Annex 38. Tourism “Micro-Destinations“ in the Canary Islands Case Study

1. Before identifying how this case study provides knowledge on operationalizing each of these four topics, refered in Chapter 6 (para. 6.57), the relevance of tourism in the overall economic activity in the Canary Islands should be mentioned.

The tourism sector is of the utmost importance for the Canary Islands economy. The results obtained by the 2002 TSA produced by the Canary Islands Statistics Institute (ISTAC) indicate that tourism generates 32% of the Canary Islands GDP and the 30% of jobs. When comparing these figures with the information provided by the UNWTO concerning tourism revenues in 2003, the Canary Islands is located within the first 15 countries, the 11th or the 15th position depending on the methodology applied. Countries such as Greece, Canada or Mexico and regions such as South America obtain revenues similar to the ones by the Canary Islands. According to Eurostat data, within the document *Tourism statistics at regional level*, the Canary Islands was the European region that in 2012 led the number of overnights within tourism accommodation establishments, reaching the 87.5 million nights.

2. Regarding the first topic mentioned (tourism is unevenly distributed in most regional territories), the Canary Islands case study is a good example that warns about the implications of accuracy and proper measurement for analytical purposes in those tourism destinations where tourism activity is highly concentrated geographically:
   - Around 12 million tourists every year. First European region (NUTS 2) regarding overnights in hotels
   - 1.7% of the territory include 92% of bed places and account for 94% of tourist overnights in hotel
   - Such concentration of tourism activity refers to 16 municipalities out of 88 (18% of the total)
   - Resident population around 2.1 million

This lack of homogeneity in terms of administrative type of territorial entities has also relevant implications in monetary terms as there is clear evidence based on data provided by the Canary Islands Regional Tourism Information System (R-TIS) main indicators such as:
   - Average expenditure at destination: differences between nationalities
   - Tourist of the main countries of origin have their own geographically concentration in such municipalities
   - REVPAR differences in these 16 municipalities are relevant
   - Etc.

These and other type of relevant differences of those 12 million tourists can be analyzed in terms of main variables measuring tourism activity, such as:
   - Accommodation establishments
   - Beds
   - Overnights
   - Visitors
   - Occupancy rates

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55 The term “micro-destination” does not appear in the proposed Classification of Territorial Entities used in this document, where the generic term of “small tourism destination area” is preferred in order to design such small size analytical units. As explained in the Glossary (see “Territorial entities/Explanatory notes”), at the local level, “tourism destination” and “tourism spatial area are not basic administrative units” of the proposed classification and should therefore be considered as analytical units that might or not coincide with one of such entities.
3. All these basic data and indicators are provided by the Canary Islands R-TIS which has been developed focusing on the articulation of national / regional official statistics (what INRouTe identifies as the basic core of a R-TIS); such a system, as will be referred in the following paragraphs includes different type of statistical sources being the frame of accommodation establishments its basic support. Such Directory (named ALOJATUR) is geo-referenced and the way it is explains that all those variables already mentioned are also geo-referenced (see paragraphs 8.37 and beyond).

4. The Canary Islands Statistics Institute (ISTAC), adopting 2008 international tourism statistics standards, has developed a research strategy with the aim of providing more and better tourism information at the sub-national level. However, public administrations and economic agents request information at a higher level of specialization and territorial disaggregation in order to address both tourism promotion activities and tourism excellence plans at the micro level.

5. In this sense, the Canary Islands R-TIS focuses not only on providing subnational macroeconomic tourism data, but also on providing data for the tourism management in all its dimensions, as a necessary input for the Canary Islands or some of its small tourism destinations to become a Smart Tourism Destination. Moreover, the Canary Islands R-TIS is aligned with the Smart Specialization Strategy of the Canary Islands 2014-2020 fostered by the Regional Government which stresses the smart leadership of tourism, identifying two general objectives: (1) Improving the competitiveness and productivity of the Canary "tourism product"; (2) Productive diversification of the tourism based economy.

Components of Canary Islands R-TIS

6. Canary Islands R-TIS consist of different statistical operations. These operations combine different data gathering methods: in addition to conventional methods such as surveys, census, and administrative records also new methods such as sensors or other renowned sources embodied in big data are part of such a system. The following table gathers a classification of the statistical operations according to analysis dimensions and data gathering methods:

<table>
<thead>
<tr>
<th>Statistical operations</th>
<th>Data gathering methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism demand operations</td>
<td>Surveys / Administrative records</td>
</tr>
<tr>
<td>Tourism supply operations</td>
<td>Census / Administrative records / Sensors</td>
</tr>
<tr>
<td>Tourism employment</td>
<td>Administrative records</td>
</tr>
<tr>
<td>Synthesis operations</td>
<td>Secondary information</td>
</tr>
</tbody>
</table>

7. R-TIS aims at not only providing regional tourism macroeconomic figures for the seven islands, but mainly at responding different questions that arise when managing tourism destinations in all its dimensions, such as: Where do tourists obtain information and motivates them to visit Canary Islands? Which distribution channels do they use?, Where do they overnight and what influences their choice? What activities do they do within the
destination and how do they move therein? How much do visitors and excursionist spend and how is this expenditure distributed? What image do tourists have of the destination and what do they project to others? What is the tourists’ opinion on the destination and how many recommend it? What is the social and environmental pressure level of tourism?

8. In order to respond to these questions, the launching of an extensive set of data gathering tools is needed, including:
- statistical information obtained as a disaggregation of the operations officially conducted for the national level
- official statistical operations conducted by regional public entities

The statistical activities, both main and secondary, which today are part of the action plan of the Canary Islands R-TIS are those gathered in the following table:

**Table 19 Set of Main and Secondary Operations by The Canary Islands R-TIS. Source ISTAC**

<table>
<thead>
<tr>
<th>Statistical Operation</th>
<th>Data gathering methodology</th>
<th>Analysis Dimensions</th>
<th>Time and Space Disaggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEMAND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring Survey Canary Islands Tourism Brand (TRACKING-Canarias)</td>
<td>Survey</td>
<td>Tourism market Position of the Canary tourism brand</td>
<td>Aperiodic Canary Islands, 20 origin markets</td>
</tr>
<tr>
<td>Collection of Air Transportation Statistics</td>
<td>Administrative records</td>
<td>Passengers Cruise ship passengers</td>
<td>Months Islands, airports, ports</td>
</tr>
<tr>
<td>Collection of maritime transport statistics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey of Tourist Movements in Canary Borders (FRONTUR-Canarias)</td>
<td>Monthly survey</td>
<td>Tourists (forecasts) Excursionists Cruise ship passengers</td>
<td>Months, years Islands</td>
</tr>
<tr>
<td>Tourism Expenditure Survey</td>
<td>Monthly survey</td>
<td>Tourism expenditure Profile Satisfaction Trip characteristics Specific annual modules (shopping, active tourism, sports tourism, health tourism, etc.)</td>
<td>Months, quarters, years Microdestination, tourism towns, islands</td>
</tr>
<tr>
<td>SUPPLY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism Accommodation Survey on Hotel Establishments</td>
<td>Census, every establishment, every day</td>
<td>Occupation (passengers entered, travelers staying, average stay, occupancy rates) Rates (ADR, RevPar, revenue) Employment Tourist population equivalent Land use Power Water Waste Renewal range of accommodation Infrastructure Equipment Services</td>
<td>Days, special periods, months, years Microdestination, tourism towns, islands</td>
</tr>
<tr>
<td>Tourism Accommodation Survey on Non-Hotel Establishments</td>
<td>Sensors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel Outlook Survey</td>
<td>Census, every establishment</td>
<td>Confidence Outlook Situation</td>
<td>Quarters Islands</td>
</tr>
</tbody>
</table>
The second topic identified in 6.57 (defining territorial boundaries for setting up a small tourism destination area –STDA- zone design) refers to the use of those tourism related productive establishments to be used for defining such territorial boundaries between "small tourism destination areas" and "non-tourism areas". It is proposed to use as the main criterion “Accommodation for visitors” ISIC Rev.4 class, which includes the following categories:

- 5510 Short term accommodation activities
- 5520 Camping grounds, recreational vehicle parks and trailers parks
- 6810 Real estate activities with own or leased property
- 6820 Real estate activities on a fee or contract basis

In practically all EU member countries as well as in non-European countries pertaining to the G.20 (all of them statistically developed countries), the corresponding establishments provide regular data on accommodation, other provision of services to guests, equipment, any other type of information to National and/or Regional Statistical Offices (either monthly or annual); also data provision of any physical improvement of such establishment (or the construction of new ones) are administratively recorded and might be included in the frame of accommodation units held by such Offices. Also bed capacity associated to such establishment is a stable parameter along the medium term for tourism destinations and consequently, the STDA zone design also benefit of such spatial type of stability.
11. As might seem obvious, economic territorial impact derived from expenditure associated to visitors lodged in a given STDA will be associated to such territorial entity unless itinerary type surveys or IT records could allow for distributing such expenditure all along the different territorial entities visited during the stay (see Glossary / Tourism trip and tourism visit).

12. In addition to the main criterion (type of accommodation establishments for tourists), other complementary ones could be used for zone design if required, depending on the type and location of the tourism destination:
   - The existence of different main tourism products in such spatial area
   - Proposals received after consultation with tourism key stakeholders at such tourism destination
   - Inspection of the proposed zone design

13. In the case of the Canary Islands, this main criterion was used complemented with the existence or not of some other type of tourism industry establishments. (see Hernández-Martín et al., 2014, p. 8-11)

What is interesting to highlight is that the Directory of accommodation establishments (ALOJATUR) is geo-referenced and regularly updated including legal and not fully legalized facilities. More specifically," in order to improve the directory, the Regional Statistical Office (ISTAC) utilises a very useful source - the Tourism Expenditure Survey. In this monthly survey around 37,000 tourists are asked every year for the name of the collective accommodation establishment (if applicable) in which they have stayed. If the name provided is not already in the directory, then research begins in order to clarify the situation and, eventually, to ensure its inclusion. In June 2012 there were 716 tourism accommodation establishments in Tenerife, including 250 hotels, 199 apartment complexes and 267 rural houses. The average size of each hotel is bigger than that of apartments complexes and, of course, of rural houses. Therefore, 61% of bed-places correspond to hotels, 38% correspond to apartments and 1.6% to rural houses". (Hernández-Martín et al., 2014, p. 12)

14. Two different issues regarding the central role played by the Directory of accommodation establishments in the setting up of the Canary Islands R-TIS must be highlighted:
   - Linking the main demand side surveys to ALOJATUR requires the inclusion of a question in the questionnaires used about the identification of the name of the establishment where the tourist overnighted; by so doing, it is not only possible to update such Directory but also to geo-reference the answers of such tourists. Consequently, because being geo-referenced, the database including both demand and supply side basic data and indicators allows for expanding the original regional set of data (by articulating national/regional main national statistical sources) with proper regional surveys so as to include in the database sub-regional extensions of official statistical data.
   - As visualized in the following graphic, ALOJATUR is the basic core of such a system; the way this Directory is being updated and the fact that it is geo-referenced explains the difference with the conventional way such directories are designed and updated.
15. What is also relevant in this case study is that the main operations described in the Canary Islands R-TIS includes a spatial set of basic data and indicators duly checked (looking for coherence) and properly linked (seeking for a proper integration of the same or related data provided by different sources). For instance, data obtained from tourists using ships and airplanes are coherent with the number of total arrivals, which are also coherent with data of guests in accommodation establishments. Also data on employment provided by accommodation establishments can be checked for coherence with administrative registers.

16. INRouTe strongly supports and recommends that in order to advance in the measurement and analysis of tourism at subnational levels (particularly at sub-regional levels), the corresponding authorities (mainly at the regional level) should assume the design and management of the Directory of accommodation establishments (starting with hotel but expanding to all type of ISIC categories as previously mentioned –see Annex 3) and guarantee the proper geo-reference of the supporting database; this recommendation is a sort of a necessary condition to allow for territorial scalability regarding the measurement and analysis of tourism at subnational levels.

17. Such recommendation is very much supported by the potential to improve tourism economic analysis at destinations. For instance, the distribution of tourists by nationality does not follow a regular pattern through the micro-destinations as can be seen in the following graph; consequently, aggregate figures for municipalities do not necessarily represents what is happening in such lower units (and this is something that key tourism stakeholders at destination really care about)
The third topic identified in 6.57 refers to homogeneity, a complex concept that can be defined in different ways according to what the area of research might be; in the case of tourism such complexity relates to the fact that there are different possible typologies of visitors that ideally could be obtained from available data in order to address different type of analysis (for instance, tourism behavior, main activities undertaken while at destination, etc.). This concept allows us to divide a given destination in several more homogeneous areas using specific criteria. Once created STDAs, also non-official and/or non-statistical data should be geo-referenced and added to the R-TIS data base being mobile phones records a particularly relevant source.
19. This kind of “critical mass of information” criteria for zone design should also assist improving management and monitoring in such tourism destinations by allowing for a more focused and efficient market designed initiatives.

20. As already mentioned, the main criteria used in the case study has been the type of accommodation establishments for tourists. The following paragraphs explain the process followed: starting with a pilot study in two municipalities in the south of the island of Tenerife and extending the methodology used to all the seven islands of the archipelago.

21. The spatial area chosen for the pilot study can be seen in figure and the definition of the different areas to be identified in those two municipalities (Adeje and Arona) labeled as “micro-destinations” (nine of them have been identified). (see 6.47)

Figure 7 Tourism microdestination in Arona-Adeje (South Tenerife) Source: Cartográfica de Canarias S.A. (GRAFCAN) for cartography and aerial orthophotography

In the project of reference, a “micro-destination” is defined as a small geographical unit that is highly dependent on tourism. It comprises of a wide range of tourism facilities and has a differentiated image and tourism typology (tourism products). In addition, a micro-destination is a useful individual unit for the purposes of decision making in tourism management and planning. For a more operational definition, a micro-destination is a spatial unit of statistical analysis characterized by a high density of establishments of tourism characteristic industries, tourism homogeneous statistical information, and a spatial continuity. Note that because micro-destination are small areas specialized in tourism, they show a high concentration or density of tourists and tourism activities.
22. The application of the criteria for delimiting the tourism micro-destinations in both municipalities of South Tenerife has led to the identification of nine different micro-destinations, each with their own characteristics. The following figures illustrate the complexity of the work process carried out for the pilot study by the Canary Islands Statistical Institute (ISTAC).

*Figure 8 Location of Pilot Study - Density of Tourist Beds. Source: ISTAC*
Figure 9 Tourism Entity Las Americas Los Cristianos. Source ISTAC

Tourism entity: Las Américas - Los Cristianos

Tourism groupings: Las Américas - Adeje, Las Américas - Arona, Los Cristianos
These micro-destinations represent around 1% of the island’s surface area, but inside their boundaries 63.8% of the island’s tourism collective accommodation bed-places can be found here (accounting for 22.6 millions of overnights in 2011. In December 2011, there were a total of 93,620 tourism bed-places in the nine micro-destinations while the population living in the two municipalities in the same year reached an official total of 120,473 inhabitants.
23. “The statistical data obtained for the nine micro-destinations allow us to affirm that each of the resulting units exhibit a sufficient number of differential characteristics to justify producing specific tourism information for them, such as illustrated in Table 4”


<table>
<thead>
<tr>
<th>Micro-destination</th>
<th>Overnights</th>
<th>Average daily expenditure per tourist (E)</th>
<th>% of British tourists</th>
<th>% of tourists ≥ 5</th>
<th>% all-inclusive packages</th>
<th>% satisfaction^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Callao Salvaje</td>
<td>467,300</td>
<td>95.74</td>
<td>43.9</td>
<td>33.8</td>
<td>15.6</td>
<td>90.0</td>
</tr>
<tr>
<td>Costa Adeje</td>
<td>5,373,303</td>
<td>122.32</td>
<td>41.5</td>
<td>28.3</td>
<td>28.0</td>
<td>92.6</td>
</tr>
<tr>
<td>Costa del Silencio</td>
<td>466,450</td>
<td>87.71</td>
<td>36.9</td>
<td>37.3</td>
<td>35.3</td>
<td>93.8</td>
</tr>
<tr>
<td>Las Americas 1</td>
<td>4,959,210</td>
<td>131.13</td>
<td>43.2</td>
<td>32.6</td>
<td>24.4</td>
<td>93.8</td>
</tr>
<tr>
<td>Las Americas 2</td>
<td>2,989,851</td>
<td>122.50</td>
<td>43.8</td>
<td>20.3</td>
<td>15.8</td>
<td>88.2</td>
</tr>
<tr>
<td>Los Cristianos</td>
<td>2,281,942</td>
<td>106.18</td>
<td>55.6</td>
<td>39.4</td>
<td>11.6</td>
<td>94.0</td>
</tr>
<tr>
<td>Playa Paraiso</td>
<td>1,623,828</td>
<td>125.23</td>
<td>40.0</td>
<td>21.0</td>
<td>79.0</td>
<td>93.0</td>
</tr>
<tr>
<td>Playa de El Duque</td>
<td>3,151,379</td>
<td>164.63</td>
<td>33.7</td>
<td>23.4</td>
<td>20.7</td>
<td>93.7</td>
</tr>
<tr>
<td>Torviscas y Fañabé</td>
<td>1,323,727</td>
<td>104.94</td>
<td>59.0</td>
<td>27.4</td>
<td>18.7</td>
<td>89.4</td>
</tr>
</tbody>
</table>

^aTourists having been more than five times in the Canary Islands.
^bOverall impression of the trip being good or very good.
Source: Canary Islands Institute of Statistics.

24. As mentioned in Chapter 6, the methodology used in the pilot study was extended to all the seven islands of the archipelago allowing for a more precise analysis of tourism impacts and contributions at sub-regional levels.

For instance, a characteristic of the tourism model of the Canary Islands is the high ratio of tourism expenditure that is spent in countries of origin (on air transport, packages, excursions) and the small amount of money spent once at the destination. The figures on the ratio of tourism expenditure made once at the destination reflect that tourists staying in micro-destinations with more obsolete accommodation facilities and a predominance of apartments tend to have a higher ratio of expenditure at the destination. This is also true in the case of the total expenditure made at restaurants, for example.

Figure 11 Concentration of the tourism activity in the Canary Islands. Source: ULL
25. Finally, the existence of "small tourism destination areas" (STDAs) will greatly contribute to the forth topic previously mentioned: linking recommended guidelines included in this document with a more holistic approach regarding tourism and environmental sustainability.

26. In the case of the Canary Islands, the actual database should be supplemented with georeferenced information on water and electricity consumption as well as with other data useful for connecting tourism and environmental sustainability analysis (see box in next para. 28). There are also many other topics at destination levels that could greatly benefit from more data and analysis. Just as an example, a relevant issue to be addressed is the place where tourists stay and the places visited because they explain the mobility of tourists and consequently, allows for environmental impact analysis. Therefore, the available information on places visited by tourists is still not related to geo-located information on accommodation establishments in the case study used; when this could be achieved, the information on the mobility of tourists while at destination will be significantly improved.

27. As already mentioned, the Framework for the Development of Environmental Statistics (FDES) 2013 was approved by the UN Statistics Commission as part of their 44th session period. FDES (2013) recognizes that the environmental statistics gather a wide range of information and are interdisciplinary in nature. Their sources are different data producers, likewise for their compilation numerous methods are used.

FDES (2013) enumerates the most important environmental statistics for the description of statistical topics, thus being useful for the guidance of countries developing national programmes of environmental statistics. The minimum set of environmental statistics is conceived with enough flexibility so that it can be adapted to the concerns, priorities and resources of each country within the environmental field, and therein diverse indicators are defined for which breakdowns linked to tourism are recommended. These indicators are as follows:

- Final consumption of energy
- Water use
- Total emissions of direct greenhouse gases (GHGs), by gas
- Consumption of ozone depleting substances (ODS), by substance
- Emissions of other substances
- Volume of wastewater generated
- Amount of waste generated

On the other hand, from the point of view of human pressure, tourism population is a tourism statistics concept proposed by INRouTe for tourists, as a subset of visitors, and for the measurement and analytical purposes linked to concentration/diffusion of tourism activity indexes as well as for setting up tourism environmental indicators.

Finally, for island territories, with a vast surface under environmental protection, coinciding with a land shortage, it is important to measure the amount of land used by the tourism supply.

(For more details, interested readers should see Annex 39/Background)

28. The measurement of many of the cited indicators is not a minor issue. The Canary Islands Statistics Institute (ISTAC) strategy implies providing data from the accommodation supply and for tourism micro-destinations, which is valuable for the sustainable management of tourism destinations. The data gathering strategy within the Tourism
Accommodation Survey embodies different types of methods: survey, cross check of administrative records and sensorization. The indicators that will be dealt with as part of the first phase are:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Data gathering methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final consumption of energy</td>
<td>Survey</td>
</tr>
<tr>
<td></td>
<td>Intake sensorization</td>
</tr>
<tr>
<td>Water use</td>
<td>Survey</td>
</tr>
<tr>
<td></td>
<td>Intake sensorization</td>
</tr>
<tr>
<td>Amount of waste generated</td>
<td>Sensorization by waste type</td>
</tr>
<tr>
<td>Tourism population (already published)</td>
<td>Survey</td>
</tr>
<tr>
<td>Land use</td>
<td>Administrative record (Cadastre)</td>
</tr>
</tbody>
</table>

29. If it could be accepted that the Canary Islands Tourism micro-destination project as well as other similar initiatives in other countries will pave the way towards operational initiatives to support tourism stakeholders at sub-regional levels, such experience will certainly improve regional insight on those four topics already discussed which seem particularly relevant for all type of such stakeholders tourism practitioners –including tourism officials who commission surveys and research, and those who undertake such surveys- as well as public institutes and agencies, regional and local governments, universities, research centers, industry associations, trade bodies and specialized firms- and obviously, it will allow for improving definitions and guidelines recommended in this document.