USING TSA FOR BUSINESS AND POLICY

Keynote, Session VI: Using TSA Data for Business and Policy Analysis

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Summary

The *Tourism Satellite Account: Recommended Methodological Framework* (TSA) is now the main internationally recognised standard to measure tourism in the economy. An increasing number of countries, notably within the OECD area, are implementing the TSA. Potentially, the TSA can be used by a wide range of public and private stakeholders, however, many of them still do not take full advantage of the TSA. To a large extent, TSA data are still underused.

The benefits of the TSA are wide ranging: quality benchmark, assessment of tourism contribution in the economy, or tourism sector identification. TSA extensions also provide very relevant policy and business information, e.g. indirect impacts, employment, quarterly and regional data. These extensions, however, often bring divergences with other economic estimates. Several key issues continue to limit the usage of the TSA, such as the lack of knowledge about the TSA, timeliness, the lack of spatial dimension, and insufficient international comparability.

This paper suggests increasing international efforts in the following areas: i) implementation of internationally recommended standards; ii) involvement of more stakeholders in the production and dissemination of TSA data and extensions; iii) adjustment and better communication of TSA products to users; and iv) building TSA users' capacity. The OECD, one of the creators of the TSA, continues to be fully committed to support these efforts.

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Index

INTRODUCTION

Since 2000, the Tourism Satellite Account: Recommended Methodological Framework (TSA) is the main internationally recognised standard to measure tourism in the economy. The TSA has been instrumental in changing the way tourism is looked at. The TSA reconciles the demand (visitor consumption) and the supply (production by tourism-related industries) sides of tourism, and provides a consolidated as well as a detailed picture for the complex set of industries related to tourism.

Nine years after its adoption, an increasing number of countries, notably within the OECD area, are implementing the TSA in one way or another (very often work is still in progress to produce the core TSA data). However, to a large extent, TSA data are still underused.

This document presents a global insight about the use of TSA in OECD countries as well as in a few non-member countries. It analyses the relevance and utility of TSA data, gathers examples of TSA uses, contributes to a wider dissemination of TSA-based economic and social analyses at international, regional and regional levels, and promotes a better use of TSA data for business and policy analysis. It aims to promote the development of a "common perspective" on the best ways to use the TSA. The TSA project must be regarded as a process potentially yielding several different products for dissemination. These products have to be adapted to various types of users in the private as well as in the public sectors.

This report is based on member countries' replies to the OECD questionnaire "*Best Practices in TSA Usage in OECD Member Countries*" as well as on other relevant documentation (e.g. publications, websites). 24 OECD countries and 6 non-member economies responded to the OECD questionnaire.

TSA USERS

Potentially the TSA can be used by a wide range of public and private stakeholders: National Tourism Administrations (NTA), National Tourism Organisations (NTO), National Statistical Offices (NSO), central banks, business and tourism associations, regional and local public authorities, academic and research institutions, international organisations, etc.

Policy users

The TSA can guide policy decision-makers in their strategic choices, helping them to understand the size and importance of the tourism sector as a whole, which in turn can help secure resources and funding for new tourism policy initiatives. Indicators from the TSA are more and more used as targets in national tourism policies and long-term strategies. This allows policy-makers to closely assess the progress made in the implementation of the national tourism strategy (and to develop a culture of evaluation). In a growing number of countries, the TSA data support tourism policy papers and official statements referring to the economic size of tourism. A main interest appears to be the contribution of tourism to Gross Domestic Product (GDP), tax generated for the government and total employment generated by tourism industry. There is also a growing interest in the use of TSA as a platform for dynamic modelling. Other efforts should also be made to facilitate a better understanding of regional, environmental and sustainability issues. There is definitely a large demand for information on these aspects though it is not evident that it should be met within the boundaries of a TSA project.

- *Tourism is of less importance to the Swedish economy than it is in many other countries. The share of GDP for the travel and tourism industry between 1995 and 2004 fluctuated between 2.55% and 2.81%. This shows that the travel and tourism industry's share remains constant in comparison to the overall economy. However, changes in the overall economy have a greater impact on the travel and tourism industry's share than the increases or decreases within the travel and tourism industry itself. The travel and tourism industry's share of GDP was larger in 2004 than, for example, agriculture, forestry and fishing, and almost as large as for electricity, gas, heating and water.* (Sweden)

- *The TSA contributes vital information. The real value of the high-level TSA outputs is in firmly, and officially, establishing the role and contribution of tourism. The flow-through analysis in a wide range of areas (e.g. policy, central and local government planning for tourism, business development) flow from this core understanding. The TSA is vital rather than useful. The real power of the results is most evident when they are mentioned in secondary documents from which a range of decisions are made (e.g. government papers, minister speeches, planning documents, analysts' reports, business case reports, etc).* (New Zealand)

- *Indicators from the TSA (i.e. inbound tourism demand, domestic leisure tourism demand, total tourism demand in Finland, total value added as a share of GDP at basic prices, % (including employers' expenses), total output of tourism industries, number of tourism specific companies, imputed employment effects of tourism, and hours worked in tourism industries) are all used as indicators when the targets have been set in the National Tourism Strategy. These indicators are also followed closely in connection with the implementation of the National Tourism Strategy.* (Finland)

Business users

Businesses and tourism associations are also important potential users of the TSA. They can use the TSA to obtain knowledge on tourism industry developments. Coupled with the credible estimates of tourism economic contribution, the TSA has helped over time to bolster the industry's sense of self-awareness, identity and importance. However, it is clear that business users still do not take advantage of the TSA as much as they could: the TSA definitely can bring its users a lot more beyond a global appreciation of tourism. It is claimed (but not yet fully demonstrated) that the TSA could provide the industry with useful guidance for business action in tourism and support business development and investment decision. This aim could certainly be fulfilled through the detailed data provided by the TSA respectively for the accommodation, catering, travel agencies and transportation sectors, all characteristic industries which are isolated in the TSA.

The TSA supports private sector policy analysis for establishing strategies, addressing tourism infrastructure and labour market. The TSA is mainly used by business associations for advocacy, media interactions and for speaking on behalf of their sector. In New Zealand, one large tourism business explained that they use TSA information to help new employees understand the context in which they are working and the scope of tourism in the country. Thus, the TSA underpins and supports much of the sector or regional consideration of tourism.

The TSA could be even more useful to business through its potential extensions that could be implemented by the business itself. In fact, the TSA can be seen as a point of departure from which more detailed data could be derived. An example of such an approach could involve the MICE (meetings, incentives, conventions and exhibitions) industry. MICE is not isolated as such in the TSA but

the TSA could be a framework for further evaluation in this area using available industry data.

ESTIMATED BENEFITS OF THE USE OF THE TSA

Providing a quality benchmark for the development of a system of tourism statistics

The quality statement is essential though it might appear insufficiently publicised to final users. Together with the international comparability argument, quality is another important reason to protect and promote the TSA. This could be an important action to be undertaken by the international community and as emphasised by many OECD countries. It is clear that, for example, a better protection of the "TSA brand" could contribute to an expansion of its usage.

A preliminary effort should be to define the content of a "TSA brand" to avoid the risk of confusing different "TSA" products. The "TSA brand" should first and foremost appear as a quality label indicating that a set of adequate methods have been implemented to produce the data.

In their response to the questionnaire, many countries answered that they use the TSA as a quality benchmark of the raw data used in the collection process (Austria, Canada, Czech Republic, Korea, Mexico, New Zealand, Spain, Sweden and Switzerland). The answers provided the following elements:

- *National Statistical Institutes underline the importance of the TSA to identify a number of data gaps and to force several sources to be confronted in a new way. The TSA exercise is thus leading to a long term work programme, which ultimately should allow better TSAs to be compiled but should also improve tourism statistics in general (TSA used as a quality benchmark).*

- *Tourism data are checked against national accounts estimates so there is mutual quality assessment of the estimates* (Sweden). *When the tourism data are in conflict with e.g. national accounts data, the tourism data are adjusted* (Denmark). *Spain confirms that "the TSA data must be totally coherent with the national accounts figures. On the contrary, it could have a negative effect in the credibility of both national accounts and TSA."*

- *Feedback from TSA analysts directly informs the development processes for key input surveys (e.g. international and domestic travel surveys)* (New Zealand).

- *The analysis of the data from different sources prior to the compilation of the TSA provides a better understanding and knowledge of these statistical sources that are useful to improve their quality and reliability* (Spain).

Identifying the tourism sector and industry analysis

Traditional tourism statistics - mainly based on arrivals, overnight stay and balance of payments information - do not grasp the whole economic phenomenon of tourism. This information is not sufficient for effective public policies and efficient business operations. The TSA has considerably expanded the tourism information data base and provides credible data concerning the scale and significance of tourism in the economy. It has contributed to an increased awareness of the roles that tourism is playing, whether directly, indirectly or through induced effects in the economy in terms of generation of value added, employment, personal income, government income, etc.

TSA is an appropriate measurement tool to assess tourism's impact on overall economy. TSA has become a useful tool in order to provide extensive analyses that point out the small but essential role that tourism plays for the economy. TSA has crucially provided robust estimates for tourism, which prior to TSA did not exist in any credible sense. (Ireland)

The TSA provides a coherent framework within which to integrate, reconcile, organise and analyse the variety of economic statistics relevant to tourism, both on the supply (*i.e.* industry) side and on the demand (*i.e.* tourist) side. This is important because tourism is not an explicitly identified industry within the statistical system as it cross-cuts several industries. The TSA serves to pull tourism's various components together and, as such, it explicitly defines the tourism industry within the statistical system. The TSA has played an extremely important role in terms of identifying the "tourism sector" through its list of "tourism industries".

The TSA establishes tourism as an industry. In official statistics, industries are defined from the supply side, and since tourism is defined from the demand side it has so far not really been possible to compare tourism to other industries in a reliable manner. The fact that the tourism data is reconciled with other statistical sources increases the reliability and credibility of the results. (Denmark)

The TSA also allows to analyse all the aspects of demand for goods and services which might be associated with tourism within the economy and to describe how this supply interacts with other economic activities. The TSA identifies important linkages of tourism to non-tourism commodities and non-tourism industries (including retail stores and car manufacturing industries) that form the basis for new alliances between tourism marketing organisations and "non-traditional partners". It permits a comparison with other industries in terms of output, employment and so on (Box 1).

Box 1. Tourism Contribution to Tourism and Non-Tourism Industries (Canada)

Travel agency services are the most reliant on tourism insofar as 92.2% of the industry's economic activity comes from tourism. Other industries most affected are air transportation and accommodation. For air transportation, tourism accounted for 78.7% of the industry's GDP. It accounted for 66.4% of the economic activity of the accommodation industry. These shares may appear low; however, the air transportation industry includes freight services while the accommodation industry includes meals and alcohol served to local residents (non-tourists), which reduce the share due to tourism. The food and beverage industry with a 17.3% share of tourism GDP is the least reliant on tourism among the major tourism industries.

Various industries not identified as "tourism industries" produce goods and services that are purchased by tourists (*i.e.* groceries, souvenirs and other retail goods). In 2002, tourists spent $10.0 billion buying such goods and services (more than what was spent on accommodation). This was up 15.6% from 2000. In 2002, these "other industries" accounted for 23.2% of tourism GDP, up from 22.5% in 2000. Tourism generated 120,800 jobs in these industries.

Source: Canadian Tourism Satellite Account, 2002 (2007)

Assessing the contribution of tourism to the economy

The national accounts are a comprehensive set of economic data which are fully consistent and complete within the boundary of the economic activities they cover. GDP is perhaps the most recognisable and important economic statistic from the core national accounts. Satellite accounts allow an expansion of the national accounts for selected areas of interest while maintaining the concepts and structures of the core accounts. Satellite accounts present specific details on a particular topic (both in monetary and physical terms) in an account which is separate from, but linked to, the core accounts. Therefore, a TSA highlights tourism within the national accounting framework. The strength of the TSA is that it allows comparison with the other main indicators of the economy.

> *The key TSA aggregates are obviously those related to the contribution of tourism to the GDP and employment. Also important, from the supply point of view, are the data on the Gross Value Added of the tourism industries and, concerning the demand side variables, the different categories of tourism consumption."* (Spain)

Tourism in the national economy

One of the key TSA aggregates currently used is obviously the one related to the contribution of tourism to the GDP (Tourism GDP in aggregate and by industry and share of tourism in GDP). Only direct GDP, as opposed to indirect GDP, is measured (Boxes 2 and 3). Indirect GDP refers to the downstream effects of economic activity. Although these indirect effects are important, they are beyond the scope of the TSA which focuses on the GDP generated by the production of goods or services consumed directly by tourists. Indirect effects, however, can be calculated in economic impact models based on the TSA (see TSA extensions).

Box 2. Tourism GDP in the National Economy (Australia)

Tourism accounted for $37.6 billion of total GDP in 2005–06. This is an increase of 5.5% from 2004–05. In contrast, total GDP grew by 7.7% in current prices. The TSA presents growth rates in current prices terms so these estimates reflect the effects of price change as well as the underlying volume of tourism activity. In the absence of information on the changing volume of tourism activity over time, estimates of the tourism industry's share of GDP are presented. In 2005–06 the tourism industry share of GDP was 3.9% which is the lowest share of GDP recorded. The highest tourism share of GDP in 2000–01 (4.7%) was largely due to price increases in tourism services resulting from the introduction of the GST and the increased number of visitors associated with the conduct of the Olympic Games.

Tourism contributed 10.5% of total exports of goods and services in 2005-06, lower than in 2004-05 when tourism accounted for 11.7% of exports. The fall in share is largely due to strong growth in total exports of 17.2%. Domestic visitors generated 75.8% of tourism industry GDP in 2005-06 while international visitors generated 24.2%.

Source : Tourism Satellite Account, 2005-06 (Australia, 2007)

Box 3. Tourism in the National Economy (New Zealand)

	Units	2001	2002	2003	2004	2005
Tourism as % of gross domestic product	Percentage	9.9	9.7	9.8	9.5	9
Tourism as % of employment	Percentage		10	10.4	10	9.8
Tourism as % of exports	Percentage	16.4	16.2	18.1	19.3	18.7
Total Tourism expenditure	Million NZD	15 255	16 095	17 054	17 351	17 483
Domestic tourism share of NZ tourism	Percentage	55.7	55.9	55.1	55	53.9
Numbers of enterprises in tourism	Thousands		281	295	324	334

Sources: Tourism Satellite Account, Business Demography Studies, Statistics New Zealand, 2007; Tourism in OECD Countries 2008: Trends and Policies, 2008

Domestic tourism

The TSA is seen as an important tool to improve the measurement of domestic tourism in national economies and to weigh it in comparison to *e.g.* inbound tourism (Box 4). The TSA fills an important statistical gap as traditional tourism statistics are more oriented towards the measurement of international tourism flows. In OECD countries, domestic tourism often represents between 50 to 75% of the tourism flows, and it might be a strong support for capital formation in the field.

Box 4. The Crucial Importance of "Domestic Tourism" (Ireland)

A major finding to emerge from the project is the crucial importance of "domestic tourism" in the overall tourism marketplace. This arises because the TSA methodological approach puts a clear focus on the importance of "same day visits". Traditionally, statistical offices concerned with tourism concentrated their efforts on the calculation of "export tourism" for balance of payments purposes and as a result there was relatively less focus on the components of domestic tourism. Most importantly, the collection of data on "same day visits" was generally ignored. What arises from the research for this project is that the tourism marketplace is more accurately comprised of four elements, namely: Inbound Tourism; Domestic Tourism; Same Day Visits; and Outbound Tourism.

In order to conform to the TSA-RMF it was necessary to estimate "same day visits" for the Republic of Ireland. There has been no previous attempt to estimate "same day visits" for Ireland. This first estimate which we believe to be conservative suggests that this component is a very sizeable element (27.7% of total) of tourism demand and as such it is imperative that data collection methods be developed to monitor this vital component

Source : First Steps Tourism Satellite Account Project, The Republic of Ireland (2004)

Employment

Understanding and measuring tourism-related employment and human resource issues are key challenges for policy makers and entrepreneurs keen to support the sustainable growth of the tourism industry and to enhance its competitiveness. Current perceptions of the structure, economic/social importance and employment trends of the sector often rely on empirical studies rather than on solid and reliable data. TSA data on employment provide valid, good quality and useful information for socioeconomic and tourism policy makers in areas such as labour force and tourism planning, as well as for individual businesses or regions for benchmarking purposes. Examples of uses include: improving productivity and competitiveness through education and training, improving the efficiency of labour markets by reducing skill and occupational mismatches between supply and demand for labour, reducing the costs of high labour turnover, minimising unemployment, stimulating flexible labour practices, evaluating labour costs and improving job prospects by evaluating labour structures and labour conditions.

> *The Ministry of Tourism had commissioned a major research project on Tourism Yield 'Tourism Sector Performance and Business Benchmark'. As part of this project a detailed analysis was undertaken using TSA figures to assess tourism industry performance and labour productivity.* (New Zealand)

In the TSA, Table 7 does not meet all the needs of users as far as employment is concerned. It measures only jobs that are directly associated (jobs generated by, or attributable to, tourism) with tourism (Box 5). On the other hand, it does not include indirect employment, such as jobs generated in agriculture to support production in the food and beverage services industry. This is why some countries are implementing TSA extensions in this area as proposed, for example, by the OECD in its employment module.

Box 5. Tourism Employment in the National Economy (Canada)

Tourism contributed 3.9% of all jobs in Canada in 2002, accounting for 611 100 jobs. This was up marginally (+0.1%) from 2000. Tourism provided the most jobs to the accommodation industry (160 500) with the food and beverage services industry a close second (144 700). About 20% of tourism jobs were in non-tourism industries. Tourism accounted for 120 800 jobs in these industries, mostly in manufacturing, wholesale trade, and local public transportation. Between 2000 and 2002 tourism employment in transportation fell 8.9% to 77 900 jobs, as a result of job losses in the airline industry.

Source: Canadian Tourism Satellite Account (2002)

TSA extensions

The survey shows that the use of the TSA is not limited to the core TSA data. Many countries are implementing what can be called "TSA extensions".

Quarterly data

The TSA has been defined on an annual basis. However, a few countries such as Canada and the United States are developing quarterly TSA figures, which are of great analytical utility, due to the strong seasonality of the activity (Box 6).

The Quarterly National Tourism Indicators (NTI) are used to monitor supply, demand, employment and GDP for tourism in Canada on a timely basis. The NTI provide seasonally adjusted, current and constant price estimates, both actual levels and percentage changes. A brief analysis of the quarterly results is included as well as occasional articles. This product provides quarterly updates for the Canadian TSA. (Canada)

Box 6. Quarterly TSA Data (United States)

Data produced are tourism spending (also called direct tourism output) by types of goods and services as well as indirect tourism-related spending by types of goods and services. Both series are seasonally adjusted and provided at both current and constant prices. Characteristic products are divided into seven sub products, *i.e.* only slightly less details than in the TSA-RMF. Tourism related-employment data are also published and divided into equivalent industry groups. The data are available on a preliminary basis three months after the observed quarter.

Source: Bureau of Economic Analysis, US Department of Commerce

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Employment

Extensions on employment offer opportunities for insights into the relationship between labour markets and other economic processes and produce data on elements such as productivity and indirect employment effects, but also detailed information on wages and salaries, number of jobs and hours worked by occupation, income by gender or other variables. Such extensions reinforce the consistency of the total framework and provide possibilities for connections with other extensions of the TSA. It provides a resource for training and planning for tourism and for tourism analysts and employment and training planners. The OECD has produced in 2001 an internationally recognised standard "*OECD Employment Module*" which has been used and implemented by a few OECD countries (Box 7).

Box 7. Tourism Labour Force in the Economy (Poland)

The data concerning the use of labour factor in tourism activities is presented in TSA and in a separate but related to TSA employment module. This module consists of eight tables containing data enabling detailed analysis of the use of labour in tourism characteristic activities (except tourism durable goods manufacturing industries). The average number of people employed in tourism characteristic activities (TCA) is slightly above 847,000, where 272,000 are owners, co-owners and unpaid family members (self-employed persons) and 555,000 are employees. In the aggregate, people employed in characteristic activities accounted for 7% of total labour force in the economy.

Source: Tourism Satellite Account For Poland (2000)

Environment and sustainability

The impacts of tourism on environment have become a major issue in recent years. The use of the TSA in this area seems to be rather promising since environment accounts also based on the principles of the System of National Accounts have been developed in a number of countries.

In Canada, there is an interesting project going on to link environmental accounting to TSA. Linkages could be established for tourism industries starting with the priorities of water, energy use and greenhouse gas emissions. The aim is "*to help understand and manage the relationship between the environment and tourism and to help lessen risks to the environment. This will allow the comparison of the environmental impact of tourism with other industries*".

Additional work has been carried out in a few countries particularly at the academic level. In 2007, the Cardiff University in Wales published an article demonstrating how selected environmental consequences of tourism consumption relating to carbon emissions and waste can be quantified using TSA and an environmental module associated with an input-output framework.

Government revenues attributable to tourism

Another example of TSA use also comes from Canada. For the years 2000 to 2006, Canada had estimated government revenues attributable to tourism and has now decided to make it a yearly exercise. Government revenues are broken down into three levels of government (federal, provincial/territorial and municipal). The use of the TSA appears essential since it provides tourism shares by detailed commodities and industries. In fact, the level of disaggregation used by the Canadian TSA is somewhat more detailed than the one the TSA-RMF requires.

Spain also conducts work in the same direction; its TSA provides an estimate of the net taxes on products and of other net taxes on production attributable to tourism.

Indirect and induced impacts of tourism

This issue has long been a subject of debate and continues to be an important misunderstanding about what the TSA can provide. The TSA uses a narrow approach of tourism demand (direct impact of tourism only). The 2008 TSA update adds precisions to define the concept of direct impact. The TSA approach is aligned with national account principles with a view to allow comparisons between the "tourism industry" and other industries.

However, many stakeholders and users have underlined the need to calculate indirect and induced impacts of tourism on the economy in order to understand the global reach of tourism. Indirect impacts can be defined as the impacts generated by the intermediate consumption of the producers who are directly in contact with the visitors. Induced impacts can be defined as the impacts generated by the production factors (mainly manpower through its demand for goods and services) implemented by these producers who are in contact with the visitors. There are very few practical examples of evaluation of induced effects.

There are a number of "TSA adapted methodologies" that include indirect effects. Some countries have integrated this dimension in their "TSA" with clear explanations about the method. This may create confusion as these methods can only be considered as extensions of the TSA. Some countries, however, have developed clearly separate TSA extensions, such as economic models using Input-

Output multipliers (Box 8).

Box 8. Direct and Indirect Economic Impacts (Australia)

The estimates of tourism gross value added, tourism GDP and tourism employment in the TSA relate to the direct impact of tourism only. A direct impact occurs where there is a direct relationship (physical and economic) between the visitor and producer of a good or service.

Indirect tourism demand is a broader notion that includes the downstream effects of tourism demand. For example, when a visitor buys a meal, indirect tourism demand is generated for the food manufacturer, the transporter, the electricity company, etc., that provide the necessary inputs required to make the meal. To fully measure the indirect effects, changes in incomes which may create further changes in tourism demand should also be taken into account. A full analysis of indirect effects is best done using economic modelling. Tourism Research Australia (formerly Bureau of Tourism Research) has undertaken this work and the latest results are reported in the *Tourism Research Report (Volume 5, No. 2 2004) Indirect Economic Contribution of Tourism to Australia, 2001–02.*

Source : Tourism Satellite Account, 2005-06 (Australia, 2007)

Forecasting

Austria uses the TSA to make forecasts for the current year and the following year. Several organisations also developed tourism forecasting models based on historical data and patterns, counterfactual analysis and annual TSA data.

The forecasting field of research will certainly gain in popularity in the near future as new TSA data become available. The types of models to be developed include Computable General Equilibrium Models, a few examples of which have already been implemented.

Regional data

The local dimension is fundamental for the analysis of tourism and the design of national and regional policies. Tourism is unequally localised in the national territory. Tourism requires quality and credible statistics at different territorial levels in order to facilitate public (*e.g.* regional policy-making) and private decision-making. In the same way that national accounts relate to the national economy, regional accounting is a technique for statistical synthesis that aims to describe the regional economy, both globally and quantitatively. This type of data is also of special interest for entrepreneurs. As a consequence, the construction of the TSA at regional level (*e.g.* in Austria, Canada, Denmark, Finland, Spain) is rapidly becoming a key priority (Box 9). Regional extension of the TSA adds value to results obtained at national level, especially in countries in which there are marked regional differences with regard to tourism.

Depending on the country, the calculation of regional TSA might be either in the hands of national or regional organisations. The cost of producing regional TSA can be decisive; as Austria mentions: "the implementation of TSA for a regional organisation is very expensive in relation to the results able to be used for dissemination".

Box 9. Regional TSA in Finland

Tourism can be regarded as a regionally important industry in Finland. In absolute terms, the revenue and employment effects of tourism and registered overnight stays are centred mostly on the same areas as the population and production. In 2002, the region of Uusimaa alone accounted for around 49 per cent of the output of tourism characteristic industries. In relative terms the results are different. Value added generated by tourism can be considered as the best indicator describing the volume and significance of the tourism industry for the economy of the region. This value added can be compared with the gross domestic product of the economy of the whole region. Thus, Uusimaa, Lapland, Kainuu, Åland and Etelä-Savo rose over the average for the whole country (2.3%). The figure includes tourism expenses paid by employers. When evaluating the results, common factors can also be found for the successful regions. International visitors as the share of visitor numbers in the whole region can be regarded as the most important of these. In relative terms the numbers of international visitors staying overnight at accommodation establishments included in the statistics were clearly highest in the regions of Uusimaa, Lapland and Åland.

Source: Regional Tourism Satellite Account in Finland

Nevertheless, establishing a regional TSA is seen as a difficult exercise, even more difficult than at national level (Box 10).

Box 10. The Principle for Making the Regional TSA (Denmark)

1. Industrial branches should be consistent with the national account
  The selection of TSA industrial sectors should be based on recognised national economic sector accounts. In the case of the Danish national accounts, the industrial sector is classified into 132 standard sectors. However, they are built from about 800 detailed industrial branches.

2. Tourism industries should be comparable with other industries
  Once the tourism industry is identified, it should be able to compare itself with other conventional industries. For example, it should be able to compare labour productivity between the tourism industry and the agricultural industry.

3. Regional data should be balanced between the supply and demand at commodity level
  The RTSA will be built based on both regional production account and national make and use tables. The national make and use tables are distributed to regional make and use tables by using the regional production accounts or by using the regional disposable income as the distribution keys. The principle of making the RTSA is to make tourism supply and demand balanced at the commodity level. This is called the "top-down method", as it is based on the national statistical data. As the RTSA is a special account and a large amount of tourism information does not exist in the national accounts, the tourism survey data are therefore used to supplement the national accounts data. This is called the "bottom-up method". The tourism demand estimation should also be consistent with the national accounts.

Source: Documentation on Regional Tourism Satellite Accounts in Denmark (2004)

LIMITATIONS ON TSA USE

It may appear as a paradox that so many countries do produce TSA when they mentioned at the same time the weaknesses of the TSA approach. Actually, the TSA might have been somewhat "oversold" as a "magic word" to answer all questions about tourism. A major issue to be tackled certainly concerns the communication of the results. Many users are lost by the complexity of the tool and just do not know what they could learn from the TSA. The lack of knowledge about the TSA approach has been widely mentioned. A second type of concerns derives from the statistical and analytical limits attributed to the TSA.

Lack of knowledge about the TSA

A very frequent issue is that most of the stakeholders and "normal" users cannot understand the TSA data due to its complexity:

- *The complexity of the TSA complicates its analysis and relations to other macro-economic indicators for normal users. One of the main drawbacks in using TSA data is derived from the lack of expertise of most of the users in the complex area of national accounts.*(Spain)

- *Many possible users are a bit mystified by the TSA. The input-output concept is a new one to many tourism users. The benefits were probably not really apparent.* (Ireland)

- *The main difficulty lies with users not knowing the strengths and limitations of the results.* (New Zealand)

- *The TSA results in their original layout are practically unreadable for most of the stakeholders due to its detailed and complex nature.* (Poland)

- *The complexity of the TSA, its terminology, concepts and definitions, sources and methods creates challenges in terms of communicating clear messages to a general audience. A way to overcome this difficulty is to include sections on concepts and definitions, sources and methods in all TSA publications.* (Canada)

Timeliness

Except in a very few countries, the production of the TSA data can be considered as much too slow in relation to users' needs. Ideally, the main TSA data should be made available for dissemination during the year following the year of reference. There might be a trade-off, however, between the timeliness of the data and the level of details to be provided with the use of preliminary evaluations. In fact, a few countries such as Austria and Australia are already using these techniques and their experience could be shared with other countries.

Data at micro and business levels

Several countries underline that the main limitation is in terms of the level of detail at which analysis can be undertaken. The TSA, by construction, focuses on aggregates so it is not possible to analyse behaviour at the micro-level (establishments, tourists or destinations). Actually, this opinion is certainly excessive since the TSA recommends a full set of data which goes far beyond the only aggregates; a wider dissemination of the full set of data might help to modify this opinion.

It is hard to use the TSA in a business context. The TSA does not include and/or identify clearly activities such as time share, ecotourism, tourist guides, packages, MICE or cruise ship sectors. TSA results are not distributed by nationality, which is important for marketing organisations. Countries underlined the need to create challenges in terms of TSA usage in a business context.

More information should be given to users on the fact that a) the TSA is only one element of the whole system of tourism statistics; and b) the TSA should be considered as an open system to which extensions can be added to better cover issues not addressed directly by the TSA.

Divergences with other economic estimates

Divergences between TSA estimates and other economic estimates of tourism are an urgent concern. It is sometimes just a communication issue when the definitions of data and/or methodology are not explained explicitly enough. This is the case for the "direct economic contribution" of tourism versus the "direct + indirect economic contribution". The two measures should not be confused. The TSA measures only the direct effects of tourism, although users and stakeholders often want to know in addition the indirect and induced effects. It is desirable that experts come to an agreement on a common definition for measuring the "direct + indirect" contribution.

This might be also the case when the national TSA is put on a regional basis because the regional estimates did not always agree with those of provincial/territorial tourism ministries/agencies. These sub national data are not always coherent with those produced at national level. Given the number of stakeholders involved, the need for coordination in such a project must not be underestimated.

Several countries also mentioned the confusion between the results compiled according to the TSA and those compiled in a "simulated TSA".

Lack of spatial dimension

Tourism has a strong spatial dimension. For many users the lack of regional tables is an important drawback. Nevertheless, regional TSA are being developed in a number of countries. A few points can be mentioned in this context:

- The appropriate spatial level to elaborate a TSA cannot be stated universally without studying the territory of reference. A tourism destination cannot always be defined by administrative boundaries.

- The production of a TSA requires a strong statistical background which might not always exist at the regional/local level. Partnerships with the National Statistical Office should be promoted.

- The model of organisation to develop a regional TSA varies from one country to another. For example, in Canada, Statistics Canada produces TSA for all the provinces, while in Spain, Andalucía produces a TSA mainly of its own.

International comparability

International comparability (alignment with the TSA) is an important issue to consider from a tourism policy development perspective. The TSA has been built in order to make international comparability

possible. The responses to the OECD questionnaire show that this goal still has to be strengthened. At international level, discrepancies have been underlined when TSAs of different producers ("competitors") are not similarly in line with the common methodology. Among the main divergences are the definition of "usual environment", the taking account of "same-day visitors", the ways to calculate "tourism GDP", etc. This is definitely another important concern for many users (Box 11).

Box 11. International Comparability of TSA results (Germany)

Although there is a big agreement that the TSA framework is a great progress as for quantifying the economic relevance of tourism on the basis of a uniform international binding accounting system, there is scepticism about the particular factual praxis in empirical compilation of national TSA in different countries according to the international accepted recommended methodological framework and the European implementation manual. There is the belief that the different initial tourism specific data situation in miscellaneous countries will lead to a bigger degree of freedom in quantifying such expenses (*e.g.* estimation of tourism expenses during day trips).

Source : The TSA project in Germany: Results and Reactions (2004)

A higher degree of international cooperation in the production of the TSA is needed to increase the level of comparability of the TSA from one country to another.

COMMUNICATING THE TSA RESULTS

The TSA results are often available only in the national language. They are generally communicated widely in summary form to policy and business decision-makers, the general public and media (Box 10), but rarely are the full TSA data available to users. Moreover, the content of the documentation varies a lot from one country to another and there is rather little harmonisation between countries in the presentation of the tables; very few countries use the layout proposed by the TSA. The results are generally downloadable for free from the internet by the public. Some countries emphasise that academic and research institutions are among the most demanding organisations. The answers pointed the following elements:

- *The importance of good communication networks between the compiling agency and the main stakeholders and data providers should not be underestimated. It is important that the stakeholders understand what the TSA is and the output that the TSA will deliver, and that the education of users more generally is a joint effort. Effective liaison with the suppliers of the main data sources is also crucial, especially when confronting supply and demand estimates.* (Australia)

- *It is important that stakeholders know in advance the publication dates of forthcoming releases. It is important to find mechanisms to involve key stakeholders in the process of developing a TSA and in the case of regional TSAs to involve regional tourism authorities in the process of developing the estimates. Lastly, it is important to communicate and clearly explain the estimates, and differences between the TSA estimates and source data (especially those differences that arise from the reconciliation of supply-and demand-side data).* (Canada)

- *The TSA might be launched with a conference and a question and answer session, presenting concrete examples of what a TSA is, why it is useful and elaborating on the potential it offers for dynamic modelling* (Ireland).

- *Prior consultation with main users can provide advice regarding the relevant variables to be included in the publications in order to make the interpretation of the results easy for them.* (Spain)

- *The biggest mistake is perhaps over selling the TSA. From a statistical perspective the benefits are obvious, however, from a user's perspective some sort of a dynamic model was expected rather than a static set of tables.* (Ireland)

Box 12. TSA dissemination processes

Countries can combine several forms of TSA dissemination. Three types of dissemination can be identified:
- Dissemination of a full set of TSA tables with technical commentaries. This type maximises the possibility of further TSA work by other parties. A third of the respondent countries are using this type of dissemination.
- Dissemination of partial TSA data (*e.g.* visitor consumption and one or two added value aggregates) with technical commentaries and short analyses limited to the TSA data eventually completed with aggregated national accounts data (GDP).
- Dissemination of partial TSA data with analyses taking account of other tourism data. This type can be considered as "user oriented". It should not be the only way to disseminate TSA data but appears as an important complement to other types of dissemination.

CONCLUSIONS

The TSA must be regarded as a comprehensive statistical project, an important aspect of which being modularity. The development and expansion of the TSA should proceed step by step and additional modules can be added to respond to user needs. Modularity also implies that a greater division of labour can be envisioned between the various stakeholders including the business and academic sectors. A primary condition of work sharing is that the TSA data are made available for all at the most detailed level possible.

Further enhancing the implementation of internationally recommended standards

For many users, international comparability is a key element for communicating the results of the TSA. A lot of work has been done in OECD countries to develop TSA data (e.g. estimates of tourism consumption and value added aggregates) and to comply with common methodological concepts. This international dynamic must continue and be amplified. At international level, it is essential that the close coordination among a wide range of intergovernmental organisations continues to be strengthened to help the harmonisation process. Together with the international comparability argument, quality is another important reason to protect and promote the TSA brand. This could be an important action to be undertaken by the international community as emphasised by many OECD countries. It could contribute to an expansion of the TSA usage.

Involving more stakeholders in the production and dissemination of TSA data and extensions

For many users, the core TSA data are not sufficient for their needs. Countries should exert additional efforts to produce some extensions, if they have the capacity and the means to do so. It is also advised to mobilise new stakeholders as contributors and to develop flexible organisation patterns, to avoid having only one single organisation encompassing all the aspects of the TSA production including its extensions. Such a situation can lead to bottlenecks as skilled workforce in the area is difficult to mobilise. More work-sharing between organisations could certainly support further TSA developments (*e.g.* extensions and analyses), with work being achieved also by the business and academic sectors. A pre-condition to work-sharing is the full availability of data to potential contributors. It is necessary that the primary TSA producers disseminate their data and meta-data as completely as possible.

Adapting and communicating TSA products to users

The TSA can provide a variety of products elaborated by a variety of producers. The range of TSA products is potentially large from the provision of TSA data with technical descriptions to tourism economic and social analyses based on TSA data. Other products might be envisioned for different types of users. What is necessary is to create the conditions at national level so that TSA data can be used extensively for all sorts of studies about tourism. Since timeliness is a crucial factor for the business sector, special efforts should be made to implement updating techniques.

It is important that stakeholders know in advance the publication dates of forthcoming releases. It is important to find mechanisms to involve key stakeholders in the process of developing a TSA and in the case of regional TSAs to involve regional tourism authorities in the process of developing the estimates.

The TSA might be launched with a conference and question and answer session, presenting concrete examples of what a TSA is, why it is useful and elaborating on the potential it offers for dynamic modelling. Prior consultation with main users can provide advice regarding the relevant variables to be included in the publications.

Building TSA users capacity

Many respondent countries have mentioned that it might be useful to "educate" the TSA users particularly on national accounting principles. Without neglecting the provision of technical documents, it is necessary to prepare complementary TSA material adapted to the different types of users, depending on how far they are from the TSA production:

- A first category of users is producing new data using the TSA data as inputs. These users need detailed information both on the concepts and the evaluation techniques. For this category, besides technical documentation, a direct relationship with the TSA producers can be recommended.

- A second category of users is producing analyses using the TSA data. They do not need to know about all the details of the TSA production. For this category of users, a technical documentation seems adequate.

- A third category is composed of "final" users including policy and business decision-makers. For this category a lighter and policy-oriented TSA documentation has to be prepared.