



Models of Integrated Tourism in the MEDiterranean Plus

# D.3.1.2 b - Indicators guidelines (additional deliverable)









## D.3.1.2 b – Indicators guidelines (additional deliverable)

Work package: WP3 Testing and Evaluation

Type of deliverable: Tool

Dissemination level: PU - Public

### **Document history**

Date:	Author:	Version:	Text:
20/08/2017	Lluís Prats	V1	Example of indicators guidelines shared with partners
19/10/2017	Lluís Prats Cristina Massó	V2	Draft of the indicators guidelines for all indicators
3/11/2017	Cristina Massó	V3	Amendments to guidelines indicators after the revision and feedback provided by UdG team
5/12/2017	Cristina MASSÓ	V4	Document with all the feedback from the partners included.
22/11/2018	Ariadna Gabarda	V5	Document after the revision of the indicators Excel file
28/06/2019	Ariadna Gabarda Jordi Calabuig	FV	Final document reviewed by the partners

E-mail: mitomed@regione.toscana.it

Web site: <a href="https://mitomed-plus.interreg-med.eu">https://mitomed-plus.interreg-med.eu</a>

MITOMED+ Project is co-financed by the European Regional Development Fund within the Interreg Mediterranean Programme





### Contents

Glossary6
Geographical data6
Tourist supply variables6
Tourist demand variables6
Generic / destination Indicators8
ID: 1. Percentage of the area of the destination with a sustainable tourism action plan, with agreed monitoring, development control and evaluation arrangement (%)
ID: 2. Visitors satisfaction with their overall experience in the destination9
Economic Indicators
ID: 3. Percentage of tourist organizations in the destination using a voluntary verified certification/labelling for environmental/quality/sustainability and/or CSR measures (%)10
ID: 4. Relative contribution of tourism to the GDP destination (%)11
ID: 5. Average length of stay of tourists (nights)12
ID: 6. Number of overnight stays13
ID: 7. Occupancy rate in commercial accommodation (%)14
ID: 8. Direct tourism employment as percentage of total employment (%)15
ID: 9. Daily spending per tourist (€)16
ID: 10. Number of cruise passengers per day, in relation to population (1:1 ratio)17
Social & Cultural Indicators19
ID: 11. Number of beds in commercial accommodation in relation to population (1:1 ratio)19
ID: 12. Variation of unemployment rate between low and high season (%)20
ID: 13. Number of equivalent visitors per resident (1:1 ratio)20
ID: 14. Number of second/rental homes per one home (1:1 ratio)21
ID: 15. Percentage of tourist attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes (%)22
ID: 16. Proportion of cultural sites and practices under some protection label related to the total number of cultural resources23
ID: 17. Average wage in tourism for women compared to men's employment24
Environmental Indicators25
ID: 18. Percentage of the destination area that is designated for protection (%)25
ID: 19. Percentage of the destination area under a biodiversity protection plan (%)25
ID: 20. Solid urban waste produced by destination in tons per person per day (relation between low and high season)26
ID: 21. Volume of solid urban waste recycled (relation between low and high season)27





ID: 22. Water consumption in litres per person per day (relation between low and high season)
ID: 23. Energy consumption (KWh) per person per day (relation between low and high season)
ID: 24. Number of colony-forming units of pollution in seawater per 100 ml ( <i>Escherichia coli</i> and intestinal <i>enterococci</i> )
ID: 25. Number of berths and moorings for recreational boating in relation to total length of coastline
ID: 26. Number of blue flags, EMAS, ISO 14001 and other national environmental certifications, in relation to the number of beaches as that part of the coastline considered bathing area
ID: 27. Percentage of sand nourished (%)
ID: 28. Percentage of coastline Km of free access beaches relative to total lineal Km of beaches (%)
ID: 29. Water quality in tourist harbors/marinas (ppm)34
ID: 30. Percentage of beaches accessible to all: mobility and sensorial disabilities (%)35
ID: 31. Percentage of electric energy consumed by renewable sources (%)36
ID: 32. Number of days when the NOx threshold is trespassed37
ID: 33. Use of land: area of developed and building land in relation to land designated as not for building (1:1 ratio)





**METHODOLOGICAL NOTE:** In the online platform, there will be a section for each indicator, where the destinations can include specific details related to data collection. For instance, specific source of the data collection, doubts in the format of the data, etc. Since the testing and evaluation phase is over, all the comments and suggestions will be useful to improve this indicators system and, eventually, introduce some arrangements.

Platform link: https://mitomedplus.andalucia.org/mitomedplus/index.html





### **Glossary**

Please, find here some useful definitions in order to homogenize concepts among all the destinations calculating the indicators. These general criteria are the basis for all the gathering process, except in those cases where specificities are required.

### Geographical data

**Destination:** the territorial unit to be analysed in order to calculate the indicators. It has to be considered that, to manager's interest, data can be aggregated for supra-municipal destinations.

Area of the destination: area in km<sup>2</sup> of the destination.

Length of the coast: length in km of the coastline.

Beach: coastal land besides the sea and adapted for bathing-related activities.

**Population**: number of inhabitants registered in the census of the destination.

### Tourist supply variables

**Commercial accommodation**: it comprises those tourist organizations offering accommodation within the commercial sector, such as hotels and similar, campsites, rural accommodation and/or tourist apartments. Second or rental homes and cruises must be excluded from this category.

**Second/rental home:** within destination's housing, second and/or rental homes are those homes to be used for tourist purposes.

**Beds**: beds in commercial accommodation per month.

**Extra beds:** those beds that are not registered and must be excluded from the calculation. Also important the accommodation types that generates reliable open data to be used.

**Tourist organization** as a public and/or private owned company with the same main activity, which is to serve visitors directly and is of one of the tourism characteristics activities (...) It is important to note that establishments that having a particular tourism characteristic activity as a secondary activity should not be included." Source: <a href="https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf">https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf</a> (pp.50)

### Tourist demand variables

**High, low and/or other tourism season**: understanding the variety of idiosyncrasies, each destination will define the months included in "high season", "low season" and/or "other seasons" individually. This can be done initially when registering the destination.

**Tourists**: international recommendations define a visitor as a **tourist** (domestic, inbound or outbound) with a trip including an overnight stay in the destination. Source: <a href="https://unstats.un.org/unsd/publication/Seriesm/Seriesm/Seriesm\_83rev1e.pdf">https://unstats.un.org/unsd/publication/Seriesm/Seriesm\_83rev1e.pdf</a> (pp. 10)





**Same-day visitors**: number of visitors in the destination including only people with no overnight stays.

**Visitors**: in line with the conceptualization recommended by WTO, visitors can be either international or domestic and include same-day visitors and tourists. Concerning international visitors, they are returning outbound visitors in the case of residents or arriving inbound visitors in the case of non-residents, while domestic visitors are understood as someone who is on a tourism trip that is a resident travelling in the country of reference. Source: https://unstats.un.org/unsd/publication/Seriesm/SeriesM\_83rev1e.pdf (pp. 16)

**Equivalent visitors (ETCA)**: the full time equivalent visitors during a year. The measuring unit is related to the annual equivalent people, so every day that an individual is in a destination is equivalent to 1/365 annual equivalent people. For instance, an individual staying one week during its holidays is equivalent to 0.02 ETCA people.

**Occupancy rate in commercial accommodation**: occupancy rate based on the number of available beds per month. The result must reflect the average of all types of commercial accommodation.

**Overnight stays:** nights that each tourist is sleeping at your destination. This means that for the multi-destination tourists, it is important to calculate only the nights stayed in your destination.

**Survey**: in some indicators, we asked for data gathered through surveys. We recommend that in the case of questions in case of a face-to-face survey could be used the ones described in ETIS.

Sample resident survey:

https://www.surrey.ac.uk/shtm/Files/ETIS%20Toolkit%20Sample%20Resident%20Survey.pdf

Sample destination management survey:

https://www.surrey.ac.uk/shtm/Files/ETIS%20Toolkit%20Sample%20Destination%20Management%20Survey.pdf

Sample visitor survey:

https://www.surrey.ac.uk/shtm/Files/ETIS%20Toolkit%20Sample%20Visitor%20Survey.pdf).





### **Generic / Destination Indicators**

ID: 1. Percentage of the area of the destination with a sustainable tourism action plan, with agreed monitoring, development control and evaluation arrangement (%)

**Indicator name:** Percentage of the area of the destination with a sustainable tourism strategy/action plan, with agreed monitoring, development control and evaluation arrangement (%).

### Calculation:

Question: Is there a strategy for sustainable tourism? Yes / No. If Yes:

Area (km²) of the destination included in a strategic plan

Total area (km²) of the destination

x 100

**Collection of the data**: Evidence of an existing strategy in place for sustainable tourism in the coastal destination. % of the area included in the action plan.

Note: Only the supra municipal plans that have clear actions in the municipalities of the destinations should be considered in this indicator.

**Collection method**: Data must be collected analysing each individual action plan. Priority will be given to the international and standard plans, but all of them, including the local ones, will be also valued. In case of different plans affecting the same area, the area affected will only be included once in the calculation.

Format of the data collected: The area of the destination included in the action plan.

**Output format**: In %. This data can also be showed as the area of bigger destinations by aggregation of the local destinations. Annual basis.

**Result interpretation**: A threshold will thus be defined. No existence of a plan equals 0%.

Poor: From 0% to 33,99%

Good: From 34,00% to 66,99%

• Very good: From 67,00% to 100%

**How to understand the threshold**: The ideal value of this indicator should be 100%, which would reflect that the entire destination is included in a sustainable strategy, because we need to understand that we are not searching only for environmental protections but for all the sustainability issues. The % is calculated in relation to the area of the destination included in a sustainability plan. Hence, if only 60% of the destination is affected by a sustainability strategy, it would refer to the quartile 2. This would imply there is still room to include additional areas and actions in the sustainability plan to maximise its impact.

#### **Definitions to clarify:**

 <u>Sustainable tourism Action Plan:</u> This indicator tries to measure the management commitment and involvement for the sustainability of the destination. This indicator considers sustainability in its broadest and most generic meaning, any plan considered "sustainable" by the destination will be considered here. This information will be refined in other indicators as per regard to economic, sociocultural and environmental





sustainability. Additionally, this indicator needs clarification on which sustainable tourism strategies or action plans can be objective enough to be considered. In this regard, it was proposed to only consider defined standard strategies or action plans.

### ID: 2. Visitors satisfaction with their overall experience in the destination

**Indicator Name**: Visitors satisfaction with their overall experience in the destination.

#### Calculation:

Visitors surveyed with level of satisfaction 4 and 5 of ETIS scale

x 100

Total number of visitors surveyed

**Collection of the data**: The collection of this data will require a survey. The survey can be from direct contact or via technological supplies.

#### Collection method:

- The easiest way to collect this data will be using automatic systems placed at some access/exit points to the beaches, similar to these already found in other tourism facilities, such as airports, and tourist offices. These systems have the advantage of offering very clear options to the survey taker, and the use of pictograms instead of text makes translation unnecessary, even if sometimes are not fully accessible. Indeed, we need to take into account the possible bias in the access to the whole diverse typology of visitors if we only have one point of data collection.
- Another option is to conduct direct and face-to-face surveys. In this case, it will be
  needed a sampling method per each destination deciding the collection points,
  moments in time, and number of surveys to ask. These surveys can also be carried out
  in addition to the usage of the automatic system.

**Format of the data collected**: Number of the visitors surveyed in the coastal destinations that scored 4 or 5 out of the total number of visitors surveyed.

Output format: % of total visitors surveyed that scored 4 or 5 or average. Annual basis.

**Result interpretation**: The thresholds will be set on the basis of the values obtained by the destinations or regions predefined. Note that:

- The highest value is equal to 100%
- The lowest value is equal to 0%

The rest in relation to those two limits the results can be divided into 3 categories:

• Low: 0-33,99%

• Regular: 34,00-66,99%

High: 67,00-100%

**How to understand the threshold**: there are no major issues in understanding this indicator, as it reflects level of satisfaction of visitors following the structure of a Likert scale with values ranging from 1 to 5 as indicated in the section above. Secondary indicators might be obtained as well for other purposes, as an example the number of people unsatisfied and their place of answer, to check for possible problems and solutions.

**Definitions to clarify**: N/A.





### **Economic Indicators**

ID: 3. Percentage of tourist organizations in the destination using a voluntary verified certification/labelling for environmental/quality/sustainability and/or CSR measures (%)

**Indicator Name**: Percentage of tourist organizations in the destination using a voluntary verified certification/labelling for environmental/quality/sustainability and/or CSR measures (%).

### Calculation:

Number of tourist organizations using certifications and CSR measures x 100

Total number tourist organizations in destination

**Collection of the data**: This data could easily be collected by contacting certification companies. In the eventuality that they do not want to share a list of certified organizations, the destination should consider the creation of a census of certified organizations.

**Collection method**: Some destinations have their local or regional certifications or labels, but in order to be comparable and transferable those local labels will not be considered. The labels that will be included are the following ones: EMAS, ISO 14001, EU Eco-label, Green Globe 21, EarthCheck, Green Key, Biosphere and Travel Life. We would request destinations to keep the full list of the labels, even if one per tourist organizations will be counted in this indicator, in case that sub-indicator are developed in the future.

**Format of the data collected**: Number of tourist organizations that are recognized with one or more of the labels above mentioned. Each company only counts once even if they have several labels.

**Output format**: % of tourist organizations counting with one of the labels mentioned in collection method section. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data per tourist organizations
- Calculation based on data included in Services sector
- Other

**Result interpretation**: This indicator will be in the form of a percentage for each destination. The thresholds will be set on the basis of the values obtained by the destinations predefined. Note that:

- The highest value is equal to 100%
- The lowest value is equal to 0%

The rest in relation to those two limits the results can be divided into 3 categories

Low: 0-33,99%

Regular: 34,00-66,99%

High: 67,00-100%





**How to understand the threshold**: The idea is to have the highest threshold possible. The final result shows you which is your position in a global environment, or in the environment that you decide to check, like your competitors set. Clear values are 100% meaning that you are the best ranked destination in this aspect, or 0% meaning that you are in the last ranking positions. The rest of percentages are showing how close you are from one or the other extreme.

If you are in a good value but you compare yourself with the best destinations you might have a low number, and with the same value if you compare the result with the worst destinations will turn you into a high value.

### **Definitions to clarify:**

• The labels that are to be considered for this indicator have already been listed. It goes without saying that we are considering exclusively tourist organizations duly registered and with compliance to all applicable legislation. However, the sensitivity towards sustainability practices is not only found when tourist organizations have certifications and labels. Normally certifications are too expensive and tourist organizations are not often taking into consideration this option in their budgets.

### ID: 4. Relative contribution of tourism to the GDP destination (%)

Indicator Name: Relative contribution of tourism to the GDP destination (%)

### Calculation:

Income from tourist organizations	
	x 100
Gross Domestic Product	

Collection of the data: Official governmental statistics

**Collection method**: The ideal data for this indicator is the relative contribution of the tourist organizations to the destination's economy (GDP). Since this may be difficult to obtain at destination level, it is highly recommended that two other values are measured:

- Proportion of tourist organisations in relation to the total number of businesses in the destination (%)
- Proportion of active population in tourist organizations in relation to the whole active population (%) (corresponds to indicator 8)

**Format of the data collected**: GDP coming from tourism organizations out of the total GDP of the region.

**Output format**: Percentage of GDP generated from tourist organizations. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data per tourist organizations
- Calculation based on data included in Services sector
- Other

**Result interpretation**: This is a complex indicator and it has several interpretations. The same value, let's say 25% of tourism contribution to the GDP, can be better or worst depending on the country's vocation and strategy, and the type of development desired. For this reason the decision is that the threshold will be defined as the average value of the EU (10,2% in WTTC 2017). Then a scale below and one over this threshold is defined as follows:





- Over
  - Good: Up to 15,99% higher than the optimal
  - o Regular: From 16,00% and up to 29,99% higher than the optimal
  - o Not good: Above 30,00% higher than the optimal
- Below
  - o Good: Up to 5,99% lower than the optimal
  - Regular: From 6,00% and up to 10,99% lower than the optimal
  - Not good: Below 11,00% lower than the optimal

**How to understand the threshold**: The basis for the threshold has been defined according the average value of tourist organizations in the EU revenue (10,2% in WTTC 2017). Two threshold have been designed over and below this average to measure it in comparison to the average of the EU.

### **Definitions to clarify:**

 <u>GDP</u>: Gross domestic product (GDP) is a monetary measure of the market value of all final goods and services produced in a period of time.

### ID: 5. Average length of stay of tourists (nights)

**Indicator Name**: Average length of stay of tourists (nights)

#### Calculation:

Total number of overnight stays

Total number of tourists

**Collection of the data**: Length of stay in commercial accommodation at destination level, and divided by type of accommodation. Also the total number of tourists of the destination.

**Collection method**: Official statistics about accommodation length of stay. If the data is not collected officially which are the other options:

- Through direct surveys to tourists staying at your destination, and as a proxy direct surveys to tourists asking for information at the tourism offices.
- Through direct surveys to the commercial accommodation suppliers.

**Format of the data collected**: Addition of all lengths of stay collected in number of overnights, divided by the number of tourists. Collected in a monthly and annual basis.

**Output format**: Mean of overnight stays per month and per year. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on total number of tourist
- Calculation based only on tourists staying in commercial accommodation
- Other

**Result interpretation**: The results might be interpreted the following way

Compared with other destinations. This comparison can be with all destinations average number or with the average of a set of selected destinations.





Good: 11,00% or more over average

Regular: up to 10,99% over or under the average

Not good: 11,00% or more below average

### How to understand the threshold:

- Good situation means that your tourists are staying longer at your destination than to
  other destinations. This is a good sign of a destination with a wide range of products to
  be consumed or places to be visited, or of a very loyal tourist.
- Regular situation means that you are on average with the other destinations, and then
  you can decide adopting measures to increase this value or not. If you are passing
  from good to regular situation is an alert of destination offer problems.
- Not good situation means that you are below the average of other destinations and that you need to increase the efforts to revert it. Otherwise you can go for a strategy on short break tourism, to clearly adapt to your reality.

In terms of the analysis, it could be linked the result of this indicator with that of ID 9 (expenditure) to have a better perspective of the economic sustainability of the destination.

**Definitions to clarify:** N/A.

### ID: 6. Number of overnight stays

Indicator Name: Number of overnight stays

#### Calculation:

a) (monthly basis) Number of commercial accommodation stays per month

b) (annual basis) Sum of the monthly number of commercial accommodation overnight stays

Collection of the data: Number of overnight stays per each month and per year

Collection method: The data can be collected from tourist office statistics or equivalent.

If the data is not collected officially, the other options are:

- Through direct surveys to tourists staying at your destination, and as a proxy direct surveys to tourists asking for information at the tourism offices.
- Through direct surveys to the commercial accommodation suppliers.

Format of the data collected: Number of overnight stays. Calculated monthly and annual.

Output format: number of overnight stays per month and per year.

**Result interpretation**: The threshold can be defined by the average number of nights per month obtained from the destinations you want to be compared with.

Good: More than 11,00% Over the average

Regular: 10,99% higher or lower than the average

Not good: More than 11,00% Below average

**How to understand the threshold**: In addition to the threshold below, it is recommended to also analyse the overcrowding and seasonality aspects through calculating:

- The monthly value
- Evolution during the year (trend)





### **Definitions to clarify:**

 Overcrowding: each destination should be able to evaluate which are the acceptable thresholds related to overcrowding in specific points and/or in the whole destination.

### ID: 7. Occupancy rate in commercial accommodation (%)

Indicator Name: Occupancy rate in commercial accommodation (%)

#### Calculation:

Number of occupied beds in month "x" or year

x 100

Total number of beds

**Collection of the data**: Number of beds occupied. Also number of beds in the calculation period. It is of interest to have the data divided by type of accommodation and to calculate a weighted average to reflect the weight of the different types of commercial accommodation.

**Collection method**: The data can be collected from tourist office statistics and equivalent or directly from the stakeholders.

If the data is not collected officially which are the other options:

- Through direct surveys to tourists staying at your destination, and as a proxy direct surveys to tourists asking for information at the tourism offices.
- Through direct surveys to the commercial accommodation suppliers.

**Format of the data collected**: Number of occupied beds in one month and year over the total number of beds.

**Output format**: Expressed in %. This data can offer different outputs, which should be considered for the destinations. However, for the usage of the platform, we propose to use the data for: occupancy rate per month and year expressed in %. Other options are outlined below. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on the total number of beds in opened and closed commercial accommodation
- Calculation based on the number of available beds in opened commercial accommodation
- Other

**Result interpretation**: This indicator takes the form of percentage and the threshold is defined taking as the basis the average number of the evaluated destination, region or set of competitors. It is defined with a traffic light shape.

- Good: More than 11,00% Over the average
- Regular: 10,99% higher or lower than the average
- Not good: More than 11,00% Below average

**How to understand the threshold**: the threshold is the average of occupancy rates for all sets in the database. The occupancy rate of a specific destination is compared against the global average and evaluated accordingly, positively if found above the average or negatively if below the global average.

**Definitions to clarify**: N/A.





### ID: 8. Direct tourism employment as percentage of total employment (%)

Indicator Name: Direct tourism employment as percentage of total employment (%).

### Calculation:

Number of people employed in tourist organizations

x 100
Total active population

**Collection of the data**: All full-time and part-time number of people employed in tourist organizations. All full-time and part-time total active population. Collected on monthly basis.

**Collection method**: The data can be collected through local, regional or national statistical bureaus.

**Format of the data collected**: Total number of people employed in tourist organizations and total number of active population.

**Output format**: Expressed in % per month, per year and per season. % of the number of people employed per month in the tourist organizations. This can also be shown per season impact, or in a yearly basis. Also a comparison with previous years can be an output to show and analyse. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data per tourist organizations
- Calculation based on data included in Services sector
- Other

**Result interpretation**: This is a complex indicator and it has several interpretations. Direct tourism employment in some destinations is taken only from activities linked to hospitality, in other regions as service sector in general, or others considering the tourism satellite accounts basis. For this reason, and according to the average number of people employed in tourist organizations in the EU, an optimal value or threshold will be defined as the average value of the entire EU (9,6% in WTTC 2017). Then a scale below and one over this threshold is defined as follows:

- Over
  - o Good: up to 15,99% higher than the optimal
  - o Regular: from 16,00% and up to 30,99% higher than the optimal
  - o Not good: above 31,00% higher than the optimal
- Below
  - o Good: up to 5,99% lower than the optimal
  - o Regular: from 6,00% and up to 10,99% lower than the optimal
  - Not good: below 11,00% lower than the optimal

It is also recommended to conduct an analysis of aspects of overcrowding and seasonality, hence it is important to collect:

The monthly value





Evolution during the year (trend)

**How to understand the threshold**: The basis for the threshold has been defined according the average number of people employed in tourist organizations in the EU (9,6% in WTTC 2017). Two threshold have been designed over and below this average to measure it in comparison to the average of the EU.

In this case the best value is to be close to the middle value, because the European value includes very specialized tourism destinations and actual non tourism destinations. This mid value implies not extreme dependence of tourism.

When further we are from the central value it means that we have more or less dependency of the tourism.

### **Definitions to clarify:**

 Active employed people: Inhabitants with a regular legal contract during the period analysed, including those on a sick leave.

### ID: 9. Daily spending per tourist (€)

**Indicator Name**: Daily spending per tourist (€)

#### Calculation:

Average of total spending per tourist per day (in €)

**Collection of the data**: Calculation of the expenditure of tourists done in a specific destination in one day. Whenever is possible to divide it between foreign and national tourists.

**Collection method**: An approximation using credit card expenditure could be used, in order to avoid surveys. Otherwise, direct surveys should be planned.

In this case, it will be needed a sampling method per each destination deciding the collection points, moments in time, number domestic and international tourists, and number of surveys to ask.

These surveys can also be carried out in addition to the usage of the automatic system.

Format of the data collected: Amount of money spent in tourist organizations (€).

**Output format**: Average daily expenditure per tourists. Expressed in euro. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on segregated data (food, beverage, car renting...)
- Calculation based on overall daily spending
- Other

**Result interpretation**: The threshold is defined as the average number of the evaluated destinations. In this regard the threshold is defined as following:

- Good: More than 11,00% Over the average
- Regular: 10,99% higher or lower than the average
- Not good: More than 11,00% Below average

**How to understand the threshold**: The basis for the threshold is the average of daily expenditure for all the evaluated destinations. Good situation means that your tourists spend





more money at your destination that to others, regular situation means that they spend similar amounts than in other destinations, and finally not good situation means that they spend less at your destination that to others.

**Definitions to clarify**: No definitions need to be clarified for this indicator. The type of expenditures considered for this indicator should be all the ones incurred in tourist organizations.

### ID: 10. Number of cruise passengers per day, in relation to population (1:1 ratio)

**Indicator Name**: Number of cruise passengers per day, in relation to total population (1:1 ratio)

#### Calculation:

Average (Number of cruise passengers per day)

**Population** 

**Collection of the data**: Number of commercial cruise line passengers on a daily basis. Population of the destination.

**Collection method**: The data about the number of cruise passengers can be obtained from cruise companies or from the harbour. The data about the population of the destination can be obtained from the official census of inhabitants.

**Format of the data collected**: Number of tourists or visitors arriving from the sea confronted to the number of local population. Rate calculated 1 on 1 from cruise passengers and locals.

**Output format**: Rate calculated 1 on 1 from cruise passengers and local population. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data segregated by registered cruise passenger in harbour
- Calculation based on total number of registered passengers in harbour
- Other

**Result interpretation**: This indicator must be analysed as a trend (preferably in graphic form). Thus, it will show the days in which the town may be considered overcrowded with visitors:

Good: 0 – 0,089

Regular: 0,090 – 0,119

Not good: 0,120 and higher

**How to understand the threshold**: The threshold shows the relation of cruise passengers to the resident population in a specific destination. This allows us to analyse the level of overcrowding in a specific destination. Good situation means that the cruise passengers are equal to less than 9% of the population generating a low sense of overcrowding and not good situation means that the passengers are overpassing the number of inhabitants of the destination, generating a huge overcrowding problem.

#### **Definitions to clarify:**





- <u>Commercial cruise line passengers</u>: Those are the passengers that arrive at the destination as passengers, so this eliminates those people traveling in cruise lines for working purposes, even if they live in different locations.
- Overcrowding: each destination should be able to evaluate which are the acceptable thresholds related to overcrowding in specific points and/or in the whole destination.





### **Social & Cultural Indicators**

### ID: 11. Number of beds in commercial accommodation in relation to population (1:1 ratio)

**Indicator Name**: Number of beds in commercial accommodation in relation to population (1:1 ratio)

### Calculation:

Number of beds in commercial accommodation

Population

**Collection of the data**: Number of beds in commercial accommodations for a given year and divide it by population in destination as registered that same given year. Calculate for last year available.

**Collection method**: Information regarding population to be obtained from the destination official statistics. Information regarding beds could be obtained from the official statistics, private sector boards, chambers of commerce, or others.

Format of the data collected: Two figures needed Beds and population.

**Output format**: Number. Annual basis. Rate calculated 1 on 1 from number of beds and resident population.

**Result interpretation**: An optimal threshold will be defined as the average value of the destinations analyzed. Then a scale below and one over this threshold is defined as follows:

- Over
  - Good: up to 15,00% higher than the optimal
  - o Regular: from 15,01% and up to 30,00% higher than the optimal
  - Not good: above 30,01% higher than the optimal
- Below
  - o Good: up to 5,00% lower than the optimal
  - Regular: from 5,01% and up to 10,00% lower than the optimal
  - Not good: below 10,01% lower than the optimal

**How to understand the threshold**: The comparison to the threshold provides information on the level of specialization of a destination regarding the number of beds available in the destination.

Definitions to clarify: N/A.





### ID: 12. Variation of unemployment rate between low and high season (%)

Indicator Name: Variation of unemployment rate between low and high season (%)

#### Calculation:

Unemployment rate in low season – unemployment rate in high season

**Collection of the data**: % of active population unemployed in low season, % active population unemployed in high season.

**Collection method**: Data coming from the official statistics regarding employment. If this data it is not official use relevant data from the labour unions.

**Format of the data collected**: Number of active population, unemployment rate (%) in high season, unemployment rate (%) in low season.

**Output format**: Variation expressed in % of unemployment between low and high season. Annual basis.

**Result interpretation**: Variation between:

- Good: variation below 3,99%
- Regular: variation between 4,00% and 6,99%
- Not good: variation over 7,00%

**How to understand the threshold**: This indicator tries to measure the unemployment breach between high and low seasons, considering the element of seasonality of tourism in each destination through the number of employees Employed in the sector, either on full-time or part-time.

**Definitions to clarify**: What is important for this indicator is to compare employment and unemployment figures in relation to tourism affluence to the destination (time unit of comparison is "season" not "month").

### ID: 13. Number of equivalent visitors per resident (1:1 ratio)

Indicator Name: Number of equivalent visitors per resident (1:1 ratio)

#### Calculation:

Number of equivalent visitors

**Population** 

**Collection of the data**: Number of equivalent visitors in a year, population for same year.

**Collection method**: Information regarding residents to be obtained from the destination official statistics. Information regarding number of equivalent visitors to be obtained from the official national statistics or to be inferred from the visitors attended at the Tourist offices. If the data is obtained on a monthly basis the effects on seasonality might be detected as well.

Format of the data collected: Number of equivalent visitors and number of residents.

**Output format**: A number. Annual basis. Please specify in the platform the method you have used to calculate this indicator:





- Calculation based on total number of tourist
- Calculation based only on tourists staying in commercial accommodation
- Other

**Result interpretation**: The threshold can be defined as an index which indicates the balance in number of equivalent tourists and residents.

- Good: above 1,05: more tourists than residents, that is a tourism specialized destination.
- Regular: 0,95-1,05 destination with tourist presence, but not very specialized.
- Not good: under 0,95: significantly less tourists than residents, that is a destination that is not tourism-specialized.

**How to understand the threshold**: The comparison to the threshold provides information on the level of specialization of a destination regarding tourism. This indicator could also be calculated on monthly basis, to give some more insight of aspects of seasonality.

A result above 1 means more tourists than residents, that is a tourism specialized region, while a result below 1 means less tourists than residents, that is the region is less tourism-specialized. When more to the extreme the result number means more or less level of specialisation.

**Definitions to clarify:** N/A.

### ID: 14. Number of second/rental homes per one home (1:1 ratio)

Indicator Name: Number of second/rental homes per one home (1:1 ratio)

#### Calculation:

Number of second/rental homes

Total number of registered homes

**Collection of the data**: A total number of homes for usage as second/rental homes and a total number of homes registered. The aim is to see the proportion of the total housing pool that is allocated for tourism purposes.

**Collection method**: Sources of official statistics, e.g. property census.

**Format of the data collected**: Number of homes to be used for tourist purposes (tourist rentals and/or second homes). Total number of homes registered in official census destination.

Output format: A number. Annual basis.

**Result interpretation**: The threshold is defined as the average number of the evaluated destinations. In this regard the threshold is defined as following:

- Good: More than 11,00% Over the average
- Regular: 10,99% higher or lower than the average
- Not good: More than 11,00% Below average

**How to understand the threshold**: The comparison to the threshold provides information on the level of specialization of a destination regarding tourism in terms of homes used only for tourist purposes





Definitions to clarify: N/A.

## ID: 15. Percentage of tourist attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes (%)

**Indicator Name**: Percentage of tourist attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes (%)

#### Calculation:

Number accessible tourist attractions x 100

Total number of tourist attractions

**Collection of the data**: List of all visitor attractions in a destination that are accessible for people with disabilities or that are provided with accessibility schemes. This should be recorded for last available year. This implies that each destination have a list of all the existing visitor attractions that have some sort of certification, even if at local level. Please specify the certification types in the provided space in the platform.

**Collection method**: Tourist office data, city council. This data might be collected manually once and then revised every year. We suggest the destinations to validate this data trough specialized associations in support of disabilities. Destinations should specify the criteria to define a tourist attraction as "accessible".

This data can be collected separately regarding physical disability, sensorial disability, and mental disability.

**Format of the data collected**: Number of accessible attractions, number of not accessible attractions, and total number of available attractions.

Output format: Percentage (%). Annual basis.

Result interpretation: The optimal value will be equated with the value for the best region:

- The highest value is equal to 100%
- The lowest value is equal to 0%

The rest, in relation to those two limits, are divided into 3 categories:

- Not good: If the resulting value is less than 50,99%
- Regular: Value between 51,00% and 75,00%
- Good: Value over 75,01%

**How to understand the threshold**: The indicator tries to measure the percentage of visitor attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes, comparing it to the region with the best performance in this area.

### **Definitions to clarify:**

<u>Tourist Attraction</u>: it is understood as "a physical or cultural feature of a particular place that individual travellers or tourists perceive as capable of meeting one or more of their specific leisure related needs. They include different types of tourist attractions such as built and natural attractions. Source: Dictionary of Travel & Tourism Hospitality Terms (R. Harris & J. Howard, 1996). For the purpose of this project we will be focusing mainly on accessible tourist attractions. These can be either public





attractions (beaches, natural parks, monuments, etc.) as well as private infrastructures (hotels, restaurants and other tourist services). In this sense, "accessible tourism enables people with access requirements, including mobility, vision, hearing and cognitive dimensions of access, to function independently and with equity and dignity through the delivery of universally designed tourism products, services and environments. This definition is inclusive of all people including those travelling with children in prams, people with disabilities and seniors." Darcy, S., & Dickson, T. (2009). A Whole-of-Life Approach to Tourism: The Case for Accessible Tourism Experiences. Journal of Hospitality and Tourism Management, 16(1), 32-44.

 <u>Person with disability</u>: "means any person whose full and effective participation in society on an equal basis with others in travel, accommodation and other tourism services is hindered by the barriers in the environment they are in and by attitudinal barriers".

http://www.accessibletourism.org/resources/accesibilityen\_2013\_unwto.pdf

### ID: 16. Proportion of cultural sites and practices under some protection label related to the total number of cultural resources

**Indicator Name**: Proportion of cultural sites and practices under some protection label related to the total number of cultural resources.

#### Calculation:

Number of cultural sites under some protection label		
Total number of cultural resources	x 100	

**Collection of the data**: Number of cultural sites inscribed in WHS/UNESCO or other legal protection policies according to cultural protection national or regional legislation; number of cultural sites offered and existing by a specific destination.

### **Collection method:**

- destination's inventory of cultural ressources and lists of protected sites. UNESCO
  World Heritage List (WHS cultural, mixt or intangible). Can be retrieved at
  <a href="http://whc.unesco.org/en/list/">http://whc.unesco.org/en/list/</a>
- destination's inventory of cultural ressources and lists of protected sites according to clear local, regional, or national protection systems.

Each destination should clearly specify the criteria to define a site being under protection.

Format of the data collected: Number of cultural resources/sites considered as protected.

Output format: Percentage (%). Annual basis.

**Result interpretation**: Proportion of protected sites and practices (UNESCO or other): in relation to those two limits, are divided into 3 categories

- Not good: If the resulting value is less than 25,99%
- Regular: Value between 26,00% and 50,00%
- Good: Value over 50,01%

**How to understand the threshold**: This indicator tries to measure the percentage of the destination covered by a policy or plan that protects cultural heritage.

### **Definitions to clarify:**



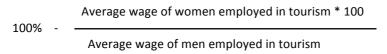


<u>Cultural resources:</u> it can be defined as physical evidence or place of past human activity: site, object, landscape, structure; or as a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it (Source: <a href="https://www.nps.gov/acad/learn/management/rm\_culturalresources.htm">https://www.nps.gov/acad/learn/management/rm\_culturalresources.htm</a>)

### ID: 17. Average wage in tourism for women compared to men's employment

Indicator Name: Average wage in tourism for women compared to men's employment.

#### Calculation:



**Collection of the data**: Average wage of women working in tourist organizations, average wage of men working in tourist organizations. Annual indicator.

**Collection method**: Data coming from the official statistics regarding employment. If this data it is not official use relevant data from the labour unions.

Format of the data collected: Average monthly brut wage (€) earned by women in the tourism industry, average monthly brut wage (€) earned by men in tourist organizations.

**Output format**: Percentage %. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data per tourist organizations
- Calculation based on data included in Services sector
- Other

**Result interpretation**: A value of 0% means in this case total equity of wages. In this regard the threshold is defined in a three possible situations:.

- Good: A difference positive or negative of less than 10,00%
- Regular: A difference positive or negative between 10,01% and 20,00%
- Not good: A difference positive or negative of more than 20,01%

How to understand the threshold: This indicator tries to measure the impact of social and cultural elements into destinations. It is clear than a difference of more than 10% in wages it is not acceptable in any circumstance. This threshold represents an alert to be checked, because the difference might be caused by several elements, like differences in the same positions or differences regarding different positions ocuppied by men and women. Regarding wages there is the possibility to include several other complementary indicators.

**Definitions to clarify**: For the calculation of this formula, we refer to brut monthly salaries.





### **Environmental Indicators**

### ID: 18. Percentage of the destination area that is designated for protection (%)

Indicator Name: Percentage of the destination area that is designated for protection (%)

#### Calculation:

Km <sup>2</sup> under protection	
	x 100
Total km <sup>2</sup> of destination	A 200

**Collection of the data**: Number of km<sup>2</sup> that are listed as protected regarding local, regional, national, or supranational systems of protection. Number of km<sup>2</sup> that the destination has.

**Collection method**: Data coming from official statistics, or from official certifying authorities of environmental protection. It might be obtained from GIS or cartography tools.

Format of the data collected: Number of km<sup>2</sup>

Output format: Percentage %. Annual basis.

**Result interpretation**: An ideal value for this indicator has been established in academic research at 12% of the total area of the destination. Therefore, this will be the threshold figure and on the basis of it destinations will perform according to the following scale:

Good: 10,00% or more

Regular: From 5,01% to 9,99%

Not good: Less than 5,00%

**How to understand the threshold**: The % of km<sup>2</sup> of protected area will be compared against the threshold recommended in academic research and will be allocated within a scale and graded according the position with this value.

**Definitions to clarify**: This indicator refers mainly to environmental protection for conservation purposes. It is important that destinations make sure not to double count the sites protected under different regulations, e.g. regional, national. The IUCN list is the reference classification of the protection system worldwide.

### ID: 19. Percentage of the destination area under a biodiversity protection plan (%)

Indicator Name: Percentage of the destination area under a biodiversity protection plan (%)

### Calculation:

**Collection of the data**: Number of km<sup>2</sup> that are included in a biodiversity plan, number of km<sup>2</sup> that the destination comprises.





**Collection method**: Data coming from official statistics or from official certifying authorities of biodiversity protection. It might be obtained from GIS or cartography tools. As with the case of ID 1, only supra municipal plans that have clear actions and impact in the destination will be considered.

Format of the data collected: Number of terrestrial km<sup>2</sup>

Output format: Percentage %. Annual basis.

**Result interpretation**: The reference value is the EU percentage included in Natura 2000 network (18,36%). Therefore, this will be the threshold figure and on the basis of it destinations will perform according to the following scale:

Good: More than 21,00%

Regular: From 15,00% to 20,99%

Not good: Less than 14,99%

**How to understand the threshold**: The % of the destination's area that is included in biodiversity plans will be compared against the percentage of EU areas under Natura 2000 network (18,36%). When higher the better.

### **Definitions to clarify:**

• In order to homogenize the criteria, we understand "destinations under a biodiversity protection plan", within terrestrial space, as those destinations which has a part or is totally included in Natura 2000 network (for EU countries or equivalent system in other countries). This network includes the sites that have been designated under the Birds Directive as Special Protected Areas (SPAs), and Sites of Community Importance (SCIs) and Special Area of Conservation (SACs) designated under the Habitats Directive.

### ID: 20. Solid urban waste produced by destination in tons per person per day (relation between low and high season)

**Indicator Name**: Solid urban waste produced by destination in tons per person per day (relation between low and high season).

#### Calculation:

a) (Tons of solid urban waste produced in low season / days per season)

(Population + number of equivalent visitors low season)

b) (Tons of solid urban waste produced in high season / days per season)

(Population + number of equivalent visitors high season)

Result b)

Result a)

**Collection of the data**: Tons of solid urban waste generated in low season; tons of solid urban waste generated in high season; population; number of equivalent visitors.





**Collection method**: Official statistics of the environmental agencies, population census, tourism official data or derived from tourist office statistics, and city council data regarding second homes.

**Format of the data collected**: Solid urban waste produced (tones), population and equivalent visitors.

Output format: Tons (t) of solid urban waste per person and per season. Annual basis.

**Result interpretation**: The threshold is defined by comparing the waste volume of c) between low and high seasons:

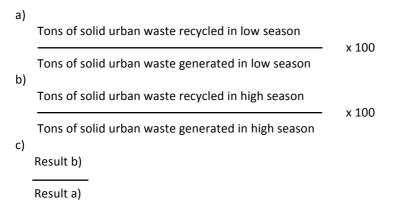
- Not good: Solid urban waste in high season is 1,50 times or more than solid urban waste in low season
- Regular: Solid urban waste in high season is 1,00 to 1,49 times bigger than solid urban waste in low season
- Good: Solid urban waste in high season is between 0,50 and 0,99 times to solid urban waste in low season

**How to understand the threshold**: The lower the value of the indicator the better, the comparison of low and high season allows for the assessment of the impact of tourism in the creation of waste. Nevertheless a negative value will never be possible in a normal situation.

**Definitions to clarify**: Seasons defined by each destination.

### ID: 21. Volume of solid urban waste recycled (relation between low and high season)

**Indicator Name**: Volume of solid urban waste recycled (relation between low and high season) **Calculation**:



**Collection of the data**: Tons of solid urban waste generated in low season; tons of solid urban waste generated in high season; tons of solid urban waste recycled in low season; tons of solid urban waste recycled in high season. This might be collected as separated solid urban waste in recycling programs, having plastic, paper, glass, organic, and general waste, and total waste. Other recycling categories might be included if they are relevant for the destination, as for instance water.

**Collection method**: Official statistics of the environmental agencies, population census, tourism official data or derived from tourist office statistics.





**Format of the data collected**: Solid urban waste produced (tones); solid urban waste recycled (tones) per item and in total

**Output format**: Number. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data segregated by recycling fraction (glass, plastic...)
- Calculation based on data grouped by total recycled volume
- Other

**Result interpretation**: Considering the result of c), the following categories are established:

- Good: more than 10% over the mean
- Regular: up or equal to 10% over or under the mean
- · Not good: more than 10% below the mean

The destination can compare not only with the mean, but also with all the other destinations or with the set defined by themselves.

**How to understand the threshold**: The ideal value in this case would be 100% of the solid urban waste produced is recycled. Bearing in mind that it is not realistic to think of a destination that reaches this value, the threshold is defined on the mean value of all the participant destinations, or in comparison with the predefined set.

**Definitions to clarify**: Seasons defined by each destination. The types of solid waste to recycle may include organic, paper, glass, etc.

### ID: 22. Water consumption in litres per person per day (relation between low and high season)

**Indicator Name**: Water consumption in litres per person per day (relation between low and high season)

### Calculation:

a)
(Litres of water consumed in low season / days per season)
(Population + equivalent visitors in low season)
b)
(Litres of water consumed in high season / days per season)
(Population + equivalent visitors in high season)
c)
Result b)
Result a)

**Collection of the data**: Litres of water consumed in low season, litres of water consumed in high season, population, number of equivalent visitors, number of days for low season, number of days for high season.

**Collection method**: Official statistics of the water management agencies, population census and tourism official data or derived from tourist office statistics.





**Format of the data collected**: Number of litres of water consumed in low and high season, population, equivalent visitors, number of days in low and high season.

**Output format**: Litres of water consumed per person per day. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data segregated by type of water consumers (domestic, industrial...)
- Calculation based on data grouped by general water consumption
- Other

**Result interpretation**: Considering the result of c), the following grades are established:

- Good: more than 10% over the mean
- Regular: up or equal to 10% over or under the mean
- Not good: more than 10% below the mean

**How to understand the threshold**: This indicator tries to measure the water consumption per tourist/day compared to the resident population water consumption per person/day while comparing a season with tourism and a season without. The threshold is defined on the mean value of all the participant destinations, or in comparison with the predefined set of destinations.

**Definitions to clarify**: For water consumption, in this case we refer to water billed consumed in households and industrial usage (e.g. hotels if it's the case in a specific country). We request destinations to specify the source of the data for this indicator for the comparability amongst different data types.

### ID: 23. Energy consumption (KWh) per person per day (relation between low and high season)

**Indicator Name**: Energy consumption (KWh) per person per day (relation between low and high season)

#### Calculation:

a)

(KWh of energy consumed in low season / days per season)

(Population + number of equivalent visitors in low season)

(KWh of energy consumed in high season / days per season)

(Population + number of equivalent visitors in high season)

c)

Result b)

Result a)

**Collection of the data**: KWh of energy consumed in low season, KWh of energy consumed in high season, population, number of equivalent visitors, number of days for low season, number of days for high season.





**Collection method**: Official statistics of the environmental agencies or electrical companies demand, population census and tourism official data or derived from tourist office statistics.

**Format of the data collected**: Energy consumed in low and high season (KWh), population, equivalent visitors.

Output format: KWh of energy consumed per person per day. Annual basis.

**Result interpretation**: Considering the result of c), the following grades are established:

- Good: more than 10% over the mean
- Regular: up or equal to 10% over or under the mean
- Not good: more than 10% below the mean

**How to understand the threshold**: The ideal value will be the one in which high season consumption have the same volume of consumption than low season. The threshold is defined on the mean value of all the participant destinations, or in comparison with the predefined set of destinations.

**Definitions to clarify**: For the purpose of this indicator, we are referring to electricity as energy consumed.

### ID: 24. Number of colony-forming units of pollution in seawater per 100 ml (*Escherichia coli* and intestinal *enterococci*)

**Indicator Name**: Number of colony-forming units of pollution in seawater per 100 ml (*Escherichia coli* and intestinal *enterococci*)

#### Calculation:

- a) number of Escherichia coli cfu in 100 ml
- b) number of intestinal enterococci cfu in 100 ml.

**Collection of the data**: Number of colony-forming units (cfu) of *Escherichia coli* per 100 ml, number of colony-forming units (cfu) of intestinal *enterococci* per 100 ml.

**Collection method**: Environmental agency, water management agency, coastal agency statistics or city council data.

**Format of the data collected**: cfu of *Escherichia coli*, cfu of intestinal *enterococci*, in the sample of water, expressed per 100 ml.

**Output format**: Number of units of *Escherichia coli* and intestinal *enterococci* in 100 ml. Annual basis.

**Result interpretation**: This indicator has two different components and therefore it needs to be split into two separate indicators. The values of the indicator will be excellent, good, sufficient or poor according to the specifications of the European Bathing Water Directive 2006/7/EC:

- Excellent quality: Escherichia coli =<250 AND intestinal enterococci =<100</li>
- Good quality: Escherichia coli =<500 AND intestinal enterococci =<200</li>
- Sufficient quality: Escherichia coli >500 AND intestinal enterococci >185





**How to understand the threshold**: This indicator is trying to measure the quality of sea water with regards to several elements present in it like bateria or other. We take the thresholds from the European Directive (Bathing Water Directive 2006/7/EC). The Directive specifies as well the collection methods and regularity.

**Definitions to clarify**: More information about the Directive 2006/7/EC here: <a href="https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0007&from=EN">https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0007&from=EN</a>

### ID: 25. Number of berths and moorings for recreational boating in relation to total length of coastline

**Indicator Name**: Number of berths and moorings for recreational boating in relation to total length of coastline.

### Calculation:

a) Number of berths

Total km of coastline

b)

Number of moorings

Total km of coastline

c)

Result: a + b

Collection of the data: Number of berths, number of moorings, total length of coastline (km)

**Collection method**: Data obtained from the city council taxes linked to berths and moorings, or through the port management agency. For length of the coastline GIS tools can provide it.

Format of the data collected: Number of units, km of coastline.

Output format: Number of berths and moorings per kilometre. Annual basis.

**Result interpretation**: This indicator should be displayed in a single value. Moreover it can be displayed as two separate values, one for berths and another for moorings.

The threshold will be set on the mean value of the regions valued:

- The highest value of all destinations is set to 100%
- The lowest value is set to 0%

Therefore, this will be the threshold figure and on the basis of it destinations will perform according to the following scale:

Good: Less than 33,99%

Regular: From 34,00% to 66,99%

Not good: More than 67,00%

This average can be compared with all the destinations, or with the preestablished set.

**How to understand the threshold**: This indicator is trying to measure the environmental impact of recreational boats and activities. To higher % of berths and moorings in the coastline, more commercial activity of boats (and more pollution) and less space for other usage of the coast/beaches.





### **Definitions to clarify:**

- Moorings: the ropes or chains that keep a boat from moving away from a particular place usually placed in the sea.
- Berths: a place in a port where a ship can be kept from moving away.

ID: 26. Number of blue flags, EMAS, ISO 14001 and other national environmental certifications, in relation to the number of beaches as that part of the coastline considered bathing area

**Indicator Name**: Number of blue flags, EMAS, ISO 14001 and other national environmental certifications, in relation to the number of beaches as that part of the coastline considered bathing area.

### Calculation:

Km of beach certified with labels

x 100

Total km of beaches in destination

**Collection of the data**: The collection of all possible certifications regarding environmental protection of the beaches will be collected. In this sense official certifications will be first checked. Nevertheless other possible certifications might be used. If one same beach has two or more certifications, for the purposes of this indicator will only be added up once, but we require destinations to insert full list of certifications in the space provided in the platform.

**Collection method**: Retrieved from the official webpages of the certification authorities of blue flags, EMAS, ISO 14001 and other national environmental certifications. The total number of km of beaches obtained by the destination itself.

**Format of the data collected**: Km of beaches with certifications, km of beaches.

**Output format**: Percentage % certified km of beaches. Annual basis.

**Result interpretation**: This indicator should be displayed in percentage relative to the total number of possible blue flags. The threshold will be set on the mean value of the destination preestablished:

- The highest value of all destinations is set to 100%
- The lowest value is set to 0%

Therefore, this will be the threshold figure and on the basis of it destinations will perform according to the following scale:

Good: More than 67,00%

Regular: From 34,00% to 66,99%

• Not good: Less than 33,99%

**How to understand the threshold**: This indicator is focusing on the environmental quality of beaches. The higher the % the most respect for environment the destination has, as it meets the requirements of the certifications. But as an example, an optimal and realistic reference could be one blue flag per destination.

Definitions to clarify: N/A





### ID: 27. Percentage of sand nourished (%)

Indicator Name: Percentage of sand nourished (%).

Calculation: Two possible calculation methods:

1)

Km² of sand nourishment

x 100

Km² of total sand in bathing area

2)

m³ of sand nourishment

Total volume sand in bathing area in m³

x 100

**Collection of the data**: The data is usually generated in low season during the maintenance of the bathing areas, so the amount of sand bought for the management authorities of the beaches will be a clear element giving light.

**Collection method**: Beach management statistics. This can be obtained too through the data collected for blue flags, EMAS, ISO 14001 and other beach certifications. GIS systems can help in determining the bathing area and length.

Format of the data collected: Areas in km<sup>2</sup> or volumes in m<sup>3</sup>.

### **Output format:**

- 1) % of length sand nourished
- 2) % of volume sand nourished. Annual basis.

**Result interpretation**: This indicator needs to be defined in percentage relative to the values to the total figure for the destination.

The threshold will be set on the mean value of the destinations preestablished:

- The highest value of all destinations is set to 100%
- The lowest value is set to 0%

Therefore, this will be the threshold figure and on the basis of it destinations will perform according to the following scale:

- Not good: More than 51,00%
- Regular: From 26,00% to 50,99%
- Good: Less than 25,99%

**How to understand the threshold**: This indicator is focusing on the quality of coastal sand and on the human activity, which affects the natural movements of sand in coastal areas. It is an indicator of great interest for the environmental sustainability of the region and for the sustainability of the coastal area for tourism purposes on the medium and long run. Therefore, in this sense the more nourishment you need the worst environmental impact.

Definitions to clarify: N/A





### ID: 28. Percentage of coastline Km of free access beaches relative to total lineal Km of beaches (%)

**Indicator Name**: Percentage of coastline Km of free access beaches relative to total lineal Km of beaches (%).

#### Calculation:

Km of free access beaches

x 100

Total km of beaches

Collection of the data: Lineal km of free access beaches, total sum of coastline km of beaches.

**Collection method**: Data coming from local official statistics. It might be obtained from GIS or cartography tools.

**Format of the data collected**: Number of linear km of free access beaches, number of total linear km of beaches.

Output format: Percentage %. Annual basis.

Result interpretation: The indicator is defined in percentage with an ideal value of 100%.

Posible situations are defined as follows:

Good: More than 80%Regular: Equal to 80%

Not good: Less than 80%

**How to understand the threshold**: This indicator is only of interest in those regions and countries in which the coast can be private, because in the case of countries where bathing areas are public with free access by law, the result will always be the ideal 100%.

**Definitions to clarify**: The original indicator does not specify what is understood as a beach. In this regard we use a tourism-based definition of beach, i.e. any sea bathing coastal space or in other words coastal spaces prepared for bathing.

### ID: 29. Water quality in tourist harbours/marinas (ppm)

Indicator Name: Water quality in tourist harbours/marinas (ppm)

### Calculation:

Concentration of hydrocarbons in ppm (parts per million)

**Collection of the data**: The data must be collected from the official data from harbours or from the water management authorities.

**Collection method:** Data should be collected constantly, and at least once every week will be reasonable. Different collection times along the day are adequate.

Format of the data collected: Number in parts per million (ppm)

Output format: Number in parts per million (ppm). Annual basis.

**Result interpretation**: The threshold defined in here has no reference value because there is no European directive in this regard, neither a clear international consensus on the figure to be implemented. There is a scale for harbours which distinguishes four categories or levels of quality:





- Not pass > 10,01 ppm
- Pass > 5,01 < 10,00 ppm</li>
- Very Good > 2,01 < 5,00 ppm</li>
- Excellent < 2,00 ppm</li>

Hence, the proposed scale for this indicator would be:

- Not good: > 5,01 ppm Insufficient quality
- Regular: > 2,01 < 5,00 ppm Good quality</li>
- Good: < 2,00 ppm Excellent quality</li>

**How to understand the threshold**: The quality of the water will be acceptable when the amount of hydrocarbons is less than 5,00 ppm. This expresses just a trend in the quality.

**Definitions to clarify:** N/A.

### ID: 30. Percentage of beaches accessible to all: mobility and sensorial disabilities (%)

Indicator Name: Percentage of beaches accessible to all: mobility and sensorial disabilities (%)

### Calculation:

Number of accessible beaches

x 100

Total number of beaches

Collection of the data: Number of accessible beaches, total number of beaches in destination.

**Collection method**: Data coming from local official statistics, or from official certifying authorities of accessibility.

Format of the data collected: Number of accessible beaches, total number of beaches

**Output format**: Percentage %. Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data segregated by the accessibility according to the type of disability (mobility, sensorial...)
- Calculation based on data grouped by general disability
- Other

**Result interpretation**: The ideal regarding accessibility should be that at least every destination has 1 beach completely accessible.

- 1 or more beach completely accessible: Optimal
- 0 beach completely accessible: Not optimal

Therefore we can set different situations regarding the percentage of bathing areas that accomplishes with accessibility:

- Not so good: Up to 33,99%
- Regular: Between 34,00% and 66,99%
- Good: Over 67,00%





**How to understand the threshold**: The threshold informs of the accessibility of the destination for people with mobility and/or sensorial disabilities. The goal of this indicator is to help achieving total inclusion in leisure and tourism in coastal areas, where the concept of tourism for all is at stake. However, the indicator is only considering beach areas, which only represent a single resource in a coastal and maritime area.

**Definitions to clarify**: The accessibility concept should be monitored in terms of overall accessibility in the destination, thus including accessible transport, accommodation, and services, as well. Hence, a broader definition of accessible beach is needed. An accessible beach is one that can guarantee access to water to people with mobility impairments and other kind of disabilities as sensorial.

### ID: 31. Percentage of electric energy consumed by renewable sources (%)

Indicator Name: Percentage of electric energy consumed by renewable sources (%)

#### Calculation:

Kwh of electric energy consumed from renewable sources

x 100
Total Kwh of energy consumed

**Collection of the data**: Kwh of electric energy from renewable sources in last available year, total Kwh of electric energy consumed in last available year.

**Collection method**: Data can be obtained from the energy or environmental local body, sometimes using data from national government statistics. Another option is to obtain data directly from the energy distribution or generation companies.

Data about European mean to be found in Eurostat <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable\_energy\_statistics">http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable\_energy\_statistics</a>

Format of the data collected: Number in Kwh

**Output format**: Percentage (%). Annual basis. Please specify in the platform the method you have used to calculate this indicator:

- Calculation based on data segregated by type of renewable resources
- Calculation based on data grouped in general renewable resources
- Other

**Result interpretation**: A value of 100% would represent the ideal scenario. However, due to the fact that this ideal is not achievable we set as threshold the average figure for the EU, which is 18%. In this regard we define three different situations depending on the values of the indicator for each being higher, lower or similar to this threshold:

- Good: More or equal than 31,00% means
- Regular: Between 16,00% and 30,99% means
- Not good: Less or equal than 15,99% means

**How to understand the threshold**: The goal of this indicator is to help reducing fossil energy generation and consumption, which have positive implications in the reduction of CO<sub>2</sub> emissions. So the more the use of renewal energies the better.





**Definitions to clarify**: Renewable energies resources defined as the Eurostat defines, also called renewables, are energy sources that replenish (or renew) themselves naturally. Typical examples are solar energy, wind and biomass. Renewable energy sources include the following:

- Non-combustible renewables
  - Hydropower: the electricity generated from the potential and kinetic energy of water in hydroelectric plants (the electricity generated in pumped storage plants is not included);
  - <u>Tide, wave, ocean energy</u>: mechanical energy derived from tidal movement, wave motion or ocean current and exploited for electricity generation
  - Geothermal energy: the energy available as heat from within the earth's crust, usually in the form of hot water or steam;
  - Wind energy: the kinetic energy of wind converted into electricity in wind turbines;
  - Solar energy: solar thermal energy (radiation exploited for solar heat) and solar photovoltaic for electricity production.
- · Combustible renewables
  - o Biofuels: fuels from biomass
  - Renewable local waste

### ID: 32. Number of days when the NOx threshold is trespassed

Indicator Name: Number of days when the NO<sub>x</sub> threshold is trespassed

#### Calculation:

Number of days when the air quality parameters (NO<sub>x</sub>) is over the threshold

**Collection of the data**: A regular air quality measurement is needed in order to obtain the number of days the  $NO_x$  is over the threshold. In case the destinations have more than one collection point, if one of these points has overpassed the level this particular day will be counted as overpassed. If the destination has not collection points, take data from the closest collection point.

**Collection method**: The local environmental bodies that are collecting data through sensors, or national government statistics. Data collected for some environmental certifications might be used as well.

Format of the data collected: Number of days.

Output format: A number. Annual basis.

**Result interpretation**: The ideal case would be a situation when there are 0 days with  $NO_x$  pollution. We set a threshold on the mean value of all the participant destinations or containing just the predefined set.

- Good: More or equal than 10% over the average
- Regular: 10% higher or lower than the average
- Not good: More or equal than 10 % below average





**How to understand the threshold**: The goal of this indicator is to help reducing fossil energy generation and consumption, which have positive implications in the reduction of  $CO_2$  emissions. The idea of base it with a mean is to help reduce globally the  $CO_2$  emissions.

**Definitions to clarify**: The  $CO_2$  emission thresholds are not clearly defined in EU legislation. The only parameter that is monitored is  $CO_2$  emission on certain sources like chimneys, factories among others. That is why the  $NO_x$  was taken as basis for this indicator.

### ID: 33. Use of land: area of developed and building land in relation to land designated as not for building (1:1 ratio)

**Indicator Name**: Use of land: area of developed and building land in relation to land designated as not for building (1:1 ratio)

### Calculation:

Result c

a)

m² of land built

Total m² of land in destination

b)

m² of land for building

Total m² of land in destination

c)

m² of land not for building

Total m² of land in destination

x 100

Total m² of land in destination

d)

Result a + b

**Collection of the data**: m<sup>2</sup> of land built, m<sup>2</sup> of land for building, m<sup>2</sup> of land not for building, m<sup>2</sup> of total land within a destination for the last available year.

**Collection method**: Data coming from local official statistics. It might be obtained from GIS or cartography tools.

Format of the data collected: m<sup>2</sup> of land built, for building and not for building.

Output format: Percentage (%). Annual basis.

**Result interpretation**: The following categories have been established for the three elements of this indicator results:

- Not good: more or equal than 10% above the mean
- Regular: up to 10% over or under the mean
- Good: more or equal than 10% below the mean

We set a threshold on the mean value of all the participant destinations or containing just the predefined set.

**How to understand the threshold**: This threshold is helping to understand the level of built environment vs. the level of natural environment. There is no a clear value that represents an





ideal value regarding this indicator, that's why the comparison with other similar destination might help you, as destination, how are you positioned. The result might affect the kind of supplied products that the destination might be good at.

### **Definitions to clarify:**

- <u>Land built</u>: Land where houses or similar infrastructures have been built on or land used for industrial purposes.
- Land for building: designated to be built but not yet done.
- <u>Land not for building</u>: regulations establish these area as not for construction. These could also include national parks and other natural reserves.