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**FRAMEWORK FOR THE COLLECTION AND PUBLICATION OF  
TOURISM STATISTICS**

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## **Framework for the collection and publication of tourism statistics**

### **1. Background**

The Australian Bureau of Statistics (ABS), as the central government statistical agency in Australia, has a major role in the production of tourism statistics. It is responsible for producing two of the most important tourism statistics collections in this country, viz. Overseas Arrivals and Departures and the Survey of Tourist Accommodation. Additionally, the Bureau produces a wide range of other statistics of relevance to the tourism industry, such as the Population Census, Labour Force Surveys, and other household and industry collections.

Whilst the ABS has been producing the Overseas Arrivals and Departures statistics since the early part of the century (primarily to monitor international migration patterns), it is only in recent years that the demand for tourism statistics has grown, following a relatively recent rapid growth in the activity and its economic importance. Reflecting this, the ABS introduced the Survey of Tourist Accommodation in 1975.

Traditionally, because of the geographic location of the country, tourism in Australia has been, and still is, predominantly domestic in nature. With a relatively slowly growing population, the industry has looked to international tourism for growth. During the 1980s we got it! Annual growth rates for inbound tourists frequently reached well over 20%. While the most recent years have experienced some slowing down in the growth rate, strong growth is still being experienced and expected into the new century.

International tourism is estimated to account currently for nearly 30% of total tourist expenditure in Australia. This proportion has increased rapidly in recent years and is expected to continue to do so. With this change in the structure of tourism demand, the "industry" has undergone major changes. It is now becoming more sophisticated and more aware of the need to be responsive to tourists' demands.

This has led to increasing demands by the industry, and also by policy makers, for more and better information relating to the activity.

## 2. Development of tourism statistics

This process, to varying degrees, has been, and is being, experienced by many other countries. Even those countries regarded as traditional tourist destinations only went through this phase within the past thirty years. More countries, particularly developing countries, have realised the potential of a tourism industry in recent years and are only now experiencing this change.

This rapid and relatively recent growth in tourism has affected the way tourism statistics have developed. Unlike the more traditional industries, which have generally developed more slowly over a greater period of time, the relatively sudden development of tourism has worked against a coordinated and systematic development of the statistics. The resulting sudden interest in tourism data is reflected in a growth in the number of bodies collecting and producing tourism statistics. This widening interest in contributing to the body of knowledge is welcome, and necessarily reflects the many perspectives and areas of interest within "tourism". (One can't help but feel, however, that the trendy and glamorous image of the topic might have attracted some bodies who in reality have little to contribute.) The diversity in the range of bodies collecting and producing tourism statistics is matched by the diversity in the range of bodies who use tourism statistics. The many aspects of, and areas of interest in, tourism contrast sharply with the more traditional industries where the activity, products and statistical needs are relatively homogeneous, and are measured within a framework that has been developed over a period of time, and often with substantial international cooperation.

In the development of tourism statistics in the past, there has been limited consistency and a lack of commonality in interpreting the scope and composition of the activity to be measured. This has resulted in a lack of standardisation of the concepts and definitions used, limiting the value of the data collected by precluding the possibility of comparing or linking data from different collections. The use of common standards would significantly increase the value of the currently available data, and without the need to increase the amount of resources used.

### 3. Development of the statistical framework

During 1990 the ABS started work on developing a statistical framework for tourism statistics which would attempt to bring some degree of order to the field. Our objective was to develop some form of structured approach to the collection and production of the data. During development major statistical users and collectors were consulted for their input and reaction to the approach taken. In November 1990 a draft "Framework for the Collection and Publication of Tourism Statistics" was produced. The response from the Australian tourism statistics community was very favourable, and internationally it was felt that the concept and approach had relevance to the wider tourism statistics community. The ABS was invited to present the Framework at the 1991 Ottawa Conference on Travel and Tourism Statistics.

### 4. The scope and composition of the Framework

#### 4.1. The model

The approach taken by the Framework is that tourism comprises activities - or what the Framework refers to as "events" - which involve the actions of persons who are defined as "visitors". (Here we are using the terminology of the new WTO/UN international standards and refer to "visitors" rather than "tourists", who are now a sub-class of visitors, viz. overnight visitors.) Tourism is thus identified in demand side terms - that is, in terms of the characteristics of the consumer. The nature of the product involved or the nature of the activity of the organisation supplying the product have no relevance to the identification of a transaction (event) as tourism. Only the status of the consumer is relevant. For example, the purchase of a soft drink is tourism where the purchase is made by a person who is a visitor to the particular place, but is not tourism when a resident of that place purchases a soft drink from the same shop.

"Tourism" therefore is taken to cover the activities of a particular type of consumer rather than the activities of particular types of suppliers.

#### 4.2. The "Event"

The core of the Framework model is the *event*. This mostly, but not necessarily, involves an economic transaction. The event comprises three essential

elements for tourism statistics purposes, the CONSUMER, the PRODUCT and the SUPPLIER. (Figure 1.)

- . The CONSUMER is always the visitor. The Framework adopts the WTO/UN international standard definition of "visitor".
- . The PRODUCT is the good or service being obtained or used by the CONSUMER (or his agent). This may involve a commercial transaction, such as the purchase of a product, or a non-commercial activity, such as the use of a public beach.
- . The SUPPLIER is the commercial or non-commercial body providing the product or the environment in which the activity is taking place. In the case of a commercial transaction the SUPPLIER is the business from whom the CONSUMER obtains the product, eg. the retailer, rather than the manufacturer.

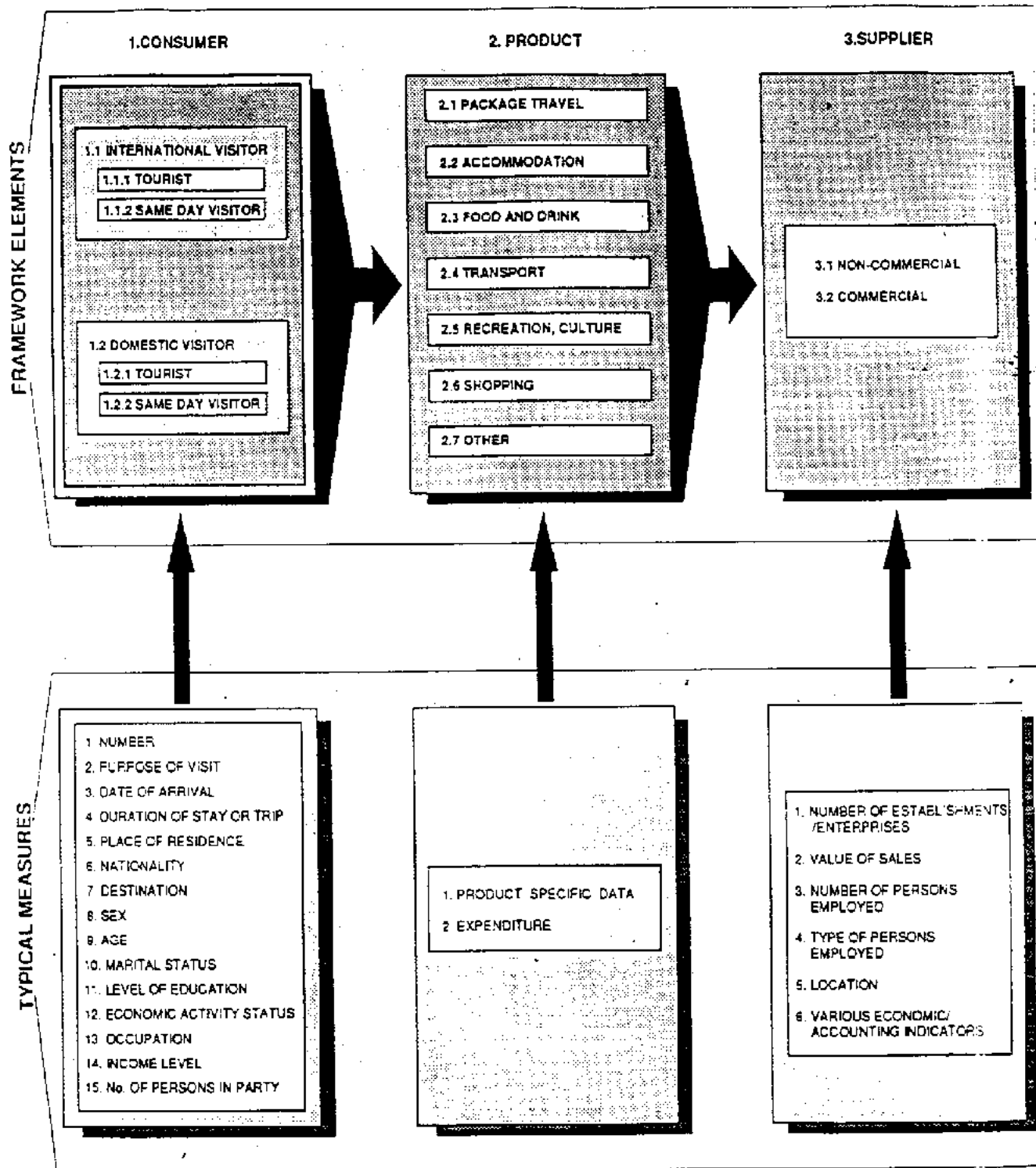
#### 4.3. Hierarchy

The horizontal arrows in Figure 1 between the three elements represent the hierarchical relationship between them. The relationship is hierarchical in that the CONSUMER element is the "foundation stone" on which the inclusion of the PRODUCT, and through it the SUPPLIER, depends. The CONSUMER is the independent element, to which the PRODUCT and the SUPPLIER elements are subject. The status of the CONSUMER dictates the inclusion or exclusion of the event in the statistics. If, and only if, the CONSUMER is relevant then any product and supplier of that product involved in the event will be relevant.

#### 4.4. The "Typical Measures"

The vertical arrows relate what the Framework calls the "Typical Measures" to their relevant Elements. The Typical Measures comprise variables which describe some aspect of the Elements' components. These are regarded as the variables which are of common interest. The Framework does not suggest that all of these variables, and only these variables, should be collected in any particular study. The variables to be collected will depend on the objectives of a particular study, plus other factors such as collection methodology, size of sample, type of respondent, etc. The Framework sets out to provide a standard classification for each of the most commonly used

**FIGURE 1. Outline Tourism Statistics Framework Model**



variables in tourism collections. This permits comparison of data between different studies which collect data on the same variables. Through the use of standard national and/or international classifications, the data can be compared with data from other subject-matter collections (eg. for comparison with data relating to other industries), and with tourism data collected in other countries. Indeed, the most important objective of the Framework is to promote the use of standard classifications, and preferably international standard classifications, and thus to increase the value of the collected data.

#### 4.5. Coverage

The Framework's structure incorporates statistics which either:

- . describe a relationship between two of the three elements, (for example, the length of stay of domestic visitors in hotels), or
- . describe some aspect of one of the elements, (for example, the age distribution of international visitors).

In Figure 1 these are represented by the horizontal and the vertical relationships respectively.

#### 5. Components of the Framework Elements

Figure 1 shows the top order breakdown of the components of the three Elements of the event. The Framework breaks these down into more detailed categories and provides definitions where relevant.

##### 5.1. The CONSUMER

The CONSUMER is the visitor who obtains or uses a product, or undertakes an activity. The Framework adopts the WTO/UN definition of *visitor*, viz.: *"any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of trip is other than the exercise of an activity remunerated from within the place visited."*

This element is broken down into four categories, viz.

- . International Tourists (Overnight visitors)

- . International Same-day visitors
- . Domestic Tourists (Overnight visitors)
- . Domestic Same-day visitors.

No further detailed categories are considered necessary. These four categories and their definitions follow the WTO/UN standards. By now the WTO/UN definitions have wide international acceptance, and these, or derivatives of these, are now used in many countries. While in Australia (as well as in other countries) we have tended to devise individual definitions when developing new collections, a single definition for Domestic Visitor has gained widespread usage here. This is based on the WTO/UN definition but defines "usual environment" as an area within 40 kms of the place of residence, beyond which a person must travel to be defined as a visitor. This distance is, of course, somewhat arbitrary and does give rise to some anomalies, particularly when travel of more than 40 kms within a city is involved. In the Framework, we have resisted the temptation to advocate some such similar restriction. Clearly, any particular distance cut-off would be inappropriate to some countries. At the moment some countries use such a restriction while others don't. Also, other criteria are sometimes employed, such as crossing of administrative boundaries, minimum duration of trip, or specific exclusion of routine travel. The Framework, in conformity with the WTO/UN standards, does not define the "usual environment" of the visitor. It is recommended that this concept be defined in any particular country in a way which is appropriate to the conditions of the country.

The WTO is currently doing further development work to elaborate on the concept of what is meant by "usual environment" and on how it should be implemented in practice.

There is a need to be somewhat careful to ensure that the terminology used is quite clear. A particularly important example of where confusion may arise is in what we mean by "tourist", and also "tourism". To someone outside the tourism statistics community, the term "tourist" is usually thought to mean a recreation visitor, and "tourism" to mean the activities of that type of visitor. In the WTO/UN international standards for tourism statistics' definitions, however, a "tourist" is any type of visitor - including visitors for business, education, health or religious purposes -



who stays overnight. This different use of terminology leads to some difficulty in communication between tourism statisticians and others, particularly when attempting to link tourism statistics with those of other industries. This issue was highlighted during development of the Framework, when some surprise was expressed by statisticians in other subject-matter areas that the Framework of "tourism" statistics covered the activities of travellers they perceived as "non-tourists", such as business travellers. The Framework might probably be better titled "Framework for the Collection and Publication of Visitor Activity Statistics". However, we have kept to the terminology, albeit misleading in some circumstances, normally used in the international standards and by the tourism statistics community.

A compounding ambiguity is the common use of the term "tourism statistics" to mean "(all) visitor activity statistics", while we define a "tourist" as an overnight visitor only. This use of the word is particularly confusing for many, and we would prefer that the term "Overnight visitor" were used instead of "Tourist", in the same way as the previously used term "Excursionist" has been replaced by "Same-day visitor". However, again we have conformed with the terminology used in the international standards.

## 5.2. The PRODUCT

The second element of the event is the PRODUCT. (Figure 2.) This element represents the item obtained/purchased, or the service used, by or for the visitor. It is not strictly a product classification, although it is given this title for convenience. The term PRODUCT is used to represent the element which is distinct from, but provides the linkage between the CONSUMER and the SUPPLIER. Whilst most of the categories within the PRODUCT element involve the purchase or use of a commercial product, not all necessarily do.

As one of the purposes of the Framework is to provide a structure for tourism statistics which is consistent with, and can be linked with, statistics covering other industries or activities, it would be preferable to adopt a PRODUCT classification which is an accepted standard used in other such fields. Such a classification might be the Central Product Classification (CPC). However, this and other standard product classifications do not provide breakdowns which are

**FIGURE 2. The components of PRODUCT**

- 2.1 **Package travel, package holidays and package tours**
- 2.2 **Accommodation**
  - 2.2.1 **Collective tourism accommodation**
    - 2.2.1.1 **Hotels and similar accommodation**
      - 2.2.1.1.1 Hotels
      - 2.2.1.1.2 Similar accommodation
    - 2.2.1.2 **Specialised accommodation**
      - 2.2.1.2.1 Health facilities
      - 2.2.1.2.2 Work and holiday camps
      - 2.2.1.2.3 Public means of transport
      - 2.2.1.2.4 Conference centres
    - 2.2.1.3 **Other collective accommodation**
      - 2.2.1.3.1 Holiday dwellings
      - 2.2.1.3.2 Tourist campsites
      - 2.2.1.3.3 Other collective accommodation
  - 2.2.2 **Private tourism accommodation**
    - 2.2.2.1 **Private tourism accommodation**
      - 2.2.2.1.1 Owned dwellings
      - 2.2.2.1.2 Rented rooms in family homes
      - 2.2.2.1.3 Dwellings rented from pvt individuals/profess. agencies
      - 2.2.2.1.4 Accomm. provided w/o charge by friends/relatives
      - 2.2.2.1.5 Other private accommodation
- 2.3 **Food and drink**
  - 2.3.1 Restaurant, cafe, bar, tavern, etc.
  - 2.3.2 Food/drink for preparation and/or consumption elsewhere
- 2.4 **Transport**
  - 2.4.1 **Air**
    - 2.4.1.1 Scheduled flights
    - 2.4.1.2 Non-scheduled flights
    - 2.4.1.3 Other services
  - 2.4.2 **Waterway**
    - 2.4.2.1 Passenger lines and ferries
    - 2.4.2.2 Cruise
    - 2.4.2.3 Other
  - 2.4.3 **Land**
    - 2.4.3.1 Railway
    - 2.4.3.2 Motor coach or bus and other public road transport
    - 2.4.3.3 Private vehicles (with capacity for up to eight persons)
    - 2.4.3.4 Vehicle rental
    - 2.4.3.5 Other means of land transport
  - 2.4.4 Other transport items
- 2.5 **Recreation, culture and sporting activities**
  - 2.5.1 Recreation and sporting
  - 2.5.2 Cultural
  - 2.5.3 Entertainment
- 2.6 **Shopping**
  - 2.6.1 Souvenirs
  - 2.6.2 Duty free goods
  - 2.6.3 Clothes and luggage
  - 2.6.4 Other goods
- 2.7 **Other**
  - 2.7.1 Business services
  - 2.7.2 Travel items/charges n.e.c.
  - 2.7.3 Health/medical
  - 2.7.4 Education/training
  - 2.7.5 Other services n.e.c.

particularly suitable for tourism statistics. The CPC, for example, is designed as a general use commodity classification, which does not have the focus and detail required specifically for tourism statistics. As a result, the Framework adopts as a "Product" classification the WTO/UN's standard "Classification of Tourism Expenditure". This Classification, however, only provides the broad top level categories. As more detail is often required, the Framework provides more detailed categories including the WTO/UN's standard "Classification of Tourism Accommodation" and the "Classification of Means of Transport".

While the use of the "Classification of Tourism Expenditure" allows the Framework to be consistent with the international tourism statistics standards, it is accepted that the non-use of a broad international standard Product classification used in other industry collections is a weakness. However, the WTO is currently developing a CPC-based product classification for tourism, and this could be incorporated into the Framework when completed. In the meantime, the Framework provides a concordance between the PRODUCT listing (the WTO/UN classification) and the current CPC.

### 5.3. The SUPPLIER

The third element is the SUPPLIER. (Figure 3.) While, as noted earlier, tourism is defined in demand side terms rather than in terms of suppliers' economic activity, the Framework recognises the need to enable tourism to be viewed from the supply side and for data to be collected on supply side activities. A list of economic activities is required which contains those enterprises which meet the major part of visitors' demand. Such a list cannot cover 100% of visitors' demand, as this theoretically can include any consumable product.

To develop such a list, the original approach taken in the Framework was to identify the products which comprise the bulk of visitors' demand (through the PRODUCT element), and from this to identify those economic activity categories which are likely to satisfy the bulk of this demand. These supply side categories were selected from the Australian version of ISIC. Although at the time this was considered the best option available, it did not provide a very satisfactory solution. ISIC, or its derivatives, does not provide categories which contain tourism, and only tourism,

**FIGURE 3. Extract from the SUPPLIER list**

<u>PRODUCT</u>	<u>SICTA/ISIC</u>
<u>2.1 Package travel, package tours etc.</u>	6010-1 INTERURBAN RAIL PASSENGER SERVICES 6010-2 SPECIAL RAIL TOUR SERVICES 6021-1 SCHEDULED INTERURBAN BUSES 6021-2 LONG DISTANCE TOUR BUSES 6210-1 SCHEDULED AIR PASSENGER TRANSPORT 6304-1 TRAVEL AGENTS  6304-2 TOUR OPERATORS, PACKAGERS AND WHOLESALEERS
<u>2.2 Accommodation</u>	
<u>2.2.1 Collective tourism establishments</u>	
<i>2.2.1.1 Hotels and similar establishments</i>	
2.2.1.1.1 Hotels	5510-1 HOTELS AND MOTELS WITH RESTAURANTS 5510-2 HOTELS AND MOTELS WITHOUT RESTAURANTS
2.2.1.1.2 Similar establishments	5510-2 HOTELS AND MOTELS WITHOUT RESTAURANTS 5510-9 OTHER PROVISIONS OF LODGING N.E.C.
<i>2.2.1.2 Specialised establishments</i>	
2.2.1.2.1 Health establishments	5510-5 HEALTH-ORIENTED ACCOMM. 8511 HOSPITAL ACTIVITIES
2.2.1.2.2 Work and holiday camps	5510-4 CAMPING SITES, INCLUDING CARAVAN SITES 5510-9 OTHER PROVISIONS OF LODGING N.E.C.
2.2.1.2.3 Public means of transport	5510-9 OTHER PROVISIONS OF LODGING N.E.C.  6010-1 INTERURBAN RAIL PASSENGER SERVICES 6021-1 SCHEDULED INTERURBAN BUSES 6021-2 LONG DISTANCE TOUR BUSES 6110-1 CRUISE SHIPS 6110-2 SHIP RENTAL WITH CREW 6120-1 INLAND WATER PASSENGER TRANSPORT WITH ACCOMM.

activities. Any appropriate category will contain some activity which results from non-tourism demand, and significant tourism demand will be met from business units' secondary activity, which can not be identified by ISIC. (Few businesses, outside the accommodation industry, the long distance passenger transport industry and certain "tourist attractions", would be engaged solely in serving tourists.)

A better option was later provided by the WTO's development of the Standard International Classification of Tourism Activities (SICTA). This classification comprises those ISIC categories for which a very significant part of the activity results from tourism demand, as well as newly created categories which are sub-classes of ISIC categories and which contain only activities which are important to tourism. While the details of SICTA will continue to be debated, its development is to be welcomed as an attempt to address the difficult problem of developing an international standard supply side classification which is appropriate for tourism. It would be hoped that the SICTA would be incorporated into a future revision of ISIC, and that national bodies responsible for classifying enterprises to industry categories would adopt it.

One of the important requirements of the Framework was to provide a linkage between the three elements. The use of SICTA, however, while being custom made for tourism, did not overcome the basic difficulty of linking a product classification with an industry activity classification. While the linkage exercise was reasonably satisfactory for most categories, some anomalies resulted from the somewhat different conceptual approaches taken in development of the Framework and the classification. The Framework approach is a demand side one. In this approach, SUPPLIERS, or rather categories of suppliers, were identified by taking each category of PRODUCT and assessing "*What category of supplier supplies the bulk of the product to the visitors?*" This approach led to some different categorisations than those provided by the SICTA, which was developed from a supply side perspective, viz. as a derivative of ISIC. Where the SICTA did not provide a category required by the demand side approach, the Framework adopted the most relevant ISIC category. However, this is not a particularly serious problem as the categories tended to be ones which would not be major tourism activities. Further development and refinement of the Framework and the SICTA may resolve these

cases.

Because the Framework only covers direct suppliers to the consumer, the SUPPLIER element only includes a proportion of the SICTA categories. SICTA goes further than direct suppliers, including, for example, such supporting activities as "Tourism Market Research", "Tourism Architecture and Engineering", "Construction of Recreation Facilities", etc. While the Framework does not include such "indirect" suppliers, it could be expanded to do so.

## 6. The Typical Measures

The second part of the Framework covers the variables - the Typical Measures - which are commonly required to describe the three elements.

### 6.1. The CONSUMER

The Typical Measures for the CONSUMER element comprise fifteen variables, covering Purpose of Visit, Number of persons in party and demographic data describing the visitor. (Figure 1.)

As stated earlier, it is not suggested that all of these and only these variables should be collected. What should be collected is clearly a decision which can only be made by those responsible for a particular collection. Where possible the Framework provides international standard classifications for the Measures. Where no such classifications are available the Framework recommends appropriate breakdowns.

### 6.2. The PRODUCT

For the PRODUCT element, the Typical Measures, at their top order level, are:

1. Product specific data; and
2. Expenditure.

No further classification is provided for "Product specific data" which includes such data as price ranges of various products, quality of products and, for accommodation establishments, occupancy rates.

For "Expenditure", the Framework provides a breakdown which covers the various types of expenditure which would be of interest for most studies. Expenditure data are particularly difficult to measure accurately. Respondents tend not to know, or in some cases are unwilling to provide, details of expenditure. Frequently only broad estimates are available, which, fortunately, are sufficient for many purposes. However, some studies require more detailed data relating to where the expenditure is incurred (eg. at place of origin or destination) or to the source of the funds (eg. the visitor or a host). The Framework provides the structure for this breakdown in the form of a matrix which comprises cells representing the various categories of expenditure which might be required. The example shown in Figure 4 is the matrix for Domestic Visitors' expenditure. The matrix provides a structure which will allow the categories of expenditure, which are required in the majority of collections, to be identified and "mapped". This permits a more precise comparison and contrast between expenditure data from different collections. It is accepted that some of the more esoteric collections may require a more detailed classification of expenditure, although in most cases greater detail would be impractical to collect.

The WTO is currently undertaking further work on developing international standards on what types of expenditure should be covered in the tourism statistics. As a result of this development work, this matrix will be revised to incorporate relevant changes.

### 6.3. The SUPPLIER

The Typical Measures for SUPPLIER comprise six variables (Figure 1.) which cover the most frequently required data items, such as value of sales, location of enterprises, and characteristics of persons employed. Where possible, for any of the Typical Measures, international standard classifications are recommended. Otherwise, the Framework provides custom made classifications.

### 7. Summary

While the basic model for the Framework is a very simple one, an important feature of it is that it provides an integrated structure for the components of tourism statistics. Each component, whether it be a variable or classification item, has a unique place in it and can be precisely mapped in the framework structure.

Components are uniquely defined in terms of what they cover and their relationship with other components. There is no duplication or overlap, and, hopefully, no ambiguity. As such it is intended as a practical model, and to be of assistance at different levels of development of tourism statistics.

### 8. Further development

The Framework has gone through a number of revisions. It is expected to continue to develop and expand to incorporate the current rapid developments in the international standards for tourism statistics concepts, definitions and classifications. Many of these developments have resulted from the 1991 Ottawa Conference on Travel and Tourism Statistics, the recommendations from which were the basis of the new WTO/UN standards.

Following ratification of these standards by the United Nations Statistical Commission in 1993, the WTO has been developing and expanding on the concepts, definitions and classifications, to provide practical guidelines and assistance to tourism statistics collectors and users. Much of this work will be published later in the year in a series of technical manuals, which will cover:

*Collection and Presentation of Tourism Statistics*

*Concepts, Definitions and Classifications for Tourism Statistics*

*Collection of Tourism Expenditure Statistics*

*Collection of Domestic Tourism Statistics*

*Tourism Statistics and the National Accounts and Balance of Payments*

The Framework will incorporate any relevant changes or refinements to the standards contained in these publications.

### 9. Tourism Economic/Satellite Accounts

Considerable work is currently underway by various national and international organisations on the development of Tourism Economic/Satellite Accounts. Around the world there is growing interest in and need for an objective assessment of the role and contribution of tourism to the economy. Various models are being developed, without an internationally agreed standard approach at this stage.



Of particular interest internationally are the methodologies developed by the O.E.C.D. Tourism Committee, Statistics Canada and the World Travel and Tourism Council.

Australia has not, as yet, attempted to develop such accounts. However, the value of and growing need for a comprehensive and objective assessment of the economic impact of tourism is recognised. Preliminary discussions are under way to formulate a plan for the development of accounts.

Irrespective of whatever methodology might be adopted, the development of the Tourism Framework provides a foundation in respect of the concepts, definitions and classifications to be used. Data collection can now be undertaken using national standards, providing complementarity of data and enabling its direct input into the accounts. Further, the Framework will facilitate the reconciliation of consumption and production data in the accounts through the linkage it provides between the demand and supply sides of tourism.

The Framework provides an important input into the development of accounts by establishing the parameters of the activity being assessed as well as the common standards by which that activity can be measured. Further development of the Framework, particularly in the area of linkage between the various elements, would further increase its value and contribution to the development of the accounts.