Chapter 3

Tourism Satellite Accounts: Data for Business and Policy Development

The Tourism Satellite Account: Recommended Methodological Framework (TSA) is 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. The benefits of the TSA are wide-ranging: quality benchmark, assessment of tourism contribution in the economy, extensions, e.g. indirect impacts, employment, quarterly and regional data. To a large extent, however, TSA data remain underused. Some key issues limit the usage of the TSA, such as the lack of knowledge about the account, the timeliness, the lack of spatial dimension or the insufficient international comparability. This chapter recommends 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 the capacity of TSA users. The OECD, one of the main developers of the TSA, is fully committed to support these efforts.
Introduction

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 being perceived. The TSA reconciles the demand (visitor consumption) and the supply sides of tourism (production by tourism-related industries), and provides a consolidated as well as a detailed picture for the complex set of industries related to tourism. An increasing number of countries, particularly within the OECD area, are implementing the TSA in one way or another. However, to a large extent, TSA data are still underused due mainly to a lack of knowledge about these manifold data and their potential uses.

This chapter presents a global insight on the implementation and use of TSA in OECD countries, as well as in a few non-member economies. 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, national 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 and public sectors. The OECD, one of the main developers and users of the TSA, is fully committed to support these efforts (Box 3.1).

This chapter is based mainly on the responses of member countries to the OECD questionnaire Best Practices in TSA Usage in OECD Member Countries and other relevant documentation (e.g. publication, websites).

Box 3.1. The OECD Tourism Committee and the TSA project

Since the early 1980s, the OECD Tourism Committee has worked to advance the recognition of the scope, nature and roles that tourism performs in national economies. With the aim of improving the measurement of tourism services in the economy and of proposing an international standard in this area, the Tourism Committee has developed several methodologies: a Manual on Tourism Economic Accounts (1991), a pilot for a Tourism Satellite Account for OECD countries (2000) and, in co-operation with several other international agencies, the Tourism Satellite Account: Recommended Methodological Framework (TSA). The TSA is now the main internationally recognised standard to measure tourism in the economy. The TSA has been slightly updated in 2008 without changing its general philosophy and patterns.

TSA policy and business 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.

**Tourism 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 utilise the full potential of the TSA: the TSA can definitely 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 decisions. 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 the 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, for example, TSA information is used by a large business 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 for 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, for example, the MICE (meetings, incentives, conventions and exhibitions) industry.

Potential benefits for producers and users

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 is an important action which could be undertaken by the international community and promoted 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 the “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, the Czech Republic, Korea, Mexico, New Zealand, Spain, Sweden and Switzerland). The answers provided the following elements:

NSI 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 and 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, which are based mainly on arrivals, overnight stays and Balance of Payments, do not grasp the whole economic impact of tourism. This information is not sufficient for effective public policies and efficient business operations. The TSA has considerably expanded the tourism information database and provides credible data concerning the scale and significance of tourism in the economy. It has contributed to an increased awareness of the role 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, etc. (Box 3.2).

**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
Box 3.2. **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 USD 10 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.


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. 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 (Box 3.3).

**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 3.4). 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 more than 50% of the tourism flows, and it might be a strong support for capital formation in the field.
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 socio-economic 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

Box 3.3. **Tourism GDP in the national economy (Australia)**

Tourism accounted for USD 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%.


Box 3.4. **The crucial importance of “domestic tourism” (Ireland)**

A major finding resulting 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, 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 is believed 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.

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 3.5). 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, for example, as proposed by the OECD in its employment module.

Box 3.5. **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 country survey shows that the TSA is not limited to the production of the TSA tables. Many countries are implementing what can be called “extensions”. These extensions cover different aspects.

**Quarterly TSA 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 3.6).

Box 3.6. **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. 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.
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).

**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. In 2001, the OECD produced an internationally recognised standard OECD Employment Module which has been used and implemented by a few OECD countries (Box 3.7).

**Box 3.7. 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 ongoing project to link environmental accounting with the 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 2007, Canada had estimated government revenues attributable to tourism and has now decided to make it a biennial 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 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 adds precisions to define the concept of direct impact. The question is: what can be defined as the value added created by suppliers directly in contact with visitors? For services, the answer is rather natural since the producers are in direct contact with the visitors. For goods, it is not that straightforward as goods are generally sold to visitors through retailers – it has now been decided to include only the margins of retail trade into the direct impacts. 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 have also 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 showing the 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 (e.g. Austria) (Box 3.8).

**Forecasting**

As already mentioned, 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, counter-factual 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 (Boxes 3.9 and 3.10). 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.

Box 3.8. 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.


Box 3.9. 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% 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.
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, for example, in Austria “the implementation of TSA for a regional organisation is very expensive in relation to the results able to be used for dissemination”.

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

### Box 3.10. 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 responses of OECD countries to the questionnaire evoked many 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 certainly tackled concerns the communication of the results (see below). 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 macroeconomic 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**

Timeliness is a crucial topic for users. By now, the last year of reference available for the full TSA is slightly different from one country to another. By the fall of 2009, a few countries had TSA for 2008 while others only have 2002 or even earlier figures available. In fact, 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. For example, for national accounts, preliminary evaluations provide less detailed data than later evaluations founded on more detailed but slower to collect data. A similar approach might be chosen for the TSA, with the identification of a first set of data to be produced earlier. 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.

Other limits pertain to the variables associated with the TSA: “the TSA focuses on monetary aggregates, so that it has limited usefulness for analysis of non-monetary and qualitative phenomena or variables related to tourism.” There are, for example, insufficient connections established with marketing, sustainability, investment and employment strategies. There are no statistics divided by gender.

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 of 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 discuss among themselves to agree on a common definition for measuring the “direct + indirect” contribution.

This might also be the case when the national TSA is applied on a regional basis because the regional estimates do 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”. One country also mentioned that the TSA estimated employment contribution was considerably lower than estimates used by the tourism industry; which might be the consequence of taking into account the indirect component of employment.

**Lack of spatial dimension**

Tourism has a strong spatial dimension. For many users the lack of regional tables is probably the biggest drawback. Nevertheless, regional TSA is 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 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 TSA mainly of its own.

**International comparability**

International comparability (alignment with the TSA methodology) 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 TSA. 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 3.11).
A higher degree of international co-operation in the production of the TSA is needed to increase the level of comparability of the TSA from one country to another.

**Main difficulties in compiling the TSA**

To a large extent, the limitations on TSA use are linked to the difficulties encountered by countries in compiling the TSA. Definitely, the production of a full TSA appears to be a heavy burden for many countries:

- **Timeliness**: Data sources are not immediately available; results are thus only produced years later.
- **Divergence with other economic estimates**: TSA estimates are prepared from a wide range of statistical sources. Some are closely related to the appropriate national accounting basis, but others are not completely satisfactory in various respects, including coverage, concepts and timing.
- **Reliability of TSA data**: The split of package tours into the various tourism products remains an area of weakness in the TSA estimates. Furthermore, there are frequent changes in the definitions used to calculate the TSA. This fact makes it difficult to compare the TSA results over the years and requires further re-work and analyses.
- **Long-term development**: Some countries also mentioned the lack of resources to maintain and develop TSA in the long-term and to produce good analyses or the difficulties in the organisation of the TSA project. The task of compiling the TSA in itself necessitates very skilled workforce; it is therefore important to avoid constant changes of persons in charge of the project.

**Communicating the TSA results**

**A general movement towards implementation**

Many countries in the world are presently implementing the TSA methodology even if on an exploratory basis. A wide variety of cases can be found, however, regarding the production of accounts or the dissemination of TSA data. The TSA tables are used as references but most countries do not strictly present their data according to these tables for their dissemination. Most countries concentrate their efforts on tables which illustrate the balance between demand and supply within the country: Table 1 (inbound tourism expenditures), Table 2 (domestic tourism expenditures), Table 4 (internal tourism consumption), Table 5 (production accounts of tourism industries), and Table 6 (total...
domestic supply and internal tourism consumption). Many countries are also working on Table 7 (employment in the tourism industries) but the other tables have been set aside.

The country responses to the OECD questionnaire highlight different stages of development:

- In a few countries, the TSA has been produced on a full basis for a number of years and it has become a tool for tourism policy analysis. These countries are now engaged in developing TSA extensions, notably to measure indirect and regional impacts.
- In a majority of countries, the implementation of the TSA is a work in progress, mainly in the hands of statisticians.
- A few other countries are still in the preliminary stage regarding the opportunity and feasibility to develop a TSA.

### Table 3.1. Tourism GDP in OECD countries and beyond

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Gross domestic product (GDP) billion USD</th>
<th>Direct tourism GDP billion USD</th>
<th>Share of direct tourism GDP in GDP (%)</th>
<th>Tourism gross value added (GVA) billion USD</th>
<th>Share of tourism GVA in GDP (%)</th>
<th>Total(^1) tourism GDP billion USD</th>
<th>Share of total tourism GDP in GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2006-07</td>
<td>873.8</td>
<td>32.5</td>
<td>3.7</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Austria</td>
<td>2008</td>
<td>412.9</td>
<td>22.3</td>
<td>5.5</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>34.7</td>
</tr>
<tr>
<td>Canada</td>
<td>2007</td>
<td>1 269.6</td>
<td>25.4</td>
<td>2.0</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2007</td>
<td>174.0</td>
<td>5.0</td>
<td>2.9</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Denmark</td>
<td>2006</td>
<td>273.9</td>
<td>5.2</td>
<td>1.9</td>
<td>5.2</td>
<td>1.9</td>
<td>10.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Finland</td>
<td>2007</td>
<td>215.0</td>
<td>5.0</td>
<td>2.3</td>
<td>5.0</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>France</td>
<td>2008</td>
<td>2 856.5</td>
<td>105.7</td>
<td>3.7</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Germany</td>
<td>2000</td>
<td>1 900.2</td>
<td>60.8</td>
<td>3.2</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Hungary</td>
<td>2006</td>
<td>113.0</td>
<td>6.0</td>
<td>5.3</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Iceland</td>
<td>2006</td>
<td>16.3</td>
<td>0.8</td>
<td>5.1</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Ireland</td>
<td>2000</td>
<td>96.6</td>
<td>2.8</td>
<td>2.9</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Italy</td>
<td>2007</td>
<td>2 114.5</td>
<td>101.5</td>
<td>4.8</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Japan</td>
<td>2006</td>
<td>4 362.6</td>
<td>100.3</td>
<td>2.3</td>
<td>..</td>
<td>..</td>
<td>244.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Korea</td>
<td>2008</td>
<td>929.1</td>
<td>..</td>
<td>..</td>
<td>16.3 (2004)</td>
<td>2.3 (2004)</td>
<td>61.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>2007</td>
<td>1 022.7</td>
<td>..</td>
<td>..</td>
<td>81.8</td>
<td>8.0</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2007</td>
<td>778.3</td>
<td>19.4</td>
<td>2.5</td>
<td>23.4</td>
<td>3.0</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>New Zealand</td>
<td>2007</td>
<td>130.4</td>
<td>6.7</td>
<td>5.1</td>
<td>..</td>
<td>..</td>
<td>12.0</td>
<td>9.2</td>
</tr>
<tr>
<td>Norway</td>
<td>2008</td>
<td>451.8</td>
<td>14.3</td>
<td>3.2</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Poland</td>
<td>2005</td>
<td>303.9</td>
<td>6.3</td>
<td>2.1</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2005</td>
<td>47.9</td>
<td>1.3</td>
<td>2.8</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Spain</td>
<td>2005</td>
<td>1 130.2</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>120.9</td>
<td>10.7</td>
<td>..</td>
</tr>
<tr>
<td>Sweden</td>
<td>2008</td>
<td>479.0</td>
<td>13.9</td>
<td>2.9</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2008</td>
<td>500.3</td>
<td>14.5</td>
<td>2.9</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2007</td>
<td>2 802.3</td>
<td>..</td>
<td>..</td>
<td>75.7</td>
<td>2.7</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>United States</td>
<td>2007</td>
<td>13 741.6</td>
<td>357.3</td>
<td>2.6</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Chile</td>
<td>2008</td>
<td>169.5</td>
<td>..</td>
<td>..</td>
<td>5.3</td>
<td>3.1</td>
<td>..</td>
<td>..</td>
</tr>
<tr>
<td>Estonia</td>
<td>2004</td>
<td>12.0</td>
<td>0.6</td>
<td>4.8</td>
<td>..</td>
<td>..</td>
<td>1.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Israel</td>
<td>2008</td>
<td>199.1</td>
<td>4.0</td>
<td>2.0</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>

1. Direct and indirect Tourism GDP.

Source: National data, OECD processing.

[Statlink](http://dx.doi.org/10.1787/765005558465)
A majority of OECD countries have the TSA

Most OECD countries are implementing the TSA. The main calculated indicator is the tourism consumption (see Chapter 1) but many countries also calculate aggregates such as the Tourism Gross Value Added (TGVA) and/or the Tourism Gross Domestic Product (TGDP). The TSA recommends limiting indicators to direct effects only. A few countries, however, also calculate the Total Tourism Gross Domestic Product which includes direct and indirect impacts.

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 3.12), however, the full TSA data are rarely 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 as very few countries use the layout proposed by the TSA. The results are generally downloadable for free on the Internet by the public. Some countries mention that academic and research institutions are the ones that request information most. The responses showed 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).

Organisation of the TSA Project

The TSA Project is implemented through different processes of organisation. It is generally recommended to establish a multi-stakeholder team which associates at least the national statistical office, the tourism authorities and the central bank. It is however also desirable to associate other users, such as businesses and research institutes. In some
countries, the central bank is not associated in the process. In general, the national statistical office and the tourism authorities work together. But sometimes, the implementation of the TSA is solely in the hands of the national statistical office, eventually with some financial support by the tourism authorities. For the TSA production stage, the participation of other institutions, such as business and research institutions, has also been mentioned in a few countries (i.e. Austria).

Policy conclusions

Promoting a modular approach for TSA development

The TSA must be regarded as a comprehensive statistical and policy long-term project, an important aspect of which is 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. In this regard, the Canadian experience is illustrative:

The development and expansion of the TSA in Canada proceeded step by step as additional modules were added to respond to user needs. This modular approach to building the TSA and its extensions in response to user needs has worked very well. It has proven flexible in terms of providing a means to respond rapidly to emerging needs; it has proven manageable insofar as the modules are separated, which prevents the core account from being completely overwhelmed and encumbered by the add-ons (or add-ins). As a result, workloads can be spread out throughout the year, and dissemination of results occurs in smaller digestible packets throughout the year as opposed to one detailed publication, which keeps tourism in the news more often (Canada).

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. Further efforts using the TSA 2008 update have to be carried out to strengthen international comparability. At international level, it is essential that the close co-ordination among a wide range of inter-governmental 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, including the Tourism Committee (Box 3.13), as emphasised by many OECD countries. This could contribute to the expansion of the TSA usage.

Box 3.13. Further OECD work on TSA

As of today, it remains difficult to obtain detailed information on what is being done at country level. One obstacle is the lack of harmonisation in data dissemination: the data are rarely presented in the same way. Along with other international efforts, the OECD will promote a greater harmonisation in the area of TSA data dissemination. This will accompany on-going efforts to further develop the analysis based on TSA documentation and consultations with other stakeholders. The OECD will also continue to examine the TSA data available and to identify good examples of TSA usage, including those from selected non-member economies. The biennial publication on OECD tourism trends and policies will also be used as a regular vehicle to disseminate TSA data.

In co-ordination with other international organisations, the OECD will continue efforts in the long-term on TSA data collection, dissemination and analysis. It will undertake ad hoc surveys on selected TSA initiatives and will support a more extensive use of TSA data by policy makers and businesses (e.g. through its publication on tourism trends and policies). Ad hoc TSA workshops for policy makers and business decision makers are intended to be organised. Lastly, the OECD is committed to work closely with other international organisations to promote and to “protect” the TSA brand.

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 kinds of studies on tourism. Since timeliness is a crucial factor for the business sector, special efforts should be made to implement updating techniques.

As earlier mentioned, it is important that stakeholders know in advance the publication dates of forthcoming releases and 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 a question and answer session, presenting concrete examples to explain its utility and elaborating on its potential for dynamic modelling. Prior consultation with main users can provide inputs regarding relevant variables to be included in the publications.

**Building TSA user 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 produces 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 carries out analyses using TSA data. These users do not need to know about all the details of TSA production. For this category, 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.

**Bibliography**


3. TOURISM SATELLITE ACCOUNTS: DATA FOR BUSINESS AND POLICY DEVELOPMENT


### ANNEX 3.A1

#### Tourism Satellite Accounts (TSA) by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Title of the TSA</th>
<th>Production frequency/ most recent available accounts</th>
<th>Compliance with TSA international methodology</th>
<th>Development process and organisation(s) involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian National Accounts: Tourism Satellite Account</td>
<td>Annual/financial year 2007-08</td>
<td>Compliant with the TSA.</td>
<td>The TSA is prepared by ABS (Australian Bureau of Statistics). Work on the TSA has been funded by the Department of Resources, Energy and Tourism (RET).</td>
</tr>
<tr>
<td>Austria</td>
<td>TSA for Austria</td>
<td>Since 1999 annual (except 2006-07)</td>
<td>TSA-Tables 3, 8, 9 and 10 are not available so far.</td>
<td>Discussions on expert level; internal co-ordination with tourism experts and the Austrian Institute for Economic Research (WIFO).</td>
</tr>
<tr>
<td>Belgium</td>
<td>Exploratory work being conducted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Canadian TSA</td>
<td>Since 1994, Biennial/2002, Partial quarterly estimates/2009</td>
<td>The CTSA closely conforms to the TSA, however, several differences can be found in terminology, classification, coverage and valuation.</td>
<td>The TSA is developed by Statistics Canada. Work has been funded by the Canadian Tourism Commission.</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>TSA in the Czech Republic</td>
<td>Since 2003, annual/2007</td>
<td>The TSA is a principal guideline, but in particular cases where there is no clear explanation, a Czech solution was introduced.</td>
<td>The TSA was created by the Statistical Office using own sources except inbound tourism survey which is financed by the Ministry of Regional Development and by the national tourism administration.</td>
</tr>
<tr>
<td>Denmark</td>
<td>Documentation on Regional TSA in Denmark</td>
<td>Annual/2006</td>
<td>The Danish TSA is in line with the RMF methodology. Tables 1, 2, 4-7 of the TSA are currently being compiled.</td>
<td>The TSA was developed and is being compiled by VisitDenmark and Statistics Denmark.</td>
</tr>
<tr>
<td>Finland</td>
<td>Statistics Finland, Tourism account</td>
<td>Since 1995, annual/2007</td>
<td>Compliant with the TSA.</td>
<td>A steering group was set up composed of representatives from the Ministry of Trade and Industry, the Tourist Board, the Hotel and Restaurant Association and Statistics Finland.</td>
</tr>
<tr>
<td>France</td>
<td>Comptes du Tourisme</td>
<td>Since 1983, annual/2007</td>
<td>Not compliant with the TSA.</td>
<td>On-going work to adjust the account to the international standard. Work is being developed by the Ministry of Economy, Industry and Employment and INSEE.</td>
</tr>
<tr>
<td>Germany</td>
<td>TSA for Germany</td>
<td></td>
<td></td>
<td>TSA developed by the Institute of Economic Structures Research (GWS mbH) using data from the Federal Statistical Office.</td>
</tr>
<tr>
<td>Greece</td>
<td>TSA under development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>TSA of Hungary</td>
<td>Since 2004, annual/2006</td>
<td>In full compliance with the TSA from Table 1 to Table 8.</td>
<td>The TSA implementation project was based on an inter-institutional co-operation. The TSA is elaborated by the Hungarian Statistical Office.</td>
</tr>
<tr>
<td>Iceland</td>
<td>TSA</td>
<td>Annual/2006 updates to 2007 and 2008</td>
<td></td>
<td>The TSA is being developed by Statistics Iceland.</td>
</tr>
<tr>
<td>Ireland</td>
<td>Ireland TSA – First Steps Project</td>
<td>Irregular/2000</td>
<td>First Steps Project was compiled as far as possible in compliance with TSA.</td>
<td>A Tourism Research Advisory Co-ordination Group (TRACG) was established to discuss and develop tourism statistics. TRACG is composed of the Central Statistics Office of Ireland, the Department of Arts, Sport and Tourism and related agencies, university and industry representatives.</td>
</tr>
<tr>
<td>Japan</td>
<td>TSA consolidated table</td>
<td>Since 2003, annual/fiscal year 2006-07</td>
<td>Six out of the ten TSA tables have been created.</td>
<td>In 2005, the Ministry of Land, Infrastructure, Transport and Tourism established the Tourism Statistics Development Commission to develop and improve the TSA.</td>
</tr>
</tbody>
</table>
Table 3.A1.1. **TSA information by country** (cont.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Title of the TSA</th>
<th>Production frequency/ most recent available accounts</th>
<th>Compliance with TSA international methodology</th>
<th>Development process and organisation(s) involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>Korean TSA (K-TSA)</td>
<td>Irregular/2004</td>
<td>International methodology like the TSA was applied.</td>
<td>The Ministry of Culture, Sports and Tourism and the Korea Culture and Tourism Institute developed the K-TSA. Organisations involved: National Statistical Office, Bank of Korea, Korea Tourism Organisation, Korea Tourism Association, etc.</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>TSA under development – Feasability study under way</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Tourism in a macro economic perspective</td>
<td>Since 2001, annual/2006</td>
<td>Compliant with the TSA.</td>
<td>Statistics Netherlands developed the Dutch TSA.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Tourism Satellite Account 2006</td>
<td>Since 1997, annual/financial year 2006-07</td>
<td>Compliant with the TSA.</td>
<td>The TSA is prepared by the National Statistical Office. Funding comes from the Ministry of Tourism.</td>
</tr>
<tr>
<td>Poland</td>
<td>TSA for Poland</td>
<td>Since 2000, annual</td>
<td>Compliant with the TSA.</td>
<td>There was a working team for enhancement of TSA in 2006. Participants were from Department of Tourism, National Bank, Central Statistical Office, Warsaw School of Economics and Institute of Tourism.</td>
</tr>
<tr>
<td>Portugal</td>
<td>Portuguese TSA (PTSA)</td>
<td>Since 2000, annual/2007</td>
<td>Tables 1, 2, 4, 5 and 6 are compliant with TSA.</td>
<td>The PTSA is compiled at Statistics Portugal and is financed by the tourism agency, Tourism Portugal which is the main domestic user.</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>TSA under development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>TSA of Spain</td>
<td>Since 2000, annual/2007</td>
<td>The Spanish TSA follows the basic criteria of the TSA. Some specific criteria have been adopted.</td>
<td>For the compilation of the pilot TSA a working group was created to discuss methodological and statistical issues. It was composed of representatives of the National Statistics Office, Central Bank and the National Tourism Authority.</td>
</tr>
<tr>
<td>Sweden</td>
<td>TSA for Sweden</td>
<td>Since 1995, annual/2007</td>
<td>Compliant with the TSA.</td>
<td>For the construction of the first TSA in the 1990s, a reference group of people from partner organisations, tourism organisations and administrations were established in order to discuss the different sources of information.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>TSA Switzerland</td>
<td>Irregular/2005</td>
<td>Compliant with the TSA.</td>
<td>Compiled by the Statistical Office under the supervision of the State Secretariat for Economic Affairs.</td>
</tr>
<tr>
<td>Turkey</td>
<td>TSA under development to be achieved in 2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>UK TSA – First Steps Project</td>
<td>Irregular/2000</td>
<td>Compliant with the TSA.</td>
<td>Cardiff Business School commissioned by Department for Culture, Media and Sport.</td>
</tr>
<tr>
<td>United States</td>
<td>US travel and TSA</td>
<td>Annual and quarterly data/2008</td>
<td>Compliant with the TSA.</td>
<td>Compiled by Bureau of Economic Analysis, funding by Office of Travel and Tourism Industries.</td>
</tr>
<tr>
<td>Chile</td>
<td>Cuenta Satelitte de Turismo</td>
<td>Annual/2006</td>
<td>Compliant with the TSA.</td>
<td>Partnership between Instituto Nacional de Estadisticas, Consetur, Sernatur.</td>
</tr>
<tr>
<td>China</td>
<td>Jinagou Provincial TSA</td>
<td>Irregular</td>
<td>Compliant with the TSA.</td>
<td>Provincial partners (Statistical Bureau, Tourism Bureau, University). Guidance by National Tourism Bureau. Financial support by Ministry of Finance.</td>
</tr>
<tr>
<td>India</td>
<td>TSA for India</td>
<td>Irregular/2002-03</td>
<td>Broadly compliant with the TSA.</td>
<td>TSA developed by National Council of Applied Economic Research on behalf of the Ministry of Tourism under the overall guidance of a pluralist committee.</td>
</tr>
<tr>
<td>Israel</td>
<td>Israeli TSA</td>
<td>Irregular/1995</td>
<td>Compliant with the TSA.</td>
<td>Compilation by the national statistical office in close co-operation with the Ministry of Tourism</td>
</tr>
<tr>
<td>Romania</td>
<td>TSA under development – Feasibility study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Experimental TSA for South Africa</td>
<td>Released in May 2009/2005</td>
<td>Compliant with the TSA.</td>
<td>Inter-institutional steering committee and working group</td>
</tr>
</tbody>
</table>

---

**Note:** The data provided is a summary of the TSA information by country, including the title of the TSA, production frequency, compliance with the TSA international methodology, and the development process and organisation(s) involved. The information is subject to change and may require updating in future years. The table includes countries such as Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, Chile, China, India, Israel, Romania, and South Africa. The table highlights the methods and processes used to develop TSA accounts, including feasibility studies, working groups, and statistical offices involved. The data reflects the evolution and development of TSA accounts globally, with a focus on the methodologies and partnerships involved. The table is concluded with a note indicating that the information is subject to change and may require updating in future years.