THE "SERVICES INITIATIVE"

A STRATEGY FOR THE DEVELOPMENT OF SERVICES STATISTICS:

THE IMPLEMENTATION PLAN

STATISTICS CANADA

SEPTEMBER 1994

INTRODUCTION

The Statistics Canada paper "A Strategy for the Development of Services Statistics", presented at the 1993 Meeting of Services Statistics Experts, provides a framework for future development. It outlines the major users, identifies basic principles, delineates major industry groups and variables of interest, develops a strategy for the combination of survey and administrative data, identifies major cross-cutting issues, and provides guidelines for the identification of relative priorities. However, a strategy is normally timeless. It does not deal explicitly with factors such as specific outputs, timing, costs, operational issues, and areas for further investigation. In particular, it does not deal with the availability of resources to carry out all of the investigations, changes, and improvements necessary to bring a strategy to life.

The program to implement the Strategy for the Development of Services Statistics has become known as the "Services Initiative". The Services Initiative is funded from the "Data Gaps" resources approved by the Treasury Board of Canada, starting in 1992-93. The allocation from the Treasury Board increases over the five-year period from $559K in 1992-93 to $1.0 million in 93-94, $2.0 million in 94.95, $2.4 million in 95-96, and $3.4 million for 1996-97 and future years. The amount of money available has been a major factor influencing the speed and scope of the agency's implememtation of the Services Initiative. For example, because the amount of money available in the first year was relatively small, it was allocated primarily to maintain the initiatives started in previous years with "seed money" from Statistics Canada.

At the same time, the agency began the formulation of the strategy and plans for the investment of the larger amounts of resources scheduled to become available in future years. A **Services Working Group** was formed, with representation from the divisions likely to be directly involved, to advise senior management on data gaps, the cost of filling them, and priorities which should be associated with the various proposals. This Group developed the "Strategy for the Development of Services Statistics", and the "Services Initiative", the first implementation plans following the framework developed in the Strategy document.

THE STRATEGY: IN BRIEF

The implementation of the Services Initiative has the same restricted focus as the Strategy, i.e. it is aimed at the collection and analysis of data and the dissemination of information on the economic activities of selected marketed service industries and their markets. Public services (education, health and government) and distributive services (transportation and wholesale and retail trade) are not considered in the Plan, because they are deemed to be adequately covered by programs already in place, or they are the topic of separate plans also being financed from the "Data Gaps" resources

Economic statistics for marketed service industries, in spite of their importance for understanding economic growth and competitiveness, are not as complete as those for primary and manufacturing industries, or for the closely related distributive industries. However, changing this state does not necessarily mean replicating the machinery for data collection and dissemination built up over the years for goods industries. Service industries are different and require different collection strategies.

Service industries differ from the goods related industries in their business cycle behaviour, the nature of their products, their industrial structure and their markets. As service industry products are, in most cases, not storable, the industries tend not to have inventory cycles. As the industries rely more on people for their production than on large investments in land or fixed capital, there are more small firms than in goods industries. Service industries sell both to households and businesses, but most of them, when identified at the 4-digit S.I.C. level, tend to focus on one class of customer. All service industries sell in local markets, but a substantially smaller number of industries are involved in national and international sales.

The differences between service and goods producing industries permit us to consider different frequencies and approaches for data collection and for information dissemination. The traditional approach of the annual survey is expensive, and the completion of questionnaires is time consuming, especially for people in small and medium sized firms. However, administrative data are normally available to supplement surveys and reduce the burden of response. Where administrative data are available for all units in scope, the periodicity of the surveys need not be annual, especially for those industries with little fluctuation. Furthermore, user demands for information suggest that the unit of observation, the degree of product detail, and the frequency of the survey need not be the same across all service industries.

With respect to output, regardless of the mix of survey and administrative data, of frequencies and units of observation, the user, whether respondent, policy analyst, or member of the public, should have as complete an economic picture of the industry and its markets as possible when the data are assembled, analyzed and published. For national accounting purposes, the information on service industries should be sufficient to estimate real economic change, and that implies commodity detail and price indices.

The paper "A Strategy for the Development of Services Statistics", divides service industries into five categories, each with different information requirements and a different survey frequency to satisfy those requirements. The application of the five categories in the implementation plan implied some reductions in frequency for existing surveys, as well as the introduction of new surveys. Studies of Services Programmes in place were started in the fall of 1992, to assess the implications of reductions in frequency on data availability and reliability.

There remained the question of which industries should have new surveys, and in what order. For the Implementation Plan, the criteria for priority ranking suggested in the Strategy were used, in conjunction with resource constraints, to select the industries to be surveyed and to determine the sequence for implementation. A "model for development of a production survey" (see Annex 3), which is really a recommended sequence of events, was constructed by the Services Working Group. The use of this model generally guides the sequence of events and associated resource allocation for the development of each new industry survey.

THE IMPLEMENTATION PLAN

The plans for the Services Initiative cover:

(1) specific initiatives and outputs, with priorities reflected in their sequence, timing and frequency;

(2) tasks/events which involve various subject matter and service divisions, and which should occur in a coordinated fashion to ensure the delivery of desired outputs;

(3) cost estimates for the various initiatives, outputs, and

tasks, and the recommended allocation of resources;

(4)   the desirable sequence of events for the development of new production surveys;

(5)   recommendations for further investigations to assess the feasibility of changes to existing programs, and the resources which might be liberated by such changes;

(6)   the establishment of a sizeable financial reserve to retain flexibility and cover outstanding issues/areas of investigation which may result in future claims for resources.

The objectives of these plans are:

o   to complete a commodity classification structure for the outputs of marketed services by the end of the five-year planning period,

o   to implement that structure in surveys to the maximum possible extent by the 1998 reference year(or the next survey occasion for periodic surveys).

o   to improve coverage, timeliness and level of detail available to users for marketed service industries.

o   to expand the availability of data on prices and trade for service commodities.

o   to provide sub-annual (either quarterly on monthly) information on services.

o   to integrate services data from various surveys and administrative sources.

The Plans for the Services Initiative were approved by the agency's Corporate Planning Committee as part of the 93-94 Long Term Planning (LTP) Process. At that time, a significant portion of the resources available was allocated to the development of new data sources or to continuing projects for the improvement of commodity classification and the enhancement of quality and reliability of existing data products. However, not all resources available in 1994-95 and later years were allocated; some were held in a Reserve. Some were retained to be allocated after preliminary work allowed proposals to be more clearly

developed and the necessary resources more precisely identified, and some to be allocated on a year-by-year basis for occasional projects which needed to be funded for only a specified period of time. A small part of the Reserve was also held against unforeseen problems and opportunities. The Reserve is held under the control of the Director-General, Resources, Technology and Services Statistics, supported by the Services Working Group, which remains in existence to advise on the progress of the various projects, and on changes to the plan and associated resource allocations.

A progress report on the Services Initiative is provided each year to the agency's Corporate Planning Committee. At the same time, recommendations are provided on changes to the plan and on how the Reserve should be allocated for the year ahead. Allocations of the Reserve are for one year at a time, unless specifically noted. This process of regular review and updating ensures that the Services Initiative plans and results remain relevant to emerging issues, and effective in meeting the challenges associated with the production of useful statistics on services.

OUTPUTS AND ALLOCATION OF RESOURCES

The original Implementation Plan for the Services Initiative, approved by the Corporate Planning Committee during the 93-94 LTP process, included a recommended allocation of resources over a five year period, starting in 1992-93, for the improved availability of sub-annual and annual statistics for selected service commodities and industries and for improved statistics on trade in services. The resource allocations for 1992-93 and 1993-94 conformed to earlier decisions taken during the 92-93 LTP process. Those for succeeding years reflect the more recent recommendations, and the resource allocation matrix is updated annually, following the decisions of the Corporate Planning Committee.

The most recent picture of the range of outputs expected over the period are listed in **Annex 1**. **Annex 2** provides an indication of the allocation of the **Reserve** for the 1993-94 and 1994-95 fiscal years. Decisions on the allocation of the **Reserve**, which will grow to more than $1.0 million by 1996-97, will be an annual event for the foreseeable future.

The following paragraphs provide an overview of the major thrusts in the Plan, as it is currently conceived.

Commodities and Prices

As part of the five year programme, commodity classifications are to be developed, or revised, for all of the selected service industries, including those already surveyed. Resources are provided for the development and the maintenance of these classifications. Once commodity classifications have been tested and implemented in annual or periodic surveys, price surveys can follow. Resources are allocated for two industries, reflecting the on-going work on consulting engineers and the already advanced state of the commodity classification in the production survey for computing services.

Production and Trade

New production surveys are introduced in each year of the planning period. The sequence of events for each survey follows the "model for survey development" described in **Annex 3**, taking into account the different information requirements developed for the 5 groups of service industries identified in "**A Strategy for the Development of Services Statistics**". (The allocation of industries to the 5 groups is presented as an Annex to the "**Strategy**" paper.) The selection of industries and the order in which surveys are introduced in the Plan were determined following the priority-ranking criteria given in the "**Strategy**" paper.

Production surveys of service industries can provide some information on exports, but information on service imports of other industries is required to quantify the domestic market. More current information on international trade in services is also essential to the understanding of the Balance of Payments and the changing nature of many business services, of which telecommunications, consultancy services, and the entertainment industries are examples.

Integration and Current Indicators

The "**Strategy**" paper emphasizes the importance of presenting an integrated picture of the service industries, including, where appropriate, data on trade, capital investment, R&D, and employment as well as on the market served by the industry. There are two aspects of this integrative activity. The first is the development of current indicators for service industries, in collaboration with the System of National Accounts and survey divisions, and the second is the inclusion in the publication programme of a more complete picture of the industries and their

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economic environment based, where possible, on the integration of data at the level of the statistical unit. The Services, Science and Technology Division has been assigned the role of fostering and coordinating this integrated approach both for current indicators and for the publication/dissemination of services statistics. This work on data integration is in no way intended to preclude other survey divisions from the analysis and publication of data they have gathered.

The Reserve

A number of items are not covered in the specific resource allocation plans approved to date because not enough is known about them at this time. For example, studies will be needed to assess the usefulness of data files from the Goods and Services Tax (the "GST", a Canadian value-added tax), for providing timely information on sales of services. Studies may be required to assess the possible use of the recommended strategy (periodic benchmark surveys with estimates based on administrative data for intervening years) for other industries. A Reserve has been established to support such assessment activities and the implementation of resulting recommendations.

In addition, the Reserve has been and will be used to support developmental efforts for the collection of information not readily available, such as data on capital expenditures, employment characteristics and markets for service industries, and also to support infrastructure developments not directly related to any specific survey. Developing market information may involve additions to existing household surveys, special tabulations from census data, or special surveys of the purchase and sales of services by non-service industries. Examples of infrastructure development are nature of business surveys to improve the Business Register and improvements to the SIC coding of the tax data at Revenue Canada. The Reserve could also cover the development and testing of model surveys in conjunction with members of the Voorburg Group. Model surveys, when accepted by the U.N., provide a basis for comparison of international data on service industries.

IMPLEMENTATION ISSUES

The Services Initiative has now been underway for more than two years. A number of issues have surfaced which must be confronted as part of the continuing process of review and modification of the implementation plans. Most of these issues relate to the entities being surveyed.

1. The political and economic structure of the country dictates a need for reliable provincial as well as national totals. Existing surveys of service industries are mostly based on legal entities, but they do ask for some data on revenue and expenses by province. Where the Strategy calls for reductions in survey frequency, administrative data are generally adequate, and at the national level do not cause a problem. However, where the legal entity operates through multiple locations, and those locations are geographically dispersed among the provinces, administrative data sources do not provide sufficient information to satisfy requirements for provincial statistics. In the short run, these "multis" will be surveyed each year. They account for less than 5% of the 4,000 or more units previously surveyed for those industries where the Strategy calls for a reduction in survey frequency and increased reliance on administrative data sources.

2. The need for better data on interprovincial trade in services, and provincial contributions to international trade in services, also suggest that the legal entity may not be most effective statistical unit, given known data demands. Studies are underway to examine the potential improvements and costs if the establishment were selected as the target statistical unit.

3. The need for more and better market-oriented data on services, particularly for services to business, suggests that data need to be collected on purchases of services by goods-producing as well as other service-producing industries. Again, "multis" pose problems, both because of different record-keeping and cost allocation practices among firms.

SUMMARY

By the end of the five year program, in 1997, the major gaps in the service industries will have been covered by production surveys and there will be a complete classification of commodities for all of the marketed service industries dealt with in this plan. The ground will have been prepared for price indices to be developed and data on international trade and markets will have been expanded. The services program will then be ready to fill minor information gaps and to add data on own-account services to the integrated picture of production, trade and markets which will have been established. Moreover, the market for information on service industries will have been broadened from the System of National Accounts to a wide range of clients in government and business.

ANNEXES

ANNEX 1

OUTPUTS OVER THE PLANNING PERIOD

INDUSTRY	FIRST YEAR OF OUPUT			
	CLASSI-FICATION	PILOT SURVEY	FULL-SCALE SURVEY	PRICE DATA
Management Consultants	DONE	92-93	93-94	
Accounting & Bookkeeping	DONE	DONE	92-93	
Food & Beverage	95-96			
Real Estate Op. & Insurance Agents	92-93	94-95	95-96	
Other Telecommunications	92-93	95-96	96-97	
Courier Services	93-94			
Services Incid. to Construction	94-95	96-97	97-98	
Lawyers & Notaries	93-94	95-96	96-97	
Services Incid. to Mineral Extraction	94-95	96-97	97-98	
Services Incid. to Agriculture	94-95	96-97	97-98	
Finance & Insurance	94-95	95-96	96-97	
Telecommunications Carriers	92-93	CONSULT/REVIS 93-94	REVISE PUB. 94-95	
Advertising Services	92-93	TEST 93-94	INTRODUCE 94-95	
Engineering Services	DONE	DONE	DONE	94-95
Software Development & Computer Services	DONE	DONE	DONE	96-97
Architectural & Other Scientific	92-93	TEST NEW CLASSES 93-94	INTRODUCE NEW CLASSES 94-95	
Radio & Television Braodcasting	95-96	TEST NEW CLASSES 96-97	INTRODUCE NEW CLASSES 97-98	
Current Indicators Publication		DRAFT PUB. 92-93	QUARTERLY PUB. 93-94	

ANNEX 3

MODEL FOR DEVELOPMENT OF A PRODUCTION SURVEY

Normal Sequence of events for each industry:

Year 1: o Develop proposed classification of services for industry outputs
- The categories of services for which revenue data will be requested.

o Identify the universe/frame for the industry:
- Examine classification of businesses.
- Get preliminary information on size of businesses.
- Begin process of unduplication of frame against admin. sources.
- Initiate consultation with industry representatives.
- Develop pilot survey questionnaire.

Year 2: o Conduct Pilot Survey

o Develop preliminary estimation techniques - how to merge survey and admin data to produce industry estimates.

o Continue consultation with industry and other users
- Develop preliminary specifications for statistical tables.

Year 3: o Feed back survey results to re-examine both industry and commodity classification structure.

o Conduct full scale survey

o Develop first estimates from Pilot Survey

o Refine estimating techniques

o Refine specifications for statistical tables.

Year 4: o Determine appropriate frequency for continued survey activity

o Develop first official estimates from full-scale survey

o Assess weaknesses in output

o Begin development of price survey approach
- model pricing will be used for many of the gap industries.

ANNEX 2

ALLOCATION OF THE RESERVE

1993-94

In 1993-94, most of the available funds were allocated to planned activities, and only a small amount ($80.2K) was initially held in the Reserve. These funds were later allocated on a "current-year-only" basis to support work on output measures for Banking and Insurance ($25.0K), the use of tax data for Accountants ($19.2K) and work on linking the Capital Expenditures Survey to the Business Register for service industries ($36.0K).

1994-95

In 1994-95, the Reserve of $490.4K was allocated as indicated below. The first two items involve multi-year funding commitments; the others are for 1994-95 only.

1. Fund development work (2 years) on Prices for Telecommunications Services and determine continuing requirements ($60.0K per year).

2. Provide funding for the operation of the Services Advisory Committee ($25.0K per year).

3. Develop documentation on services to help users and data suppliers to more clearly understand the sector, as suggested by the Services Advisory Committee (15.0K).

4. Develop standard questions on service inputs, and test the availability of data on purchased services at various levels in business enterprises ($100.0K).

5. Prepare and publish a report on occupational skills, education, etc. in Service Industries, drawing on information from the 1991 census of population ($88.0K).

6. Improve Balance of Payments coverage in selected professional services and courier services. ($85.0K)

7. Support steps for faster processing and release of service industry data ($44.0K).

8. Retain a small reserve for opportunities or problems ($73.4K).

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