

Models of Integrated Tourism in the MEDiterranean Plus

D.3.1.1. GAP analysis





Deliverable number / title

Work package: WP3 Testing

Type of deliverable: Method

Dissemination level: PU - Public

Document history

Date:	Author:	Version:	Text:
10/05/2017	Lluís Prats	V1	First draft created
05/07/2017	Cristina Massó	V2	Revision of first draft
20/07/2017	Lluís Prats	V3	Revision V2 comments
30/07/2017	Cristina Massó	Final version	Formatting and final version

E-mail: mitomed@regione.toscana.it

Web site: www.mitomedplus.interreg-med.eu

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





Content Table

Introduction and Method	5
Generic / destination Indicators	7
Existence of a strategy for sustainable tourism in the tourism planning documents. Percentage of destination affected by or included in the plan	8
Percentage of visitors that are satisfied with their overall experience in the destination	10
Economic Indicators	12
Percentage of tourism funds spent in actions included in the sustainability plans (as considered in Indicator 1)	13
Percentage of tourism enterprises/establishments in the destination using a voluntary	
verified certification/labelling for environmental/quality/sustainability and/or CSR measur	es 15
Relative contribution of tourism to the destination's economy (% GDP)	18
Average length of stay of tourists (nights)	20
Number of overnight stays per month	22
Occupancy rate in commercial accommodation per month and average for the year	24
Direct tourism employment as percentage of total employment per month	26
Daily spending per tourist (accommodation, food and drinks, other services)	29
Total number of cruise passengers per day, in relation to total population (1 on 1)	31
Social & Cultural Indicators	33
Number of beds available in commercial visitor accommodation in relation to residents (1 on 1 proportion)	34
Variation (%) of unemployment tax between low and high season	37
Number of tourists per resident (1 on 1 proportion)	39
Number of second/rental homes per 1 home (1 on 1 proportion)	41
Percentage of visitor attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes	43
Number of cultural sites and practices under some protection label and number of cultura sites and practices acknowledged to be "at risk"	l 45
Average wage in tourism for women compared to men's employment	47
Percentage of women with respect to the total number of jobs in the tourism sector (hote and restaurants)	ls 49
Environmental Indicators	51





Percentage of tourists and same day visitors using different modes of transport to arrive at the destination (public/private and type)
Percentage of destination (area in km2) that is designated for protection
Percentage of the destination area under a biodiversity protection plan
Waste volume produced by destination (tons per person per season: low and high)
Volume of waste recycled (% per season: low and high)60
Water consumption (litre) per person, per day (in low season and in high season) 62
Energy consumption (KWh) per person per day (in low and high season)
Kms of cycling routes (versus tot kms of roads)66
Level of pollution in seawater per 100 ml (fecal coliforms, campylobacter)
Number of berths and moorings for recreational boating in relation to total length of coastline (km)70
Number of blue flags, EMAS, ISO 14001 and other national environmental certifications, in relation to total number of beaches
Area and volume of sand nourishment74
Total Km of free access beaches relative (%) to total Km of beaches76
Water quality in tourist harbours/marinas78
% of beaches accessible to all: mobility and sensorial disabilities
% of electric energy consumed by renewable sources
Number of days when the CO2 threshold is trespassed
Use of land: % developed, % building land, % land designated as not for building





Introduction and Method

This document aims to determine the main results obtained from the GAP Analysis. In essence, a GAP analysis is a method for identifying breaches in the performance of the indicators system. Therefore, it implies to carry out a critical assessment of the various indicators individually, considering various relevant issues.

Three parallel steps were conducted during this process. The first one was devoted to the information gathering in all the different destinations according to the final definition the consortium agreed. In this sense every partner was providing the data as stated or the problems raised if any.

The second step was to stablish a clear threshold for any of the selected indicators. In this regard the origin of the data, the type of data and the clarity for the final visualisation were the three main aspects took into consideration for its definition.

The third step was to check the comparison and monitor and evaluate the possible problems, giving us the clear picture of the GAP for each indicator and for each of the critical assessment measurements that were defined for the gap.

Particularly, in this case, GAP Analysis is carried out considering five of these measurements:

- 1. Data Issues
- 2. Adaptation to Coastal and Maritime areas
- 3. Comparability and transferability
- 4. Issues with the goal and definition of the indicator
- 5. Problems derived from the indicator basis

Consequently, this analysis provides a foundation of needs and operational problems concerning these five issues for each indicator, allowing determining possible measures to improve the system of indicators in the future. In this regard every indicator has their GAPS clearly detected





For each indicator we added a "data collection system" section detailing what type of data has to be provided to calculate indicators. This will ensure the harmonization of indicators, thus their comparability amongst territories.





Generic / destination Indicators





ID	ETIS Group	Indicator description
1	DESTINATION/GENERAL	Existence of a strategy for sustainable
		tourism in the tourism planning documents.
		Percentage of destination affected by or
		included in the plan.

NECSTOUR topic: 2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	100,00%	0%	20%	60,00%

Defined Threshold

The ideal value of this indicator should be 100%, with the idea of the whole destination having a sustainable tourism strategy.

A quartile threshold will thus be defined.

- Q4: From 0% to 25% Not Good
- Q3: From 25% to 50% Good
- Q2: From 50% to 75% Very Good
- Q1: From 75% to 100% Excellent

GAP analysis Items

Data Issues

The main problem of this data is that in most cases there is no database available, and therefore, data must be collected contacting each individual coastal destination.

Adaptation to Coastal and Maritime areas

This is a general indicator that can be also used in coastal destinations. Nevertheless, some sustainable strategies to be implemented in coastal areas are totally different from those to be implemented in inland areas. Therefore, if the plans were adapted to the singularities of coastal areas, and this could be included in the indicator, its value would be increased.





Project co-financed by the European Regional Development Fund

Comparability and transferability

This is an indicator difficult to compare due to the relative value of the sample used in the analysis.

Different types of strategies can be also found in different destinations which leads to a lack of homogeneity. Here defining the different types to take into account can help to divide the indicator into several ones more specific of each sustainable strategy.

Issues with the goal and definition of the indicator

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.

In this regard our observation is that the pilot destinations when talking about sustainability, and also the labels and certifications considered, have a clear bias to the environmental sustainability, which is a problem for the successful achievement of the mentioned aoal.

Problems derived from the indicator basis

This indicator needs a clarification of which sustainable tourism strategies or action plans can be objective enough to be considered. In this regard, it was proposed whether to only consider standard strategies for sustainable development, or all the implemented measures from a list created ad hoc. The decision was to use only standard strategies or action plans.

Moreover, when talking about the percentage of the destination different options might arise. Three proposals were defined here.

- In relation to the total kilometres of coast line.
- In relation to the total amount of municipalities of the destination
- In relation to the total population of the area.

The chosen criterion was the second, because it also shows the percentage of destination managers involved.





ID	ETIS Group	Indicator description
2	DESTINATION	/ Percentage of visitors that are satisfied with
	GENERAL	their overall experience in the destination

NECSTOUR topic: 2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	86%	79%	47% strongly agree, 49% agree.	85%

Defined Threshold

This is a complex indicator, but since academics have been working in tourism satisfaction measurement for many years we must define the threshold of this indicator according to the academic proposals.

Therefore, the threshold will be defined in a Likert scale from 1 to 5 (according to ETIS questionnaire scale):

- 1:totally unsatisfied2: unsatisfied3:neither unsatisfied nor satisfied4: satisfied
- 5: totally satisfied

GAP analysis Items

Data Issues

In most cases this data that is not systematically obtained, which means that is not always available, and usually it is never obtained at the same level. Sometimes it is measured at the municipal level, some others at the regional level and sometimes with just a national sample and mixing coastal and non-coastal areas. In addition, in most cases it is not measured systematically in terms of periodicity.

The main issue with this data is that it is fully based on the actual perceptions of the tourists. There are several levels of satisfaction but the relevant data for this indicator is the overall satisfaction. The collection of this data will with all probability require a questionnaire or a survey.

Data collection system





The easiest way to collect this data will be using authomatic systems placed at some entrance points to the beaches, similar to these already found in other tourism facilities, such as airports.



These systems have the advantage of offering very clear options to the survey taker, and the use of pictogrames instead of text makes translation unnecessary, even if sometimes are not fully accessible.

Adaptation to Coastal and Maritime areas

This is a general indicator that can be also used in coastal destinations without any need for adapting it.

Comparability and transferability

This is an indicator clearly comparable and transferable because the overall satisfaction is obtained everywhere in the same way. The only problem to compare is to have the same series of data.

Issues with the goal and definition of the indicator

This indicator is quite clear and the goal is trying to measure the overall experience

Problems derived from the indicator basis

There are no important problems derived from the basis of this indicator, except for hardware that would add some cost to its harmonization.





Economic Indicators





ID	ETIS Group	Indicator description
	ECONOMIC	Percentage of tourism funds spent in
		actions included in the sustainability plans
		(as considered in Indicator 1)

NECSTouR topic: 2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

The ideal value of this indicator should be as 100%, with the idea of the whole destination having a sustainable tourism strategy.

A quartile threshold will thus be defined.

- Q4: From 0% to 25% Not Good
- Q3: From 25% to 50% Good
- Q2: From 50% to 75% Very Good
- Q1: From 75% to 100% Excellent

GAP analysis Items

Data Issues

The main problem of this data is that in most cases there is no database available, and therefore, data must be collected contacting each individual coastal destination.

Adaptation to Coastal and Maritime areas

This is a general indicator that can be also used in coastal destinations. Nevertheless some sustainable strategies to be implemented in coastal areas are totally different from those to be implemented in inland areas. Therefore if the plans were adapted to the singularities of coastal areas, and this could be included in the indicator, its value would be increased





Comparability and transferability

This is an indicator difficult to compare because the value relative to the sample used in the analysis, and the size of different destinations may present important variations.

Issues with the goal and definition of the indicator

This indicator tries to measure commitment and involvement of policymakers and managers towards the sustainability of the destination. Considering that this indicator is in the economic performance block, the strategies taken into consideration should be more linked to general sustainability, including economic sustainability as its basis.

In this regard our observation is that the pilot destinations when talking about sustainability, and also the labels and certifications considered, have a clear bias to the environmental sustainability, which is a problem for the successful achievement of the mentioned goal.

Problems derived from the indicator basis

This indicator needs a clarification of which sustainable tourism strategies or action plans can be objective enough to be considered. In this regard, it was proposed whether to only consider standard strategies for sustainable development, or all the implemented measures from a list created ad hoc. The decision was to use only standard strategies or action plans.

Moreover, when talking about the percentage of the destination appears the problem of deciding, this is the total figure to put in relation to obtain the results. Two proposals were defined.

- In relation to the total kilometres of coast line.
- In relation to the total amount of municipalities of the destination.
- In relation to the total population of the area

The chosen criterion was the second, because it also shows the percentage of destination managers involved.





ID	ETIS Group	Indicator description
3	ECONOMIC	Percentage of tourism
		enterprises/establishments in the destination
		using a voluntary verified
		certification/labelling for
		environmental/quality/sustainability and/or
		CSR measures

NECSTouR topic: 6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	2,1%	64,60%	N.A.	5,26%

Defined Threshold

This indicator will be in the form of a percentage for each region. The thresholds will be set on the basis of the values obtained by the regions and in the form of a traffic light:

- 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 How the colors are going to be included? Low- red, regular – orange and High green?
 - o Low
 - o Regular
 - o High

Data collection system

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

GAP analysis Items Data Issues





Most of the countries do not collect this data. Nevertheless this data can be found elsewhere, so it is just a matter of finding the method to collect them.

Some destinations have their one 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
- Travel Life

Adaptation to Coastal and Maritime areas

This is a general indicator, which gives interesting information about sustainability and how much managers are concerned about it.

Comparability and transferability

This is an indicator comparable and transferable as the chosen labels are internationally recognized and implemented with equal standards for all.

Issues with the goal and definition of the indicator

The goal of this indicator is to understand to what extent tourism companies and activities in the destination are committed to manage the sustainability of their activities. It only includes companies that have sustainability labels. However there are companies that implement sustainability programmes and practices without applying for a certification or label. Therefore the validity of the indicator is limited.





Problems derived from the indicator basis

Sensitivity towards sustainability practices is not only found when companies have certifications and labels. Additionally, most of these labels focus on environmental sustainability leaving the other pillars of full sustainability underrepresented.

Normally certifications are too expensive and companies and destinations are not often taking into consideration this option in their budgets.





ID	ETIS Group	Indicator description
4	ECONOMIC	Relative contribution of tourism to the
		destination's economy (% GDP)

0. Profile

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	12% (2012)	6,8% (direct	16,5%	9%*
		contribution)	(Croatia -	
			2013)	

*regional value, but in M&C destinations it is much higher (from 20 to 90%).

Defined Threshold

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 (10,9% in 2014). Then a scale below and one over this threshold is defined as follows:

- Over
 - o Up to 15% higher than the optimal: Good
 - o From 16% and up to 30% higher than the optimal: Regular
 - Above 30% higher than the optimal: Not Good
- Bellow
 - o Up to 5% lower than the optimal: Good
 - o From 5% and up to 10% lower than the optimal: Regular
 - o Below 10% lower than the optimal: Not Good

Data collection system





The ideal data for this indicator is the relative contribution of the tourism industry to the destination's economy (GDP).

Since this may be difficult to obtain in some cases, it is highly recommended that two other values are measured:

- Proportion of tourism organisations (companies, businesses) in relation to the total number of businesses in the destination (%)
- Proportion of active population working in the tourism industry in relation to the whole active population (%)

GAP analysis Items

Data Issues

Some of the countries do not have this data. Another capital problem is how this raw data is calculated. There are differences in the calculation method among countries.

As an example, in Istria they only use the direct contribution of tourism to GDP for the country, and neither local or regional data is available.

Adaptation to Coastal and Maritime areas

This is a general indicator, which gives interesting information. However, in the case of Istria the GDP is given for Croatia, not for the region.

Comparability and transferability

This is an indicator clearly comparable and transferable, only having in mind those little differences about what to include. So, we consider that if data is available, it is excellent in terms of transferability.

Issues with the goal and definition of the indicator

This indicator tries to measure the impact of tourism in the economy of the regions. It is possible to add another indicator to complement with more information.

Problems derived from the indicator basis

It is important to use only the direct contribution of tourism to GDP. If local data are not available, regional data can be used, but is compulsory to do it in the same way for all the regions.





ID	ETIS Group	Indicator description
5	ECONOMIC	Average length of stay of tourists (nights)

NECSTouR topic 0. Profile

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	7,2: foreign tourist 3,2: national tourist	10,18	6,9	6

Defined Threshold

It can be said that the higher the value, the better it is, but this also depends on different strategies and different products offered. In this context, the threshold will be based on the average number that the evaluated regions have, to be used as baseline. In this regard the threshold is defined in a traffic light shape.

- Over average Green Light
- On average Orange/Yellow Light
- Below average means Red Light*

* In this situation the total number of one day visitors (and their daily expense, if possible) must be taken into account

GAP analysis Items

Data Issues

This data is available, but in some cases it is just at national level, and in some cases at regional level. Despite this, the data is very rarely available at municipal level.

Other issues are related to the origin of tourists. For example, in the case of Catalonia the data is available for both national and foreign tourists.

Adaptation to Coastal and Maritime areas

Having data specific for both coastal areas and inland areas would permit the comparability. However the lack of data for municipalities or





even regions is a disadvantage that makes this possibility difficult to attain.

Comparability and transferability

This is an indicator comparable and transferable. However, it is important to ensure that data collection is done considering the same territorial scale and if possible considering differences in the origin of the visitors (national and foreign tourists). If the same data is available transferability is possible.

Issues with the goal and definition of the indicator

This indicator tries to measure the length of the stay that tourists spend in a destination. If data could be obtained by type of accommodation it would allow further comparative analysis.

Problems derived from the indicator basis

Probably the main problem that we find is that we cannot analyze the length of stay by different types of accommodation and market origins. As it is mentioned above, in the case of Catalonia data is divided between national and foreign tourists; in the case of Tuscany data are available for different types of accommodation and market origins; however in the other regions it is aggregated.



6



ID ETIS Group

ECONOMIC

Number of overnight stays per month

Indicator description

NECSTouR topic 4. Deseasonalisation

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	5.876.825	9,68	1.835.952	2.800.000

Defined Threshold

This value should be weighted with the total possible nights per month. It takes the form of a percentage and the threshold can be defined by the average number of nights per month obtained from the global number or from the destinations you want to be compared with. In this regard the threshold is defined in a traffic light shape.

- Over the average: Green Light
- On the average: Yellow Light
- Below average: Red Light.

Recommended analysis:

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

This will allow for overcrowding and seasonality analysis.

GAP analysis Items

Data Issues

This data is available and may indicate a problem of seasonality in tourism destinations. It is also available for different types of visitors in terms of their countries of origin, which is an opportunity to identify important tourist markets for the purpose of overcoming seasonality. The main issue is that is difficult to find it on a monthly basis, especially for local or regional areas.

Adaptation to Coastal and Maritime areas

The main problem is that data collection is not carried out for coastal areas.





Comparability and transferability

This is an indicator comparable and transferable. Therefore if uniform data is available its transferability is guaranteed.

Issues with the goal and definition of the indicator

The main objective of this indicator is to have information about seasonality if data is available on a monthly basis.

Problems derived from the indicator basis

Probably the main problem is to find accurate data. It is important to note that official data is partial, considering that overnights in second homes and tourist apartments are not collected.





ID	ETIS Group	Indicator description
7	ECONOMIC	Occupancy rate in commercial
		accommodation per month and average
		for the year

NECSTouR topic 4. Deseasonalisation

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	60,5% hotels 38% campsites 18% rural tourism	61,1%	26,04%	63,38% (summer)

Defined Threshold

This indicator takes the form of percentage and the threshold is defined as the average number of the evaluated regions. It is defined with a traffic light shape.

- Above average: Green Light
- On average: Yellow Light
- Below average: Red Light.

Recommended analysis:

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

This will allow for overcrowding and seasonality analysis.

GAP analysis Items Data Issues

Data Issues

Substantial differences among regions are detected. For some regions it is easy to find this information by municipalities while in others is not. It must be considered if its disaggregation by types of accommodation is pertinent, like in the case of Catalonia.





Adaptation to Coastal and Maritime areas

The relationship with the maritime areas is mainly related to the potential to have information that helps to develop new products to attract tourism during low season.

Comparability and transferability

This is an indicator comparable and transferable if we take into consideration the comments above. Therefore if the data can be measured comparability is assured.

Issues with the goal and definition of the indicator

About the definition, the indicator explains the monthly occupancy rate, having information about the seasonality of the destination. This is especially useful to have information to implement regional policies, particularly linked to the development of new tourism products and markets.

Problems derived from the indicator basis

The main problem is to have access to these data, particularly data by type of accommodation and per month. At a public level maybe, we can consider to contact directly the stakeholders involved. It is not impossible to gather this information



ID



ETIS Group Indicator description FCONOMIC Direct tourism emplo

Direct tourism employment as percentage of total employment per month

NECSTouR topic 3. Quality of work

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	11,82%	7,8%	19%	19,80%

Defined Threshold

This is a complex indicator and it has several interpretations being a similar case than indicator 4 regarding the GDP. Direct tourism employment in some regions is taken only from activities linked to hospitality, in other regions as service sector in general, or others considering the tourism satellite accounts basis.

A similar value can be better or worst depending on the country's strategy, and especially if it is linked to productivity. More productivity with less employment can be better in terms of economic performance, or worst in terms of quality of service/quantity of jobs.

For this reason the decision is that an optimal value or threshold will be defined as the average value of the entire EU (10,9%). Then a scale below and one over this threshold is defined as follows:

- Over
 - o Up to 15% higher than the optimal: Good
 - From 16% and up to 30% higher than the optimal: Regular
 - Above 30% higher than the optimal: Not Good
- Bellow
 - o Up to 5% lower than the optimal: Good
 - o From 5% and up to 10% lower than the optimal: Regular
 - o Below 10% lower than the optimal: Not Good

Not good

Not good

Regular Good Regular





Recommended analysis:

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

This will allow for overcrowding and seasonality analysis.

GAP analysis Items

Data Issues

In the Istria case, the results correspond to county level (not available for national level), and the campsites are not included, just hotels and restaurants.

Adaptation to Coastal and Maritime areas

This is an interesting indicator, which gives information about the employment rate in the tourism sector. For maritime areas it would be interesting to have the direct employment that tourism generate in them, as it would be useful for designing employment policies and regional development in these regions.

Comparability and transferability

At the beginning, this could be an indicator comparable and transferable. But, in fact, it is not, because it is based on different items included and they are not available in all countries.

Issues with the goal and definition of the indicator

About the definition, the indicator explains the direct employment rate in the tourism industry. Results give information about how each region is performing in terms of direct employment in the tourism sector. Data can be useful to manage some aspects of the destination, especially social and employment policies.

Problems derived from the indicator basis

It would be interesting to have information about the employment generated in different tourism subsectors. In order to interpret more correctly this indicator we could also consider the rate of unemployment.

Furthermore, the results show that the indicator has been calculated differently in some cases. It is not always easy to have data that do not





need supplementary calculations to homogenize the results and make them comparable.





ID	ETIS Group	Indicator description
9	ECONOMIC	Daily spending per tourist
		(accommodation, food and drinks, other
		services)

NECSTouR topic 0. Profile

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	Foreign tourists: 121,5€ National tourists: 19,2€	98,78€ per person	<pre>≤25€ (16,94%), 26-50€ (31,71%), 51-100€ (31,09%), 101- 200€ (14,78%) ≥201€ (5,8%)</pre>	100€

Defined Threshold

This indicator takes the form of a percentage and the threshold is defined as the average number of the evaluated regions. In this regard the threshold is defined in a traffic light shape:

- Above average: Green Light
- On average Orange/Yellow Light
- Below average: Red Light.

GAP analysis Items

The results are very different among regions, and probably the calculation method has been different in each case. So, it is important to have a unique and common method and then compare results. For example this indicator can be differentiated for foreign and national tourists, such as in the case of Catalonia.

Data collection system

An approximation using credit card expenditure could be used, as to avoid surveys.

Adaptation to Coastal and Maritime areas

This indicator is particularly interesting to determine which is the daily expenditure of tourists in coastal areas. This can be especially useful if it is





comparable between coastal and inland areas. However, it is difficult to obtain data collection desegregated by municipalities or regions, and therefore the adaptation or customization for coastal areas is not possible in most cases.

Comparability and transferability

This is an indicator not easy to transfer because the values are not homogenous. Moreover, in the case of Toscana we only have data for four municipalities.

Issues with the goal and definition of the indicator

The indicator explains the relationship between daily spending expenditure in various tourism services that are used during the stay (accommodation, food and beverage, and other services). It would be interesting to have also information about the evolution of the daily spending by tourist in relation to their whole budget during their stay, and observe with the changes of consumption tendencies. However, this is difficult to have analyze with the current data. Supplementary studies with this particular goal are needed.

Problems derived from the indicator basis

It is difficult to have this indicator for municipalities in all the studied regions. We should consider the possibility of calculating the indicator for both national and foreign tourists, and the real possibility to have this information for each region included in the study.





ID	ETIS Group	Indicator description
10	ECONOMIC	Total number of cruise passengers per day,
		in relation to total population (1 on 1)

NECSTouR topic 1. Impact of transport

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

* National level for Croatia, 2013.

Defined Threshold

Initially it must be taken into account that not all the coastal regions have ports where cruise lines operate.

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

- 0-0,9: Green Light
- 0,9 1,1: Yellow Light
- 1,1 and higher: Red Light

GAP analysis Items

This indicator is difficult to compare considering that the regions are very different regarding the real dimension of their ports.

Adaptation to Coastal and Maritime areas

This is an interesting indicator directly related to Coastal and Maritime areas. It could also be useful to be able to determine the pressure of passengers and cruise passengers in coastal areas.

Comparability and transferability

The transferability of this indicator is guaranteed as far as a common method of calculation is used.

Issues with the goal and definition of the indicator





The indicator explains the congestion of cruiseship ports of call. However, in some destinations with only a prominent port the image of overcrowdedness may be biased or misrepresentative. Hence, the importance of accompaining the indicator with an explanation of special situations.

It is also strongly recommended that 2 surveys are put together to complement this indicator:

- To assess the recycling and environmental facilities of the aforementioned ports
- To know if the town/destination has a management plan specifically for cruiseship passengers. A paralell system of evaluation/indicators can be added to assess the efficacy of these.

Problems derived from the indicator basis

This indicator is difficult to compare among regions, considering their differences in terms of number of ports and their dimension, and the number of ports receiving cruises along the coast.





Social & Cultural Indicators





ID	ETIS Group	Indicator description
11	SOCIAL & CULTURAL	Number of beds available in commercial
		visitor accommodation in relation to
		residents (1 on 1 proportion)

NECSTouR topic 0. Profile

Values of reference (per residents)

Region	Catalonia	Cyprus	Istria	Toscana
Value	8,9	10,10	114	37

*Data for Tuscany (total coastline): beds 253,194 accommodation facilities 2,756 residents 682,634.

Defined Threshold

This is a complex indicator and it has several interpretations being a similar case than indicator 4 regarding the GDP. The same value can be better or worst depending on the country's strategy, and especially if it is linked to specialization. More tourism specialization can be better in terms of tourism performance, or worst in terms of general economic performance. It can create a monoculture.

For this reason the decision is that an optimal threshold will be defined as the average value of the regions analyzed. Then a scale below and one over this threshold is defined as follows:

- Over
 - Up to 0,15 higher than the optimal: Good
 - From 0,16 and up to 0,30 higher than the optimal: Regular
 - Above 0,33 higher than the optimal: Not Good
- Bellow
 - o Up to 0,05 lower than the optimal: Good
 - o From 0,05 and up to 0,1 lower than the optimal: Regular
 - o Below 0,1 lower than the optimal: Not Good

Not good

Not good





Regular Good

Regular

Data collection system

Consider and differentiate the following types of accommodation:

- Hotels
- Apartments
- Camp sites
- Rural accommodation
- Other We should define others.

Businesses considered will include only these legally registered, according to individual destinations' law. Only those business legally registered according to the destinations regulations (local, regional or national) will be included.





GAP analysis Items

Data Issues

This data is available in all the cases at national level, and in some cases at regional level. It is only very rarely available at municipal level.

Adaptation to Coastal and Maritime areas

This is a general indicator, that is, it is not specific of Coastal and Maritime Areas. The lack of municipal data is an important problem in order to adapt it to coastal regions.

Comparability and transferability

This is an indicator comparable and transferable.

Issues with the goal and definition of the indicator

This indicator tries to measure the number of beds for each 100 residents, trying to show the regions that are more affected by tourism, being Toscana the most important region thanks to the cruise tourism, which brings lots of tourists every year to the region.

Problems derived from the indicator basis.

That is why we need a ponderation system for this region, which will help us to avoid this bias in terms of number of beds availables. The same problem could be found in apartments for instance, but with a mathematic formula we should be able to avoid it.




ID	ETIS Group	Indicator description
12	SOCIAL & CULTURAL	Variation (%) of unemployment tax
		between low and high season

NECSTouR topic 3. Quality of work

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

- Variation between Avobe average : Green Light
- On average: Yellow Light
- Below average: Red Light

Data collection system

Understanding the variety of idiosyncrasies, each destination will define the months included in "low season" and "high season" individually. 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").

GAP analysis Items

Data Issues

We have important problems to find this data.

Adaptation to Coastal and Maritime areas

This is a specific indicator that helps us to know which is the seasonality of the region. In the Istria and Toscana's cases we can see that the seasonality is very high because lots of employees are working only in the summer season.





Comparability and transferability

This is an indicator comparable and transferable, but only available in the Toscana and Istria regions.

Issues with the goal and definition of the indicator

This indicator tries to measure the seasonality of tourism in each region through the number of employees working full or part time.

Problems derived from the indicator basis

In Toscana and Istria we find high seasonality of tourism, but the main problem that we found is that the values are not available in Catalonia and Cyprus.





ID	ETIS Group	Indicator description
13	SOCIAL & CULTURAL	Number of tourists per resident (1 on 1
		proportion)

NECSTOUR topic 4. Deseasonalisation

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	191	258	<i>29</i> ,01	376

Defined Threshold

This is an indicator that needs to be linked to others, because its complexity generates extreme differences in interpretation. The threshold can be defined as an index 100, which indicates total balance in number of tourists and residents.

- Above 1: more tourists than residents, that is a tourism specialized region
- Below 1: less tourists than residents, that is the region is not tourism-specialized.

GAP analysis Items

Data Issues

This data is available in all the cases at national level, and in some cases at regional level. The data is, though, very rarely available at municipal level.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. The lack of municipal data is thus a problem as it cannot be adapted to Coastal and Maritime regions.

Comparability and transferability

This is an indicator comparable and transferable. In the case of Toscana the very high value of the indicator must be analyzed, as the high number of tourists might be related to the cruise arrivals.





Issues with the goal and definition of the indicator

This indicator tries to measure the number of tourists per each 100 residents.

Problems derived from the indicator basis

This indicator should indicate seasonality but it does not in its present form. To accomplish this aim, for coastal and maritime destinations the monthly indicator is more adequate.

The indicator does not solve the problem of second homes, as these visitors are not included in statistics.

This indicator can be further developed, so a proposed formula to adapt this indicator is the following.

Per year: (tourist overnight stays x 100) / (resident population x 365)

Per month: tourist overnight stays x 100) / (resident population x 30)





ID	ETIS Group	Indicator description
14	SOCIAL & CULTURAL	Number of second/rental homes per 1
		home (1 on 1 proportion)

NECSTouR topic: 0. Profile

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	15,9	31,15	38,20*	N.A.

* Primary: 78.563; Secondary: 22.966; Empty: 24.229; For rent: 7.050.

Defined Threshold

This is an indicator that needs to be linked to others, because its complexity generates extreme differences in interpretation. The threshold can be defined as an index with 100 as total balance between tourists in second/rental homes and residents.

- Above 2: strong (probably over) especialization in tourism
- Above 0,75: more tourists than residents. A tourism specialized region
- Below 0,75: less tourists than residents, that is the region which is not tourism-specialized.

GAP analysis Items

Data Issues

In Istria the data is available only every 10 years (census).

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. The lack of municipal data is a problem in order to adapt it to coastal regions.

Comparability and transferability

This indicator is neither transferable nor comparable because the results are based on non-homogeneous criteria in each case.

Issues with the goal and definition of the indicator





This indicator tries to measure the second and rental homes per each 100 homes. In each case, to properly develop the values of this indicator information regarding properties and their use in the regions is needed.

Problems derived from the indicator basis

The faced problem lays in having the total number of houses and their uses as mentioned avobe. Differences in regions were found, regarding the reliability of data. In Catalonia, i.e it is not, whereas in Cyprys and Istria it is. The problem is to have data about the total number of homes and their uses. For example, in Catalonia there is not reliable data available, while in Istria and Cyprus data is reliable.





ID	ETIS Group	Indicator description
15	SOCIAL & CULTURAL	Percentage of visitor attractions that are
		accessible to people with disabilities
		and/or participating in recognized
		accessibility schemes.

NECSTouR topic: 2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	N.A.	55-60%	48%	50%

Defined Threshold

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
 - o Low
 - o Regular
 - o High

GAP analysis Items

Data Issues

No major issues related to data have been identified for this indicator.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. The lack of municipal data is a problem to adapt it to coastal regions.

Comparability and transferability

This indicator is not comparable to other regions as it is relative to the values of the sample. Issues with the goal and definition of the indicator





The indicator tries to measure the percentage of visitor attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes.

Problems derived from the indicator basis

There is no clear definition of what accessible means. If we only consider mobility disabilities we are just taking into account one part of the total amount of tourists that have accessibility needs.

There is a need for further development and future research on this indicator and topic.





ID	ETIS Group	Indicator description
16	SOCIAL & CULTURAL	Number of cultural sites and practices
		under some protection label and number
		of cultural sites and practices
		acknowledged to be "at risk"

NECSTouR topic: 5. Active conservation of cultural heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana	
% of WHS					
% of other protected sites					
% of sites at risk		-	_		

Defined Threshold

Proportion of protected sites and practices (UNESCO or other)

Proportion of sites and practices at risk (UNESCO): if greater than 0, an action plan to address situation must be drafted

Data collection system

Data sources: destination's inventory of cultural ressources and lists of protected sites. UNESCO World Heritage List (WHS – cultural, mixt or intangible).

Calculus:

- Number of cultural sites and practices inscribed as WHS / total number of cultural ressources
- Number of cultural sites and practices under some form of legal protection (national – regional – local, according to destination's policies) / total number of cultural ressources
- Number of cultural sites and practices considered at risk according to UNESCO WHS list / total number of cultural ressources





GAP analysis Items Data Issues

In Istria there are in total 481 cultural heritage objects under the different categories of protection (421 permanently protected, 53 preventively protected and 7 of national importance). The share of protected cultural heritage in the destination compared to the total number of cultural heritage in Croatia is 5,43%. In the destination, there is a very high percentage (16,66%) of total number of heritage of national interest.

On the other hand, in Cyprus, the heritage preservation and enhancement forms a major component of town and country planning policies, and is well reflected in the planning legislation. The Town and Country Planning Law (enacted in 1972 and put into operation in 1990) is, in fact, an important tool for the protection and enhancement of all physical manifestations of the Cypriot heritage, be it archaeological, architectural or natural.

The Government and more specifically the Department of Town Planning and Housing which comprises the major Planning Authority, has taken action in various ways, thus creating new opportunities for the preservation and enhancement of Cyprus Heritage. (For more there is a specific document on the policy protecting cultural heritage).

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. The lack of municipal data is a problem in order to adapt it to coastal regions.

Comparability and transferability

This indicator is not comparable to other regions as it is relative to the values of the sample.

Issues with the goal and definition of the indicator

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

Problems derived from the indicator basis

This indicator described in the ETIS is not so clearly defined in the sense that it only refers to the volume of natural and cultural heritage.





ID	ETIS Group	Indicator description
17	SOCIAL & CULTURAL	Average wage in tourism for women
		compared to men's employment

NECSTouR topic: 3. Quality of work

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	-24,3%	-22,8%	-9%*	-4%

* National level.

Defined Threshold

A value of 0% means in this case total equity of wages. In this regard the threshold is defined in a traffic light shape.

- A difference positive or negative of less than 10% means Green Light
- A difference positive or negative between 10% and 20% means Orange/Yellow Light
- A difference positive or negative of more than 20% means Red Light

GAP analysis Items

Data Issues

This data is available in all the cases at National level, and in some cases at Regional Level. Despite this, that data is very rarely available at municipal level.

Another capital problem is how this raw data is calculated. There are differences in the calculation method among countries, including or excluding working areas. As an example there are different criteria regarding rural tourism, including it as services or as agricultural activities.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. The lack of municipal data is a problem in order to adapt it to coastal regions, because with the exception of Cyprus for obvious reasons, there is not a single case in which coastal areas are defined as administrative regions itself.





Comparability and transferability

This is an indicator comparable and transferable.

Issues with the goal and definition of the indicator

This indicator tries to measure the impact of social and cultural elements into destinations. Regarding wages there is the possibility to include several other complementary indicators.

Problems derived from the indicator basis

The indicator described in the ETIS is not so clearly defined, in the sense that it only refers to the difference in wages between women and men. It is also inducing to the superiority of men's wages, which nowadays it is a reality, but an indicator should be impartial in its definition.





ID	ETIS Group	Indicator description
18	SOCIAL & CULTURAL	Percentage of women with respect to the
		total number of jobs in the tourism sector
		(hotels and restaurants)

NECSTouR topic: 3. Quality of work

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	-24,3%	-22,8%	-9%*	-4%

* National level.

Defined Threshold

A value of 50% means in this case total equity. In this regard the threshold is defined in a traffic light shape.

- 40-60%: Green Light
- A difference positive or negative between 10% and 20%: Orange/Yellow Light
- A difference positive or negative of more than 20%: Red Light

GAP analysis Items

Data Issues

This data is available in all the cases at National level, and in some cases at Regional Level. Despite this, that data is very rarely available at municipal level.

Another capital problem is how this raw data is calculated. There are differences in the calculation method among countries, including or excluding working areas. As an example there are different criteria regarding rural tourism, including it as services or as agricultural activities.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas.

Comparability and transferability

This is an indicator comparable and transferable.





Issues with the goal and definition of the indicator

This indicator tries to measure the impact of social and cultural elements into destinations. Other indicators could be included to indicate inequalities in management positions, etc., yet data to calculate these is usually not readily available or not collected in a systematic form.

Problems derived from the indicator basis

The indicator described in the ETIS is not so clearly defined, in the sense that it only refers to the difference in wages between women and men.

I assume that this indicator has been deleted due to the problematic, and for beig very similar to the previous one. If can be related witht e previous one, could be interesting to see how this percentage affect to the global economy, so could be also included in the Economic section as well.





Environmental Indicators





ID	ETIS Group	Indicator description
18	ENVIRONMENTAL	Percentage of tourists and same day
		visitors using different modes of transport to
		arrive at the destination (public/private
		and type)

NECSTouR topic: 1. Impact of transport

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	Foreign tourism: 66,3% plane - 27,2% car - 6,6% others National tourism (no Catalan): 18,7 plane – 56,5% car – 17,7% train, 6,4 bus, 0,7% others. Catalan tourism: 85,7% car – 8,6% train, 4,7 bus, 1% others. Catalan tourism with Second Home: 96,4% car – 2,1% train, 1,5% others.	8,4% Cruise-ship visitors	By car: 77,58%; by bus: 5,37%; by plane: 5,30%; by motorcycle 2,54%, by rented car 2,03%, by bicycle: 1,38: by boat, ship or ferry: 1,09%, the rest 4,71%	20%





Defined Threshold

Of course, soft mobility is an important issue for sustainability of tourism. With the purpose of enhancing homogeneity, a threshold is established on the basis of data about international tourism published by the WTO (WTO, 2013). The values for different types of transport are:

53% by plane – 40% by car – 2% by train, 5% by boat, ship or ferry.

In the case of public types of transport a value higher than the threshold will be positive and values lower than the threshold will be seen as negative. In the case of private types of transport values higher than the threshold will be negative and lower values will be positive.

GAP analysis Items Data Issues

Data issues

This data is available in all the cases at national level, and in some cases at regional Level, but very rarely available at municipal level.

Adaptation to Coastal and Maritime areas

This is a specific indicator that can be used to develop sustainable mobility policies. As data is not available at municipal level, the values are not representative of maritime and coastal areas.

Comparability and transferability

This is an indicator comparable and transferable.

Issues with the goal and definition of the indicator

This indicator tries to measure the percentage of tourists and same day visitors using different modes of transport to arrive at the destination (public/private and type).

Problems derived from the indicator basis

This indicator, as described in the ETIS, is not so clearly defined because sometimes the given values refer to one type of mobility and sometimes to another. Therefore it is necessary to have data about the same means of transport including car, plane, train or boat. In addition, not all destinations have data for different types of tourists, domestic and international, and no data is available on same day visitors.





ID	ETIS Group	Indicator description
19	ENVIRONMENTAL	Percentage of destination (area in km2)
		that is designated for protection

NECSTouR topic: 6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	33,03%	40,35%	7,4%	32,66% (six
				municipalities)

Defined Threshold

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:

- More than 12% Excellent
- From 6% to 11,99% Good
- Less than 6% Not good

GAP analysis Items

Data Issues

No data issues have been identified for this indicator.





Adaptation to Coastal and Maritime areas

This is a general indicator and therefore it is not specific of Coastal and Maritime Areas, but it could be calculated through digital cartography (G.I.S.) to M&C areas.

Comparability and transferability

This indicator is comparable and transferable once corrections regarding differences in calculations are made, when needed.

Issues with the goal and definition of the indicator

No issues have been identified for this indicator.





ID	ETIS Group	Indicator description
20	ENVIRONMENTAL	Percentage of the destination area under
		a biodiversity protection plan.

NECSTOUR topic: 6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	17,58%	100%	N.A.	53% (only three municipalities)

Defined Threshold

An ideal value for this indicator has been established in academic research at 75% 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:

- More than 75% Excellent
- From 50% to 74,99% Good
- Less than 50% Not good

GAP analysis Items

Data Issues

This data is available in cases at national level, and in some cases at regional level, but hardly ever available at municipal level.

Instead of calculating the indicator relative to the total area of the destination, it could be calculated relative to the total surface of protected areas in the destination.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore it is not specific of Coastal and Maritime Areas and therefore its reliability is limited.





Comparability and transferability

There are some problems in this indicator regarding its transferability and comparability, because the content and scope of biodiversity plans are not homogeneous. More homogeneity should be looked for if comparability and transferability has to be improved. Searching for more homogeneity is needed to improve comparability and transferability

Issues with the goal and definition of the indicator

This indicator tries to measure the percentage of the destination surface covered by a biodiversity management and monitoring plan.

Problems derived from the indicator basis

The indicator as described in the ETIS is not well defined, and therefore the homogeneity of biodiversity management models is not guaranteed.





ID	ETIS Group	Indicator description
21	ENVIRONMENTAL	Waste volume produced by destination
		(tons per person per season: low and high)

NECSTouR topic: 10. Waste management

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Low season				
High				
season				

Defined 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. Bearing in mind that there is no known optimal low value, a threshold is defined by the mean value of all the participant destinations.

- Waste in high season is 1,5 times or more than waste in low season: Red Light
- Waste in high season is 1 to 1,5 times bigger than waste in low season: Orange/Yellow Light
- Waste in high season is equal to waste in low season Green Light.

Non contemplated situations (such as waste per person being lower in high season) will need to be analysed in a case by case basis.

GAP analysis Items

Data Issues

This result is calculated as in ETIS per year and per month.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. For this reason, the values are not representative of the maritime and coastal areas.





Comparability and transferability

We can transfer and compare these results because they are taken from official sources.

Issues with the goal and definition of the indicator

This indicator tries to measure the waste volume produced by each destination (tones per resident per year or per month).

Problems derived from the indicator basis

The indicator described in the ETIS is not clearly defined. It is so difficult to evaluate the similarity of the different management models because they are different in each case. Different management models cannot assure the evaluation of similarities. For this reason, a unique and common model for all countries should be developed and thus enhance the comparability.





ID	ETIS Group	Indicator description
22	ENVIRONMENTAL	Volume of waste recycled (% per season:
		low and high)
	STOUD topics 10 Worte m	anaanaat

NECSTouR topic: 10. Waste management

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

The ideal value in this case would be 100%. 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. For each season:

- Being over the mean: Green Light
- Being on the mean: Orange/Yellow Light
- Being bellow the: mean Red Light

GAP analysis Items

Data Issues

In Tuscany the indicator is available for the total waste recycled but also for each of the types of waste, e.g. paper, organic, etc. As this is not available in the other regions we will use the total volume of recycled waste as reference for the calculation of the value of the indicator.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore it is not specific of Coastal and Maritime Areas. For this reason, the values are not representative of the maritime and coastal areas.





Comparability and transferability

This indicator is highly comparable and transferable as data is provided from governmental sources and similar methods are used for the calculation of its values.

Issues with the goal and definition of the indicator

This indictor tries to measure the volume of waste recycled (percent or per resident per year) relative to the total waste produced.

Problems derived from the indicator basis

The only problem is that each region calculates the volume of waste in different units.





ID	ETIS Group	Indicator description
23	ENVIROMENTAL	Water consumption (litre) per person, per
		day (in low season and in high season)

NECSTOUR topic: 8. Reduction and optimization of natural resource use with particular reference to water

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

Ideal values of the indicator would be found when tourists have the same volume of consumption than residents or less. Therefore a value of 1 means equality of consumption by tourists and residents, above 1, tourists consume more than locals and below 1, tourists consume less than locals.

A threshold is defined on the mean value for residents, for all the participant destinations.

- If tourists consumption is equal or lower than residents consumption: Green Light
- If tourists consumption is up to 30% higher than residents consumption: Orange/Yellow Light
- If tourist consumption is more than 30% higher than residents consumption: Red Light

GAP analysis Items

Data Issues

In Catalonia and Toscana there is no data on water consumption by tourists, for that reason, we took estimations derived from country global consumptions of tourists. and we had to take estimations derived from country global consumptions of tourists.





Adaptation to Coastal and Maritime areas

This is a general indicator and therefore it is not specific of Coastal and Maritime Areas and therefore its reliability is limited.

Comparability and transferability

This indicator is comparable and transferable once corrections regarding differences in calculations are made, when needed.

Issues with the goal and definition of the indicator

This indicator tries to measure the water consumption per tourist/day compared to the resident population water consumption per person/day.





ID	ETIS Group	Indicator description
24	ENVIRONMENTAL	Energy consumption (KWh) per person per
		day (in low and high season)

NECSTouR topic: 9. Reduction and optimization of energy consumption

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana	
Value					

Defined Threshold

This threshold is similar to the one in the previous indicator. The ideal value will be the one in which tourists have the same volume of consumption than residents or even less. In this regard the threshold is defined on the mean value for residents, for all the participant destinations.

- If tourists consumption is equal or lower than residents consumption: Green Light
- If tourists consumption is up to 30% higher than residents consumption: Orange/Yellow Light
- If tourist consumption is more than 30% higher than residents consumption: Red Light

GAP analysis Items

Data Issues

This data is not available in most of the cases at National level, and in some cases at Regional Level. Despite this, data is very rarely available at municipal level.

So, was so difficult to analyze this indicator value.

Adaptation to Coastal and Maritime areas

This is a general indicator, so meaning that is not really specific of Coastal and Maritime Areas. For this reason, the relationship with the maritime and coastal areas is not representative. However we could evaluate some questions about patterns of tourist energy consumption in relation to the non-tourist consumers.





Comparability and transferability

We have some problems to transfer and compare this indicator between different management models because depending on the sources of each country the value will be so different. For that reason is interesting to build specific management policies for all countries. We can consider to start working in a Data Base to have an open values, the investment needs to achieve excellent values.





ID	ETIS Group	Indicator description
25	ENVIROMENTAL	Kms of cycling routes (versus tot kms of
		Toaus)

NECSTouR topic: 1. Impact of transport

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	1.300 km	1.849,30 km	3.199,56 km	NA
	cycling routes	cycling	cycling	
	/12.123 km of	routes/	routes	
	roads –	13.267 km of	/1.812.950 km	
	10.72%	roads –	of roads –	
		13,94%	0.17%	

Defined Threshold

The ideal value of this indicator should be 50%, with the idea that the kilometers of cycling roads is about half the total kilometers of roads.

A quartile threshold will thus be defined.

- Q4: From 0% to 12,5%: Not good
- Q3: From 12,5% to 25%: Good
- Q2: From 25% to 37,5%: Very good
- Q1: From 37,5% to 50% or more: Excellent

Dada collection system

To ensure comparability of results, the types of roads and cycling routes considered must be clearly defined.

GAP analysis Items

Data Issues

These data is available in all the cases at national level, and in some cases at regional level and municipal level as well. In Tuscany is where obtaining the right data has been more difficult.





Adaptation to Coastal and Maritime areas

This is a general indicator and therefore it is not specific of Coastal and Maritime Areas and therefore its reliability is limited.

Comparability and transferability

This indicator is comparable and transferable as far as data is available. In our case the only problem faced with comparability was found in the case of Tuscany.

Issues with the goal and definition of the indicator

This indicator tries to measure the kilometers of cycling routes relative to the total kilometers of roads in the destination.

Problems derived from the indicator basis

The main problem was found in the case of Tuscany and referred to the conceptual definition of bike routes and green routes.





ID	ETIS Group	Indicator description
26	ENVIRONMENTAL	Level of pollution in seawater per 100 ml
		(fecal coliforms, campylobacter)

NECSTOUR topic: 8. Reduction and optimization of natural resource use with particular reference to water

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
cfu <i>Escherichia colii</i> /100 ml	Excellent: 96,8%. Good: 2,8% Insufficient: 0,4%	Excellent	Excellent: 97.54% Good: 1,48% Insufficient:, 0.49%	Excellent
cfu <i>Intestinal</i> <i>Enterococcus /</i> 100 ml	Excellent: 96,8%. Good: 2,8% Insufficient: 0,4%	Excellent	Excellent: 97.54% Good: 1,48% Insufficient:, 0.49%	Excellent

Defined Threshold

This indicator has two different components and therefore it should be split into two separate indicators. We take the thresholds from the European Directive (Bathing Water Directive 2006/7/EC). Therefore the values of the indicator will be excellent, good or bad according to the following values of the thresholds:

- EXCELLENT
 - o ufc/100ml ≤ 250 Escherichia coli
 - o ≤ 100 Intestinal Enterococcus
- GOOD
 - o ufc/100ml 250 500 Escherichia coli
 - o 100 185 Intestinal Enterococcus
- SUFFICIENT





- o ufc/100ml > 500 Escherichia coli
- > 185 Intestinal Enterococcus

Data collection system

Data for all destinations should be presented either as one agreggated value, the percentage of waters in each level.

GAP analysis Items

Data Issues

The data is available at municipal level but usually it is only measured in particular limited spots. This data is homogeneous all over Europe as the member states have all agreed on this European Directive (2006/7/EC).

Adaptation to Coastal and Maritime areas

This indicator is well adapted to coastal areas and is of high relevance.

Comparability and transferability

This indicator can be well compared if we use the values and scales of the European Directive. It can also be transferred to other European regions for the same reason.

Issues with the goal and definition of the indicator

This indicator is trying to measure the quality of sea water with regards to several elements present in it like bateria or other. The reliability of the indicator would benefit from a wider sample of monitoring spots spread all over the year. This would help in guaranteeing having information about the quality of the water all year round and for different purposes like bathing, scuba diving, or sailing among others.

Problems derived from the indicator basis

The original indicator has the problem of having two values for the two components considered. It is not clear whether the evaluation is done on the basis of the mean value of the quality of water for all the beaches of each destination, or as the percentage of beaches in each destination where the quality of waster is excellent, good or bad.





	-	_
ID	ETIS Group	Indicator description
27	ENVIRONMENTAL	Number of berths and moorings for
		recreational boating in relation to total
		length of coastline (km)

NECSTouR topic: 1. Impact of transport

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				
* 0 1' 1 1 1				

* Partial data

Defined Threshold

This indicator should be displayed in percentage relative to the total number of existing berths and moorings. Moreover it should be displayed as two separate values, one for berths and another for moorings. It could be also related to the number of recreational harbours and marinas.

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%
- The range between these two values will be divided into 3 equal categories, each of them representing low values, mean values and high values of the indicator.

GAP analysis Items

Data Issues

The data is available at municipal, regional and national level except for the Istrian case, where nowadays data is only available at national level. However, this data could be homogeneous.

Adaptation to Coastal and Maritime areas

This indicator is well adapted to coastal areas and is of high relevance.





Comparability and transferability

This indicator is perfectly comparable as far as it is calculated in relative terms and not in absolute ones. It can also be transferred at European level easily, and even with extra European countries.

Issues with the goal and definition of the indicator

This indicator is trying to measure the environmental impact of recreational boats and activities.

Problems derived from the indicator basis

The original indicator has the problem of having two separate components.





ID	ETIS Group	Indicator description
28	ENVIRONMENTAL	Number of blue flags, EMAS, ISO 14001 and
		other national environmental certifications,
		in relation to total number of beaches

NECSTOUR topic: 8. Reduction and optimization of natural resource use with particular reference to water

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

This indicator should be displayed in percentage relative to the total number of possible blue flags. An optimal and realistic reference could be one blue flag per municipality.

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%
- The range between these two values will be divided into 3 equal categories, each of them representing low values, mean values and high values of the indicator

Data collection system

Methodological note: if one same beach has two or more certifications, for the purposes of this indicator will only be added up once.

GAP analysis Items

Data Issues

The data is available at municipal, regional and national level. Moreover this data is homogeneous as there is an only and external institution auditing the data.

Adaptation to Coastal and Maritime areas

This indicator is adapted to coastal areas and is of high relevance.




Comparability and transferability

The indicator is perfectly comparable and easily transferable to any European coastal destination.

Issues with the goal and definition of the indicator

This indicator is focusing on the environmental quality of beaches.

Problems derived from the indicator basis

Blue flags are not necessarily a reliable indicator of the quality of beaches. In some cases the requisites of blue flags cannot be complied with even though the beach is excellent. Also, there are municipalities, which decide not to take the blue flag audits, and have other external audits instead.





ID	ETIS Group	Indicator description
29	ENVIROMENTAL	Area and volume of sand nourishment

NECSTOUR topic: 7. Active conservation of distinctive identities of destinations

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value A	N. A.	N. A.	N. A.	N. A.
Value B	N. A.	N. A.	N.A.	N. A.

Defined Threshold

This indicator should be divided into two, one for each component. It also needs to be defined in percentage relative to the values to the total figure for the region.

The threshold cannot be defined at present. It could be defined by the mean value for all the destinations involved as it was done in other indicators.

GAP analysis Items

Data Issues

The data is unavailable in all the regions. Only some partial data can be extracted in certain municipalities but the results on the basis of these available data would be far too unreliable and invalid.

Adaptation to Coastal and Maritime areas

This indicator is specific to coastal areas and is of high relevance.

Comparability and transferability

Comparability and transferability is limited as far as the availability of data is so restricted.





Issues with the goal and definition of the indicator

This indicator is focusing on the quality of coastal sand and on the human activity that 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.

Problems derived from the indicator basis

The original indicator has two differentiated components and therefore could be split into two different indicators.





ID	ETIS Group	Indicator description
30	ENVIROMENTAL	Total Km of free access beaches relative
		(%) to total Km of beaches

NECSTouR topic: 6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value				

Defined Threshold

The indicator is defined in percentage with an ideal value of 100%. Thresholds are defined as follows:

- More than 80 %: Green Light
- Less than 80%: Red Light

GAP analysis Items

Data Issues

This data is easily available, even at municipal level, and it is homogeneous among countries.

Adaptation to Coastal and Maritime areas

This indicator is specific to coastal areas and is of high relevance.

Comparability and transferability

This indicator is completely comparable and transferable.

Issues with the goal and definition of the indicator

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 beaches are public with free access by law, the result will always be the ideal 100%.

Problems derived from the indicator basis

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	ETIS Group	Indicator description
31	ENVIRONMENTAL	Water quality in tourist harbours/marinas

6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	N.A.	Very Good	N.A.	Very Good

Defined Threshold

The threshold cannot be defined, as there is an enormous disparity in the components to be chosen as part of the measurement. There is a scale for harbours which distinguishes four categories or levels of quality:

- Not pass
- Pass
- Very Good
- Excellent

Data collection system

Need to list the items to be measured to assess quality

GAP analysis Items

Data Issues

This data is not generally available with the exception of a very few harbours. Furthermore the data collected in the different harbours is not homogeneous.

There is no European Directive that regulates this issue and in the destinations analysed there are no national or regional directives regulating this issue either.

Adaptation to Coastal and Maritime areas

This indicator is well adapted to coastal areas and is of high relevance.





Comparability and transferability

This indicator is difficult to compare and transfer because the values are not homogeneous. Also, very often the quality of water in harbours is not analyzed as it is not compulsory.

Issues with the goal and definition of the indicator

The goal of this indicator is to shed light regarding the quality of seawater in coastal areas, particularly in areas where there are harbours and marinas.

Problems derived from the indicator basis

There are no directives at any level regarding the quality of seawater monitoring. In this regard the option of creating a proposal that could be then adopted and transferred to other regions is of real interest.





ID	ETIS Group	Indicator description
32	ENVIRONMENTAL	% of beaches accessible to all: mobility
		and sensorial disabilities

2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	23,8%	75%	24%	60%

Defined Threshold

The ideal regarding accessibility should be that at least every municipality has 1 beach completely accessible. Therefore we can set different thresholds regarding the percentage of municipalities that comply with this ideal:

- Less than 20% Insufficient
- Between 20% and 40% Low
- Between 40% and 60% Good
- Between 60% and 80% Very good
- More than 80% means Excellent

GAP analysis Items

Data Issues

This data is not available in all the municipalities, and when available it is not homogeneous.

Adaptation to Coastal and Maritime areas

This indicator is well adapted to coastal areas. Nevertheless, there is the need to extend it to other coastal resources beyond beaches.

Comparability and transferability

This indicator is partially difficult to compare and transfer because the values of the different regions are extremely different. It is due to the fact that for instance a beach is considered as such when there is a conditioned bathing space. This, in the case of Istria, does not mean





sandy beaches, and therefore accessibility is much more difficult to implement in this case.

The same happens in Catalonia with some beaches only accessible by walking paths or by boat, located at the bottom of a cliff. In this case the geographical shape of the coast makes the beach impossible to be made accessible for all.

Issues with the goal and definition of the indicator

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.

The accessibility concept should be monitored in terms of overall accessibility in the destination, thus including accessible transport, accommodation, and services, as well.

Problems derived from the indicator basis

A broader definition of accessible beach is needed. An accessible beach is one that can guarantee access to water to people with mobility impairments. However it does not include other kind of disabilities as sensorial, visual, or mental.





ID	ETIS Group	Indicator description
33	ENVIRONMENTAL	% of electric energy consumed by
		renewable sources.

6. Active conservation of environmental heritage

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	16,3	N.A.	3,47%*	N.A.

* Value for Croatia, at national level, N.A. for Istria County.

Defined Threshold

A value of 100% would represent the ideal scenario. However, due to the fact that is ideal is not achievable we set as threshold the average figure for the EU, which is 20%. 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:

- More than 30% means Green Light
- Between 15% and 30% means Orange/Yellow Light
- Less than 15% means Red Light

GAP analysis Items

Data Issues

This data is not available in all the destinations analyzed. Moreover, this data is not available at municipal level. The main problem is that all the information available refers to the production of renewable energy and not to the consumption.

Adaptation to Coastal and Maritime areas

This is a general indicator and therefore is not specific of Coastal and Maritime Areas. For this reason, the values are not representative of the maritime and coastal areas. To be adapted to Coastal areas additional information should be used. For instance, in Catalonia tourism energy consumption is the 18% of the total energy consumption.

Comparability and transferability

This is an indicator well comparable and transferable as far as data is homogeneous in terms of either consumption or production.





Issues with the goal and definition of the indicator

The goal of this indicator is to help reducing fossil energy generation and consumption, which have positive implications in the reduction of CO² emissions.

Problems derived from the indicator basis

This is an indicator that was not included in the ETIS list as a valuable indicator for sustainable tourism. However, the energy consumption of the tourism sector in a tourism destination is relevant, and therefore it should be taken into consideration.





ID	ETIS Group	Indicator description
34	ENVIRONMENTAL	Number of days when the CO2 threshold is
		trespassed.

2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Value	N.A.	N.A.	N.A.	3

Defined Threshold

The CO_2 emission thresholds are not defined in EU legislation. The only parameter that is monitored is CO_2 emission on certain sources like chimneys, factories among others.

The ideal case would be a situation when there are 0 days with CO_2 pollution. We set a threshold on the mean value of all the participant destinations.

- Being above the mean will mean Red Light
- Being on the mean will mean Orange/Yellow Light
- Being below the mean will mean Green Light

GAP analysis Items

Data Issues

These data is not available. The only data that exists refers to 3 municipalities that are measuring this data in Tuscany.

An additional problem is about where data is measured. For instance, in an urban coastal destination like Barcelona we can have important differences in values depending on the particular spots where the sample is taken.

Special attention is needed regarding to when the measures are taken. For instance if we want to report the impact of tourism in the CO_2 emissions, we have to take samples in both peak and in low season, and then interpret the results.





Adaptation to Coastal and Maritime areas

This indicator has no problems in being adapted to coastal areas, as far as the values can be properly measured.

Comparability and transferability

This is an indicator well comparable and transferable if data is available.

Issues with the goal and definition of the indicator

The goal of this indicator is to reduce CO_2 emissions, which is the aim and compromise of all the European governments.





ID	ETIS Group	Indicator description
35	ENVIRONMENTAL	Use of land: % developed, % building land,
		% land designated as not for building

2. Quality of life of residents and tourists

Values of reference

Region	Catalonia	Cyprus	Istria	Toscana
Developed		-	-	
Building				
land				
Not for		-	-	-
building				

Defined Threshold

- Being above the mean will mean Red Light
- Being on the mean will mean Orange/Yellow Light
- Being below the mean will mean Green Light

GAP analysis Items

Data Issues

This data should be easy to obtain for all destinations.





Adaptation to Coastal and Maritime areas

This indicator has no problems in being adapted to coastal areas.

Comparability and transferability

This is an indicator well comparable and transferable if data is available.

Issues with the goal and definition of the indicator

The goal of this indicator is to give an overall picture of land usage in coastal destinations, as to be able to assess what part of the land has had a strong human impact and to which extent this can increase in the coming years.

For analisys it should be related to indicator 20 (% under a biodiversity management plan).