are mainly in some other industry but provide the particular service as a secondary activity and those businesses that provide the services for use within their own business only. The first two are usually termed marketed services while the last is termed non- marketed.

10.   Illustrations of these three types of business in the field of accounting services would be :

(a)   a business that solely provides accounting services (eg auditing) for other businesses;

(b)   a business mainly in the field of business management and consulting services but which also provides accounting services to some clients;

(c)   a business in a totally different field but which has personnel which provide accounting services for the rest of the business.

11.   On the supply side the user interest is in data about the businesses providing services such as number of businesses, income (by type), expenses (by type), employment, profitability, investment, R&D , etc classified by characteristics of the

business such as industry, foreign ownership or control, size of business, whether innovating, exporting, etc. The modules of the Voorburg Group Model Survey provide a useful list of data items of interest.

Supply - Production

12. There is also great interest in the total production of particular services irrespective of its industry of origin. Data such as total quantity and value of various services, types of services provided, and imports and exports of the services are required.

13. Typically surveys collect data only relating to marketed services. However in some cases, for example computer services, the size and impact of non- marketed activity means that the user interest goes much wider and data about both producers of non-marketed services and production of such services is increasingly being sought.

14. Most surveys collect data only in current price terms because that is how information is recorded in business accounts. However for some analyses there is a need to look at constant price data. This raises a host of issues and measurement problems including questions of what is the actual output in some services industries, how to allow for quality changes and the different characteristics of services provided by differently skilled or qualified professionals.

Demand

15. As far as the demand side is concerned, interest is in both the characteristics of the users or clients of the services, both individuals and businesses, and in the types and extent of the services being used. For some services, for example health and community services, data about the clients (for example age, sex, health status, risk factors, etc) have typically been the key set of statistical data of interest. For others, such as computer related services, the demand side data set has only recently become more important as analysts seek to understand the key success factors in the better use of IT.

16. Demand side data usually has an economy wide perspective requiring data collection covering the full population of users of a particular service. It also often requires data from the household sector as well as from businesses.

MEETING THE NEED FOR DATA ON THESE AREAS OF INTEREST

17. There has been a tendency for statistical agencies to be slow in moving away from the traditional areas of interest in the primary and secondary sectors of the economy even though the services sector is large and growing rapidly. Data needs for Agriculture, Mining and Manufacturing are well established and users in these fields are understandably reluctant to give up their data sources. For these reasons, as well as the heterogeneity of services industries, statistical agencies have sought ways of setting priorities for their developing programs in the field of services statistics recognising that many user needs cannot be met without a large infusion of resources.

Criteria for developing a program

18.   The ABS recognises that meeting the core needs for broad level, basic data about the producers within services industries is the first requirement and that this data should be compatible with that produced for the goods producing industries. The strategy is therefore to put in place an annual economy wide survey to provide this core data set which provides a perspective on on the size and performance of each ANZSIC Subdivision. At the detailed industry level different needs will require different approaches and not all can be met.

19.   There is a core requirement for broad level indicators and any program will need to provide for this "macro" data. At least major economic variables such as sales and employment and some expense information as well as number of businesses will be required at regular frequency for all services industries. Broad production data for service activities, at least for those traded internationally, will also be required.

20.   More detailed industry specific data provides different problems for a statistical agency. The heterogeneity of the vast array of services industries and activities means that the specific data needs will be equally wide ranging. In some existing industries basic data will be available and in others expensive new collection approaches will be required.

21.   The outcome, that is the program of statistical indicators in a particular country, will differ widely depending on the nature of each country's economy and the application of the different criteria in their circumstances. The local statistical infrastructure will also have a major impact. In countries where there is an ongoing source of data about businesses such as through regular tax data sources or business registrations, the need for core data across all services industries can be more easily satisfied. Similarly data sources other than direct collection might be available. For example, in Australia, central government involvement in the fields of Finance and Insurance through the Reserve Bank of Australia and the Insurance and Superannuation Commission has meant that many data needs can be met as an administrative by-product.

22.   Resolving the competing needs requires setting of priorities by the statistical collection agency so that the maximum utility across users can be achieved. The following criteria have been used to determine priorities :

*   relative direct importance of the particular industry to the economy (eg tourism and retailing are already key sectors in Australia);

.   the dependence of other industries on particular activities (eg the contribution of transport industries and distributive industries makes them very important as does the indirect impact of information technology on other industries);

*   the extent of and potential for international trade (eg sectors such as business services, education services and medical services are seen to have significant trade potential);

- the rate of change taking place within particular industries (eg telecommunications services are changing rapidly in Australia);

- the influence of the sector on the community and interest in its effect on people (eg cultural and recreational services have a major impact on the "well-being" of the community if not major economic impact);

- the significance of government activity in a field (eg health services in Australia have traditionally had significant public sector input and data to manage this appropriately is relevant);

- other reasons (such as rapidly emerging new industries for which there is virtually no information available, the special needs for input to the National Accounts, etc);

- the cost of including a collection in the program.

23.   Costs will vary depending on a number of factors.   Surveys in some sectors will need to be larger than others. Some pose considerably greater difficulties in their development. Some require the special development of lists of organisations in the industry because, for a variety of reasons, the traditional business registers are not suitable. Areas which have never been surveyed previously pose greater problems and costs than similar sized industries elsewhere. The "professions" pose their own special problems with a myriad of ways in which they are organised, both financially and managerially. Community service and sporting industries may also pose problems because of the difficulty of obtaining lists of organisations, the incidence of voluntary labour, limited and lower quality record keeping practices, etc.

THE ABS APPROACH

General information on services

24.   For several years ABS has been developing and implementing, within its Economic Statistics Strategy, a number of initiatives which are intended to expand the basic range of economic statistics for the services sector and the infrastructure . necessary to support those collections. An important move has been to redirect some resources from the more traditional goods producing sectors of the economy to allow for an expansion of the range of services sector statistics and the conduct of an annual economy wide Economic Activity Survey.

25.   The Economic Activity Survey provides summary statistics on an annual basis for both goods and services industries at ANZSIC Division level and so enables comparisons to be made between these sectors. The third annual release in this series was published on 23 June 1994. The core data includes a broad dissection of turnover, a range of business expenses, employment, assets and liabilities, capital expenditure, profit and various operating and performance ratios. The broad picture presented by these statistics can then be supplemented by a series of surveys of particular industries at varying frequencies which provide a much more

detailed picture of the size, structure, characteristics and performance of more narrowly defined and highest priority industries.

26. A number of infrastructure improvements have also recently been put in place in ABS which will support the conduct of survey of industries in the services sector. These include the bedding down of the upgraded industrial classification (Australian and New Zealand Standard Industrial Classification - ANZSIC), with its greater emphasis on services industries, into the Business Register and surveys dependant upon it, and the upgrading of the Business Register itself with improved input from the Australian Taxation Office.

27. ABS is continuing to work at developing basic standards and methodologies appropriate to the measurement of services, and the classification of services. This latter work will involve the construction, jointly with Statistics New Zealand, of the Australian and New Zealand Standard Commodity Classification (ANZSCC) covering all goods and services produced or traded in Australia and New Zealand.

28. Statistics of International Trade in Services (ITIS) are an integral part of the compilation of the Balance of Payments statistics. There is a very strong user interest in such statistics and the linking of them to statistics for the domestic industries of which they are a part. In recent times the ITIS surveys have been upgraded from biennial to annual. The achievement of a more comprehensive linking between the ITIS statistics and the statistics from surveys of the service industries of the domestic economy is a complex task which has, so far progressed little when compared to the linking already achieved between overseas trade in goods and the statistics from surveys of the goods producing industries. One of the basic elements required to allow this to occur is to complete the ANZSCC so that it covers all goods and services produced in the economy rather than the present limitation to only transportable goods. Closer correspondence between the ITIS statistics and the statistics from surveys of the service industries of the domestic economy is occurring as the standard classification of services is developed.

29. Resources have also been allocated for the next 3 years to commence a long term development program to progressively extend the scope of the ABS Producer Price Indexes (PPIs) into the services sectors of the economy. The main objectives of this work include meeting current and emerging national accounts requirements and contributing to the development of more broadly based PPIs (ideally economy wide). It is proposed to initially focus on the transport and business services industries, mainly because of their pervasiveness across the economy. They will also be valuable in improving the constant price national accounts estimates for these industries.

Current ABS Industry surveys program

30. In attempting to develop its strategy for meeting the needs for data ABS has taken the criteria mentioned above and examined each services industry to determine an appropriate priority. In some cases more frequent collection than has been possible in the past is suggested, in others the current data sets are considered sufficient, in others again the demand side data is considered the highest priority and no new industry data needs to be sought and finally in others

there is no need to collect any new data at all.

31.   The following section includes a summary of the current ABS program and the proposed strategy for each of the major **industries** in the service sector of the economy. The service sector of the economy is here broadly defined to include 12 ANZSIC Divisions (as below) and therefore excludes ANZSIC Divisions A - Agriculture, forestry and fishing, B - Mining, C - Manufacturing, D - Electricity, Gas and Water Supply and E - Construction, which are defined as being in the goods producing sectors.

- **Wholesale Trade Industries (ANZSIC Division F - mainly ISIC Division 51)**

32.   All of the industry classes in this Division have most recently been surveyed in respect of 1991-92 with the previous survey being held in respect of 1981-82. There are no immediate plans for the next survey although it is felt that these industries should be covered at least every 5 or 6 years.

- **Retail Trade (ANZSIC Division G - mainly ISIC Divisions 50 & 52)**

33.   All of the industry classes in this Division have been regularly surveyed at 5 or 6 yearly intervals, and most recently in respect of 1991-92. The demand side data in this field is largely satisfied from various population and household surveys.

- **Accommodation, Cafes and Restaurants (ANZSIC Division H - ISIC Division 55)**

34.   All of the industry classes in this Division have been surveyed; generally at 5 or 6 yearly intervals over a considerable period, and most recently in respect of 1991-92. The significance of tourism to the Australian economy suggests that more frequent collection (at least 3 yearly) should be undertaken for the key hospitality industries. Demand side data about the characteristics of tourists (including inbound Australian travellers) is also a key data set of interest.

- **Transport and Storage (ANZSIC Division I - ISIC SDivisions 60, 61, 62 & 63)**

35.   Some of these industry classes were first surveyed in respect of 1983-84 and we are now planning for surveys of the core industries again in respect of 1994-95. The core industries are Industry Groups 611 Road freight transport, 612 road passenger transport and Classes 6642/3 Freight forwarding. At this stage it has not been decided whether Groups 620 Rail transport, 630 Water transport and 640 Air and space transport, will also be included since there seems to be alternative data available.   There are no plans to undertake surveys of the other industries in this Division (basically Services to Transport such as stevedoring and port operations and Storage industries). It would be desirable to collect data at least every 10 years.

- **Communication Services (ANZSIC Division J - ISIC Division 64)**

36.   No industry surveys have been conducted in this Division, although some data are being compiled as part of the 1992-93 Information Technology Statistics collections. With the rapid changes occurring in industries in this Division, annual or at most 3 yearly collection activity (on both the supply and demand side) is probably warranted. [See ABS paper for Voorburg Group 1994 on the ABS approach to provision of data for IT.]

- **Finance and Insurance (ANZSIC Division K - ISIC Divisions 65, 66 & 67)**

37.   There is a comprehensive range of financial assets and liabilities statistics available for financial institutions, much of which has been developed and compiled in conjunction with the Reserve Bank. ABS also draws on statistics compiled by other organisations (eg for certain insurance statistics).

38.   For these industries as a whole, aggregate industry structure statistics are also compiled annually from the Economic Activity Survey (EAS). It is felt that this data is sufficient for the time being.

- **Property and Business Services (ANZSIC Division L - ISIC Divisions 70, 71, 73 & 74)**

39.   The second round of surveys of a number of the industry classes in this sector are currently being conducted, in respect of 1992-93. 13 of the most important of the 26 industries in this Division are included in this current program (eg legal and accounting industries, real estate agents, computing services, technical services). A few of the remaining industries have been surveyed previously (in respect of 1987-88) but were not considered to be of a sufficiently high priority to be included in the current survey round. Key industries in this field will need to be surveyed at relatively frequent intervals, say, every 3 years. Others will be surveyed every 5 or 6 years.

- **Government Administration and Defence (ANZSIC Division M - ISIC Division 75)**

40.   A comprehensive set of transactions, assets and liabilities statistics for this sector is compiled annually via the ABS's Public Sector Accounts Program. Employment statistics for this Division are derived from various ABS employment surveys. No other collection activity is deemed essential.

- **Education (ANZSIC Division N - ISIC Division 80)**

41.   Some financial statistics are compiled annually via the ABS's Public Sector Accounts Program and for the private education sector through small specialised surveys to assist in the compilation of the national accounts. On activities, ABS collects statistics on schools, students and staff in conjunction with the Australian Education Council, higher education statistics are the responsibility of the Department of Employment, Education and Training. It is felt that this program meets user requirements sufficiently well.

- **Health and Community Services (ANZSIC Division O - ISIC Division 85)**

42.   The existing "industry-type" statistics for this Division are derived mainly via the ABS's Public Sector Accounts Program. Also a new (from 1991-92) annual survey of private hospitals and day surgeries and a three-yearly survey of child care establishments have been instituted. Investigations are currently proceeding with a view to undertaking surveys of the medical professional industries in respect of 1994-95 (Classes 8621/2 general practice and specialist medicine, and 8631 Pathology services). Extensive pilot testing and a dress rehearsal will be conducted during 1994-95 to test its feasibility. The ABS survey program does not at present have provision to include Classes 8613 Nursing homes, 8623 Dental services, 8632/9 Other health services, 8640 Veterinary services or Group 872 Community care services even though there is a significant demand for statistics of many of these industries. Because this field has had little supply side data in the past new collections will be required now but only at infrequent intervals in the future. Demand side data is well provided for, in the main, and it will continue to be important for analysts in this field.

- **Cultural and Recreational Services (ANZSIC Division P - ISIC Division 92)**

43.   Industry Groups 911 Film and video services and 912 Television and Radio services are industries being included in the Service Industries Surveys project in respect of 1993-94, while Class 9322 Casinos was included in the surveys in respect of 1991-92. The remaining 14 Classes in this Division have not been included in previous or currently planned surveys, ie Groups 921 Libraries, 922 Museums, 923 Parks and gardens, 924 Arts, 925 Services to the arts, 931 Sport, 932 Gambling services (apart from Casinos), and 933 Other recreation services. All of these industries should be surveyed on an irregular basis but with the major classes being included at least 3 yearly.

44.   Demand side data is very important in this field too and ABS has conducted a number of household surveys to determine the number and characteristics of people attending various culture and leisure venues.

- **Personal and Other Services (ANZSIC Division Q - various ISIC classes in Divisions 71, 74, 75, 90, 91 & 93)**

45.   A number of industries in this sector have been included in previous surveys. These are Classes 9511 Video hire outlets and 9522 Photographic film processing (included in 1991-92 surveys), 9521 Laundries and dry cleaners, 9523 Photographic film studios and 9526 Hairdressing and beauty salons (included in 1986-87 surveys). The remaining 13 Classes such as Personal and household goods hiring, Funeral directors, Gardening services, Religious organisations, Interest groups and Public order and safety services are not included in any current survey program. Apart from interest in the Waste disposal services industry, demand for statistics for most of these industries is not high. Therefore, except for the Waste disposal services industry, no collection activity is planned

SUMMARY

46.   The ABS approach to collection activity for in this field is to consider data on the supply of services (both producers and production) and demand for services separately. There is a need for an annual macro view of the producers within the services sector and this is met through the annual economic activity survey. Only a limited data set is collected about the services produced in this macro view. There is no requirement for an annual macro view of the overall demand for all services.

47.   In addition there is a strong user requirement for a micro view of the supply side of the services sector. However the need (and hence the statistical priority) for data about each of the individual industry sectors varies. Some should be covered annually if possible, others may be undertaken only at ten yearly, or greater intervals. Most industries will need to be covered about every 5 - 6 years.

48.   In Australia the tourism and technology related industries have the highest priority, but there is a recognition of the need to also cover the community service type industries. For some industries the data available from existing sources (principally administrative) is considered sufficient (eg finance).

49.   While there is no need for a micro view of the demand for all service activities, there is a requirement for some specific service sector outputs. For example, users want to know about the demand for tourism and information technology outputs and for these to be compiled in a comprehensive way across the economy. The need for demand side statistics in respect of health and education has been long recognised, and is met from regular household surveys.

50.   Apart from the collection activity, there is a need to improve on the statistical infrastructure available. There needs to be work undertaken on improving the quality of our Business Register, the recording of types of statistical units needed for specific service industry surveys and the classifications used to record or classify the statistics. The importance and the difficulty of this work should never be underestimated.

ISSUES FOR DISCUSSION

51.   Some issues for discussion include the following :

- Is the apparent international emphasis on the sectors of biggest contribution to the economy and employment (eg business services) correct? Do we need to recognise the need for data about those sectors that relate more to people related services (welfare, community services, recreation etc)?

- There is a need to look at provision of services across industries ie not just about the predominant producers (eg tourism, information technology, music and recording, sport and recreation, etc). Also users require us to consider marketed/non-marketed services in the provision of statistics. How can countries accommodate these requirements? Are current collection strategies capable of meeting this need?

- Is the "statistical infrastructure" acceptable and developing fast enough in this environment of rapidly changing services industries?

    - appropriateness of statistical unit definitions
    - adequacy of the business register particularly for the professions
    - industry and commodity classifications

    What are the priority areas for improvement?

- Do we need to provide a greater emphasis on the links between domestic provision of services and trade in services ?

- In most services industries the collection emphasis has been on the supply side (ie producers and production). Is there a need for a greater emphasis on the demand side?