THE SYSTEM OF TOURISM STATISTICS (STS) AS THE FOUNDATION FOR A TOURISM INFORMATION SYSTEM (TIS): BASIC REFERENCES

A. The System of Tourism Statistics and its links with the National Statistical System

1. The National Statistical System (NSS) of a country encompasses a series of statistical functions, each of them corresponding to entities that conduct statistical observations on some of the fields belonging to the broader universe of socio economic phenomena. The term statistical activity refers to all those activities that are required for statistical information to be produced; it spans from planning and programming statistical operations to the dissemination of information and includes for instance the design of the procedure, the collection of the data, the production, processing, compilation, and storing of the data, etc.

2. The coverage and extension of a NSS at any given moment in time are determined by a series of factors, such as:
   - the organization and legal structure of the entities that produce statistical information (mostly public);
   - the legally established links and administrative mechanisms that exist for coordination and integration, usually through specific procedures between these bodies and a Central Unit (usually the National Statistical Office – NSO);
   - the human and material resources assigned to statistical activities in each of these entities.

3. The overall objective of a NSS is to provide users with reliable, consistent and appropriate statistical data relative to the country’s main socio-economic variables, both in structure and change over time and at different territorial levels. Such data need to be comparable with similar data obtained in other countries. As a consequence, in addition to all the nationally required statistical sources existing at a given time, NSSs must include additionally those methodological and instrumental elements that are required to meet the objective of international comparability.

4. On account of its objective and content, NSSs must therefore harmonize statistical information at the national (or federal, where appropriate), infra-national and international levels, through appropriate coordination and integration procedures, that require the existence of a Central Unit.

5. For the purposes of this task, harmonization is taken to mean the controlling activity that makes it possible to ensure that a particular statistical process meets the purpose assigned to it within the NSS; coordination is taken to mean the function that serves to balance different statistical programmes from the twofold standpoint of activities and projects of those bodies that produce statistical information; and integration is a function geared to ensuring the connection and assembly of the different statistical information that are part of a NSS.

6. Regarding the integration function, it should be made of instrumental elements (concepts, definitions, classifications, data and indicators, national and international recommendations, etc.) on the one hand, and integrated statistical information systems (systems of national accounts and socio-demographic statistical systems based either on international or national standards) on the other.

7. The System of National Accounts (SNA) is doubtless the more developed of the two. In this respect, it would be desirable for countries to achieve a greater balance between the two systems in the future, insofar as they share some concepts, definitions and classifications, and because splitting economic statistics from social statistics is in part conventional since many statistical variables are at the same time of an economic and social nature, or affect both economic and social issues without distinction.

---

(*) A working paper prepared by UNWTO Statistics and TSA Department.
8. There is a reciprocal relationship between those integrated statistical information systems and basic statistics: the former determine the basic statistics that are required for their design and compilation, and on the other hand, the latter have to be compiled using concepts, definitions, classifications that are part of the reference frameworks, both of the concepts and of the tables of results. Consequently, integrated systems become the centre of gravity for statistical work in all areas.

9. The System of Tourism Statistics (STS) should be understood, as that part of the NSS providing reliable, consistent and appropriate statistical information on the socio-economic aspects related to tourism, integrated within all the economic and social statistics related to other fields, at different territorial levels (national—or federal, where appropriate-, infra-national and international).

10. The design of a national STS should be viewed as the basic coordination and integration framework of the statistical information produced by all tourism stakeholders. Concepts, definitions, classifications, data, indicators, aggregates and table of results relating to tourism, designed so as to provide an exhaustive description of the tourism phenomenon in all its aspects (physical, social, economic, etc.) and a measurement of its economic contribution within a context of international comparability are a structural part of the NSS.

11. Regarding its socio-economic aspect, the STS can be defined as a set of components, made of the statistical sources themselves and the corresponding data obtained (i.e. statistics drawn from census, sample surveys, collection of data from administrative records, a derived statistical activity – in which data are estimated, modelled, or otherwise derived from statistical data sources -, etc.), the specific tools, methodological references and instruments used at some stages of the process that the generation of statistics entails (as is the case of concepts, definitions, classifications, databases, etc.), and also the instrumental and organizational resources used in all these processes. As a consequence, the STS encompasses in particular the technical aspects of field operation, the creation of statistical infrastructure, the elaboration of the results, and the completion of work leading to an integration of the data into a system of information.

12. It is worth recalling that the general guidelines for most of its work on the international harmonization of tourism concepts and statistics were determined at UNWTO’s fifth General Assembly held in New Delhi in 1983. The 1993 Recommendations on Tourism Statistics (adopted by the United Nations Statistical Commission –UNSC– in 1993 and published in 1994) represent the first international recommendation; a second one (the 2000 Tourism Satellite Account: Recommended Methodological Framework) was adopted by the UNSC in 2000 and published in 2001. Both recommendations determine the basic foundations of the System of Tourism Statistics. Since then, there have been many contributions from institutions and individuals alike, finally enabling the necessary basis for enhancing the credibility of the measurement of tourism’s economic importance to be constructed.

13. The development of a national STS is closely linked with the implementation of a Tourism Satellite Account (TSA). In fact, the TSA provides the conceptual framework and the organizational structure for the integration of most tourism statistics within the sector as well as with other economic statistics (mainly with national accounts and balance of payment data). In order for the TSA to be such an integrated framework, the same conditions as those required for the SNA 2008 should apply: tourism statistics should be coherent (the same concepts, definitions and classifications apply to all related components) and consistent (measurements related with each component should be commensurate so as to be integrated within a unique analytical framework.

14. The new 2008 International Recommendations for Tourism Statistics (IRTS 2008) and 2008 Tourism Satellite Account: Recommended Methodological Framework (TSA:RMF 2008) constitute the updated reference framework for the STS: both documents share the same concepts, definitions and classifications. As a consequence, they should be used as reference for the identification of data gaps and for the design of new statistical sources as well as for promoting coherence and consistency of available tourism statistical information. These recommendations might extend in the coming years beyond the still restricted domain they touch upon. Examples are expanding the concept of consumption to include other components of demand (such as collective consumption and gross fixed capital formation), developing the sub-national perspective, exploring the linkage of TSA with other conceptual frameworks (in particular with the System of Economic and Environmental Accounts –SEEA-), etc.

15. Although it is each country’s responsibility to carry out the development of the STS, the UNWTO recommends this development should follow the Basic Principles of Official Statistics approved by the UNSC (11/15 April 1994) as indicated in IRTS 2008 chapter 9.
16. Those principles provide guidelines for establishing and maintaining a credible STS and therefore, the use of such principles should be understood as a necessary condition to maintain users' confidence in tourism statistics and, particularly, to help guarantee the integrity, transparency and confidentiality of the individual data as well as the public access to the available consolidated statistics.

17. The information system created by national STS, i.e. basic tourism statistics and TSA, should be the foundation for a reliable and accurate national Tourism Information System (TIS). The TIS might also include complementary statistics, non-statistical information, and additional types of indicators. This new set of information should be designed for national purposes only. Special attention should be given to the following set of indicators:

   a) *early warning* indicators could be derived from sources such as credit card records as well as air traffic slot allocation data. Both types of data are administrative information (as arrivals figures are) and some countries have already experience in deriving these indicators which have proved of great interest for analysis. Spain (regarding slot allocation data) and New Zealand (using credit card data to evaluate the production performance of commercial accommodation) are just some examples;

   b) short-term performance indicators of tourism industries’ turnover and employment could be derived from administrative records produced by official sources such as fiscal sources and social security schemes. The following document produced by UNWTO provides different examples already in place in OECD countries ([http://statistics.unwto.org/sites/all/files/docpdf/oecd.pdf](http://statistics.unwto.org/sites/all/files/docpdf/oecd.pdf)); and

   c) business cycle indicators could be derived from business tendency surveys. This type of qualitative information (based on answers of staff personnel in some key tourism industries such as accommodation or travel agencies) is widely used in most countries for non-service sectors. UNWTO has identified its application in countries like France, Spain, Canada, Brazil and New Zealand. UNWTO is also using this methodology in its UNWTO World Tourism Barometer through the UNWTO Panel of Experts Confidence Index.

18. Consequently, the development by National Tourism Administrations of a system of indicators for monitoring purposes should be characterized by an increasingly closer relationship between planning, management and evaluation/control of the effects generated by the adopted strategies, and by a flexible structure capable of being relevant to any development or policy plan.

B. National System of Tourism Statistics and international comparability

19. The following scheme highlights the basic core of a national STS for international comparability purposes. It identifies two basic organizational frameworks of data and indicators

   - the basic information framework (identified with a basic core of tourism data and indicators and supported by the IRTS 2008 as its conceptual background)\(^1\) and

   - the measurement of tourism economic contribution framework (identified with a basic set of TSA aggregates figures which finds in the TSA:RMF 2008 its conceptual background)

both of them with their corresponding components.

---

\(^1\) In the UN System, Tourism is included under “Economic Statistics” covering “statistics regarding visitor’s activity (such as arrivals / departures, overnight stays, expenditure, main purpose of the trip, etc.) associated to different forms of tourism (inbound, domestic and outbound), tourism industries activity and infrastructure, employment and tourism satellite accounts”.
B.1. The basic information framework

B.1/A. Conceptual framework

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Observation units</th>
<th>Main related characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor</td>
<td>Visitor, Travel party</td>
<td>Classes (Overnight visitor-tourist-/same-day visitor-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Country of residence / regions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Size</td>
</tr>
<tr>
<td>Trip</td>
<td>Tourism trip</td>
<td>Main purpose, Duration, Main destination, Modes of transport,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Types of accommodation used, Organization, Expenditure</td>
</tr>
<tr>
<td>Tourism industries</td>
<td>Establishment</td>
<td>Monetary Output, Intermediate consumption, Gross value added,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compensation of employees, Gross Fixed Capital Formation,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-monetary Non-monetary characteristics specific to each tourism</td>
</tr>
<tr>
<td>Employment</td>
<td>Establishment, (in the tourism industries), Households</td>
<td>Persons Size, Status in employment, Jobs Duration of work, Full-time equivalent jobs</td>
</tr>
</tbody>
</table>

B.1/B. Classifications

2.1. Forms of tourism
2.2. Classification of consumption products acquired by visitors
2.3. Classification of productive activities serving visitors
2.4. Other classifications

---

2 A statistical unit is an entity about which information is sought and for which statistics are ultimately compiled. These units are either observation or analytical units:
- Observation units are those identifiable legal/organizational or physical entities which are able, actually or potentially, to report data about their activities
- Analytical units are created by statisticians, often by splitting or combining observation units with the help or estimations and imputations in order to compile more detailed and more homogeneous statistics than is possible using data on observation units. Examples of analytical unit is the homogeneous unit of production used in input-output analysis
In the design of the system of tourism statistics as well as in the measurement of tourism activity, only observation units are used.
Finally, reporting units are those entities from which information is collected by means of a questionnaire, interview, administrative records, etc. Reporting unit, in most cases, coincide with the observation units: exceptions are tourism trips (for which the visitor is the reporting unit) and in some cases, establishments (for which information might be collected from enterprises)
B.1/C. Tables of results

3.1. Inbound tourism
3.2. Domestic tourism
3.3. Outbound tourism
3.4. Tourism industries
3.5. Employment
3.6. Complementary indicators

B.2. The TSA framework

B.2/A. Concepts and definitions

1.1 Demand perspective
   1.1.1. Internal tourism consumption

1.2 Supply perspective
   1.2.1. Tourism direct gross value added
   1.2.2. Tourism direct gross domestic product

B.2/B. Classifications

2.1. Products (consumption and non-consumption products)
2.2. Industries (tourism industries and other industries)

B.2/C. Tables of results

3.1. Contribution of tourism to the national economy
3.2. Internal tourism consumption, by products and forms of tourism
3.3. Domestic tourism consumption, by products and categories
3.4. Inbound tourism consumption, by products and categories
3.5. Direct gross value added and tourism direct gross value added, by industries
3.6. Tourism gross value added, by components
3.7. Domestic supply of goods and services, by products