

## **IMPACTOUR** **IMproving Sustainable Development Policies and** **PrActices to assess, diversify and foster Cultural** **TOURism in European regions and areas**



### **D3.4 - Results from data collection phase** **Final**

**Deliverable Lead and Editor:** Cultur

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#### **Abstract**

The data collection results deliverable is focused on the systematisation and analyses of all the data available, provided by the pilots during the whole data collection process until the document's submission date, although the data collection action will keep active for next months. Therefore, the homogenisation, comparison and systematisation of this data can help to detect points in common, highlight relevant conclusions, elaborate a benchmarking report and make future decisions.

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### Further Information

[www.impactour.eu](http://www.impactour.eu) and <mailto:info@impactour.eu>

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## Project Partners



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## Executive Summary

The aim of this deliverable, as stated in the DoA, is to present the conclusions from the first phase of data collection, as well as conclusions from the second phase of data collection. These conclusions will help to understand the reality and needs from each one of the pilots involved within the project, their ability to obtain the data and to gather it to be interpreted, and to further propose actions, improvement and solutions to keep collecting data during subsequent phases of the project.

The data collection methodology has been established, at first, in deliverable D3.3 where the consortium has defined the criteria and methodology to gather the information following the Baseline Indicators list defined in the deliverable D2.1. This quantitative data has been in an active process during the past months, and will continue beyond the submission of the current deliverable. So, in other words, the data collection process is a live action that is in constant revision and updating of the information received.

In order to proceed with the analysis of the data, a number of steps have been followed to arrive at the conclusions. Firstly, thanks to the active collaboration of the partners with associated pilots, an overview of the data collection process, pilot by pilot and criteria by criteria, has been achieved. Secondly, and based on the search for digital tools that can be seen in the introductory chapter of the state of the art, a first systematisation of the data obtained has been carried out on the basis of the supporting tool Power BI <sup>1</sup>; that is, a filtering tool through which to obtain a homogenisation of the information for an easy reading and a better interpretation. Afterwards, and thanks to the detailed analysis of each of the indicators through each of their graphs, some relevant points have been detected to discuss, verify and improve; in other words, to propose an improvement in the quality of the data through a second phase of systematisation based on a lean iterative approach and continuous improvement. Finally, and before reaching conclusions, due to the incomplete data obtained from pilots after the above-mentioned processes, it was decided to make a comparative analysis with the available data that can answer some of the questions and challenges posed in IMPACTOUR. All these phases are described in more detail below.

First of all, in order to obtain a global vision of the data collection situation before its systematisation, the project partners responsible for each pilot have highlighted the value of the responses obtained. To this end, the types of Lands in which the pilots are gathered: Ruralia, Urbanalia, Itineralia and Naturalia, have been categorised at the first level in order to highlight the most relevant data in each of them based on the following criteria: characterisation, economic, social, cultural, environmental and resilience. In addition, a final section has been added in which the challenges they have had to face during the data collection process are listed.

Following this, it has been possible to systematise the available information. Thanks to this, despite the fact that several indicators have not been able to show their final value due to the lack of some of the variables necessary for the calculation, the data obtained are sufficient to detect some values that distort the final information and that need to be reviewed and verified by the responsible partners. Typical examples of this may were the

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<sup>1</sup> <https://powerbi.microsoft.com>

use of different units for the same measure, a different interpretation for the same question on how to obtain the data, or a more or less broad measurement criterion when providing the data. However, as a result of all this filtering and improvement process, it is possible to obtain quality information that allows us to draw important conclusions for IMPACTOUR.

In a third step, and in relation to the previous procedure, a second systematisation of the data was carried out. In other words, it was necessary to contact the pilots again through their reference partners in order to validate, modify or complete specific data. Thanks to this, the quality of the information obtained and the detailed interpretation of the data or indicator significantly improved, which is very useful for future actions and tasks to be developed in the project.

Finally, and with the aim of obtaining comparative information that provides a new analysis to the document and the project, a comparative analysis was carried out based on the data obtained within the same criteria, now including different types of pilots and lands in the selected graphs. The graphs included show different ways of connecting and interpreting the data within the same criteria, such as the ratio of nights spent by a tourist or the average daily expenditure of tourists.

With all this process, and thanks to the objective of obtaining clear, understandable data that can be applied in the future, an analytical vision of the reality of the different pilots in the data collection process and the contact with the sources from which this information must be obtained is achieved. In this way, improvements can be made when obtaining data in the following steps, such as elaborating the Key Performance Indicators in WP4 or as feeding the IMPACTOUR tool in WP5.

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## 0 Introduction

### 0.1 IMPACTOUR Project Overview

IMPACTOUR – IMproving Sustainable Development Policies and PrActices to assess, diversify and foster Cultural TOURism in European regions and areas – is a project funded by the H2020 Framework Programme of the European Commission under Grant Agreement 870747 and conducted from January 2020 until June 2023. It engages 12 partners from 10 European countries with a total budget of 2,971,250.00 euro. Further information can be found at [www.impactour.eu](http://www.impactour.eu).

The main ambition of IMPACTOUR project is to create an innovative and easy-to-use methodology and tool to measure and assess the impact of Cultural Tourism (CT) on European economic and social development and to improve Europe's policies and practices on CT, strengthening its role as a sustainable driving force in the growth and economic development of European regions.



Figure 0.1 - IMPACTOUR Strategy

CT has been recognized as one of the drivers of growth, jobs and economic development, as well as intercultural understanding and social development in Europe regions and urban areas. However, there is still a knowledge gap on methods to measure different types of CT impacts and to assess multilevel and cross-border strategies, policies and practices contribution to sustainable development. IMPACTOUR proposes to bring together CT-related stakeholders and researchers to achieve new approaches taking advantage of the large amounts of information that confront policy-makers.

By identifying and comparing quantitative/qualitative pan-European information on CT forms and promotion, and by providing quantifiable evidence of CT strategies and their effect on European regions' development and Europeanisation, IMPACTOUR will deliver an innovative methodology and tool (combining data analytics algorithms with artificial intelligence and machine learning strategies) providing CT stakeholders with strategic guidance so that policies and practices on CT can be improved.

IMPACTOUR will encompass a sustainable ecosystem by engaging Cultural Tourism stakeholders and following a participatory approach. IMPACTOUR tools and methods will lead to reinforcing the commitment with Europe CT, increasing citizens sense of belonging, valorisation of minority cultures, strengthening of identities and Europeanisation.

IMPACTOUR Methodology will be completed and tested with data coming from 15 Data Information Pilots and the IMPACTOUR tool will be validated in 5 Validation Pilots, with distinct characteristics spread around Europe.

### 0.2 Deliverable Purpose and Scope

The main purpose of this document is to analyse the available data after several months of data collection process within the pilots of IMPACTOUR, although this gathering process is

still active. After filtering, analysing and making the systematisation of the available information, some key conclusions can be elaborated for further deliverables (such as the Benchmarking Report) or work packages (such as WP.4). Furthermore, based on the Lean Start Up Method, the data gathering process with pilots, following the Baseline Indicators in D2.1, provides some significant inputs and recommendations on indicators that will help better develop the Key Performance Indicators (WP4) particularly when aiming measuring the impact of the IMPACTOUR strategies..

### **0.3 Target Audience**

This document is primarily for project participants (partners and active pilots). Although it also provides the European Commission (including appointed independent experts) with an overview of the data collection status and results obtained with their followed analysis.

### **0.4 Document Structure**

This document has the following sections<sup>2</sup>:

- Section 0: Introduction
- Section 1: Methodology
- Section 2: State of the art
- Section 3: General data collection overview
- Section 4: First systematisation of data: indicators analysis
- Section 5: Second systematisation of data: data discussion
- Section 6: Conclusions for IMPACTOUR
- Section 7: Citations
- Section 8: Tables in annex

### **0.5 Document Status**

The Deliverable is listed in the Description of Action as “public”. This document has no preceding documents or expected further formal iterations. However, the data collection process is still active and on-going. Data from participant pilots will still be gathered during the following months, to better understand pilots’ challenges and to provide more detailed information to the partners for future work packages. For this purpose, the lean-start-up method defined over WP.2 establishes the steps to be followed during this process. The pilot destinations have given their consent to the publication of their data, as presented in this Deliverable.

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<sup>2</sup> Please note that the document structure was made using the word cross reference feature.

# 1 Methodology

## 1.1 Introduction

In order to develop the systematisation and analysis of data, a literature review has been carried out, building a state of the art and defining the objective of this document within the IMPACTOUR project. In other words, the review establishes a reference framework to identify the main steps to follow in a process of data cleaning and study, as well as the best existing digital tools for understanding and visualisation.

## 1.2 General Overview

As stated in previous deliverables, IMPACTOUR is based on a Lean Startup Method for data collection and improvement work, which is an iterative and cyclical process as it can be seen in Figure 1.1. This deliverable considers the information collected under WP3 (Data information pilots), until 15/03/2022. Due to the pandemic state in which the data collection process took place it is considered that this information can be modified and expanded in the following months of project implementation and future work packages, such as WP6 (Integrate and validate IMPACTOUR Tool in real scenarios).

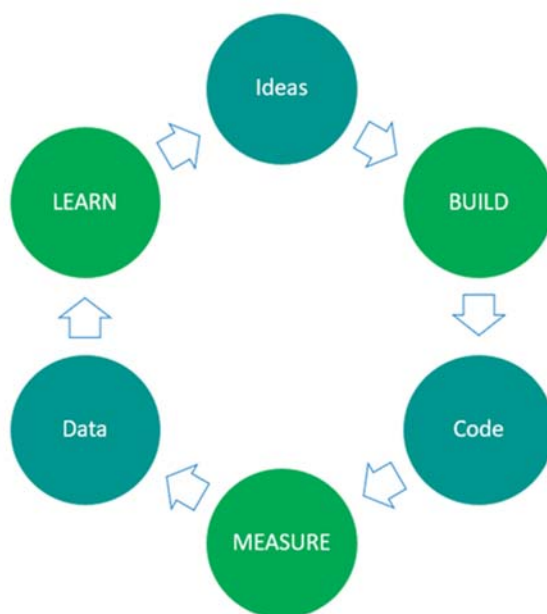


Figure 1.1 - Lean Start Up Methodology from D2.

## 1.3 Process of analysis

### 1.2.1 First collaborative overview of the results

Once the Data Collection process has been carried out, each of the partners with active pilots in the process was asked to write a summary analysis paragraph of this data gathering (process, challenges, difficulties, most relevant data, initial conclusions, etc.) for each of the domains. In other words, to write a short general synthesis for the areas of Characterisation, Economic, Social, Cultural, Environmental, Resilience and Challenges (Results and Barriers)

In addition, and to make this work more complete and comprehensive, each of the pilots has been divided according to the types of Lands, including: Ruralia, Urbanalia, Itineralia and Naturalia. In this way, IMPACTOUR partners were asked to carry out the synthesis work based on the type of destination to which their pilot belongs. For this purpose, an initial pilot has been identified to serve as a guide for each of the Lands groups (the ones appearing first in the further description), with the aim that the rest of the pilot destinations complete (if information is missing), contrast (if they have another reality) or validate (if the information is repeated) this initial approach analysis.

### 1.2.2 Power BI tool

The preliminary analysis of the systematized data sources was carried out using Microsoft's Power Business Intelligence (BI) tool.

These data sources are a series of Excel templates distributed among the members of the consortium, so that they could send them to their respective pilots. The information has been arriving sequentially and, as described above due to the pandemic state and also because not all the pilots have all the information available, the results were only partially completed in most of the pilots, and in some templates data was entirely missing.

In order to be able to work efficiently on the template sent, prior work was done to compile and systematize the information, both the data and the calculated indicators, so that a simple link could be made to a general sheet, which is where Power BI obtains the information for the current analysis. This summary sheet is automatically updated as the new information arrives and in turn it is automatically updated on Power BI every time the analysis file is opened.

### 1.2.3 Indicators analysis

The first approach on indicator analysis has been to organise and present in different graphs the results obtained from the data gathering process of the Baseline Indicators (D2.1.). This process aims to better understand the accuracy of the baseline indicators, according to the real situation of the data collected and also to test their definition and structure. It will therefore help conclude significant inputs for the development of the Key Performance Indicators in Task 4.1 (Identification of Key success factors and replicability conditions).. Initially a specific comparative analysis was not elaborated but, instead, an assessment on the data obtained from the different pilots. In this way it was possible to evaluate with quantitative data what is suggested in the pilots' comments to the barriers encountered during the process of filling in the questionnaires.

From this evaluation it was clear that some of the indicators defined are difficult to obtain, either because of the absence of data or because the indicator itself has not been clearly understood when filling in the information, or because of different understanding (from pilot to pilot) of the required information. All this information will be further used to refine both the key performance indicators and the process of obtaining the information to produce them.

Considering the detected issues in the indicator analysis according to the data gathered, the following four classification levels were considered, in order to clearly identify the detected problems:

- Level 1 – The indicator presents no issues and the collected data is sufficient
- Level 2 – The indicator presented minor issues associated with the necessary data
- Level 3 – The indicator presented major issues associated with the collected data

and they were solved by re-consulting the pilots for clarification

Level 4 – The indicator presented major issues and will be further analysed and reformulated when developing the KPIs

### **1.2.4 Comparative data analysis**

Following the previous steps, once all the data from indicators have been systematised and analysed per domain, the last chapter of the present document will include a more detailed discussion of the knowledge obtained. The lack of some information, and the inconsistency, and the difficulty to elaborate some final results (considering the indicators' mathematical operation, lead to some inconsistencies while elaborating some final results. In this way it was decided that the most relevant data will be compared, thus combining new points of view and understandings of the collected information.

For comparative analysis of the data, before conclusions were drawn, the Power BI tool was a very useful support for elaborating different graphs and charts in a variety of formats, such as bar charts or dots/bubbles charts. In addition to this comparative analysis the aim will be to add data from pilots in different lands, highlighting some relevant topics per domain to generate discussion and produce feedback for future deliverables and work packages.

## 2 Data and processing tools

### 2.1 Data processing and cleaning

As stated before, the aim of the present document is to analyse and elaborate conclusions on the data collection process. Data analysis is a process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, informing conclusions, and supporting decision-making [2]. Therefore, all the work done and reported in this deliverable is focused on refining the collected information that will be later gathered to fill the IMPACTOUR tool, a tool which will provide assessment for management of Cultural Tourism at destinations.

While considering the data analysis process, it is possible to highlight its main steps and how the process is established:

- Defining requirements for the data gathering,
- Data Collection,
- Data Processing and cleaning,
- Data Analysis,
- Data Interpretation.

Nonetheless, from the preceding list, in this deliverable the main focus is on data processing, cleaning and analysis steps. Indeed, some of the initial steps have already been tackled in previously submitted deliverables, and the final data interpretation will be addressed in the Benchmarking report (D2-3 – IMPACTOUR Benchmarking report), where a comprehensive assessment of data, combining both quantitative and qualitative is going to be performed.

Data processing involves the organization of the information to be prepared for analysis, to be consistent and comparable [3]. Thus, after organizing the gathered information, it is necessary to check it and revise it in order to detect incomplete data, duplicated data, unformatted data or simply errors. Data cleaning is a necessary process to assure that all the information that is going to be analyzed is coherent and consistent.

More specifically, data cleansing or data cleaning is the process of detecting and correcting (or removing) corrupt or inaccurate records from a record set, table, or database and refers to identifying incomplete, incorrect, inaccurate or irrelevant parts of the data and then replacing, modifying, or deleting the dirty or coarse data. [4] This procedure will correspond to a first or initial systematisation of the collected raw data.

Once the information is all set, the process of analysis can start, and it can be derived in another refining of the data provided to better understanding the results, in an iterative process that produces more consistent results according to the available data. [5] This procedure will correspond to a second and more detailed analysis of the already clean and treated systematized data.

Finally, data visualization is a possible approach to produce the analysis, examining the information in a more visual and comparative approach to have a better insight on the information. [6] For this step, digital programmes have become a very useful tool to elaborate easy-to-read graphs and chart, generate discussion and elaborate conclusions.

## 2.2 Tools for data analysis

When working on data visualisation and digital support, Business Intelligence (BI) appears as a concept and a tool that has been widely highlighted in the literature, especially in the strategic management discipline as well as the information systems discipline. BI is a process of applying tools and techniques to gather and analyse the data collected from multiple (both internal and external) sources, to create knowledge that helps in decision-making [7].

The use of BI tools can also help to improve profits by managing organisational corporate performance and gain competitive advantage through consolidation of past victories [8]. Although there are several benefits that BI tools offer, the main reasons for implementing BI include easy-to-use tools for data discovery, availability of industry specific or business context solutions [9] and renewed interest of senior managers.

Therefore, after a research process, it was decided to apply these kinds of tools and concepts for the analysis of data within the IMPACTOUR project, especially the easy-to-use tools for the gathering, systematization and presentation of the information, and its further interpretation and support.

Amongst the different platforms reviewed to use in the analysis process of, it has been found the following as more relevant:

- Datapine
- Zoho Analytics
- Tableau
- Power BI
- Oracle BI

Finally, it was decided to adopt Power BI as the main tool used for the data analysis procedure, since it is an easy-to-use tool and it is very well integrated within the Microsoft Excel software. Indeed, all of the spread-sheets gathered from pilots were produced in this format, making Power BI the most reasonable solution to proceed with.

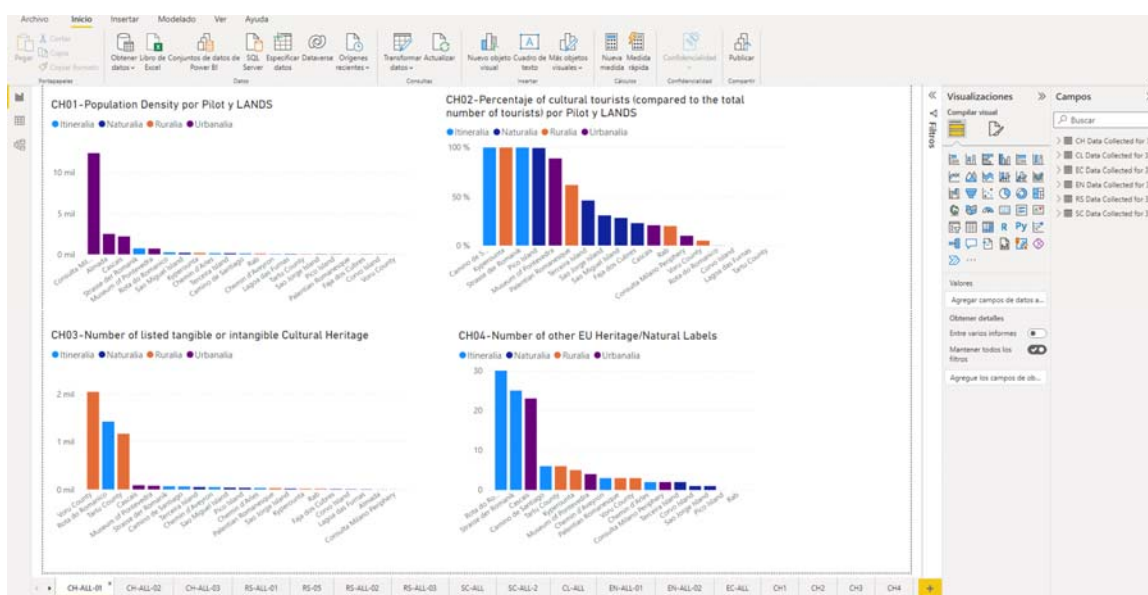


Figure 2.1 - Power BI visualisation (example)

## 3 General data collection overview

### 3.1 Introduction

#### 3.1.1 Pilots involved

Following the description presented in the Methodology chapter, the 20 pilots involved within this initial overview analysis of the data gathered were Almada, Camino de Santiago, Cascais, Chemin d'Arles, Chemin d'Aveyron, Corvo Island, Faja dos Cubres, Kyperounta, Lagoa das Furnas, Milano Periphery, Museum of Pontevedra, Palentian Romanesque, Pico Island, Rota do Românico, São Jorge Island, São Miguel Island, Strasse der Romanik, Tartu County, Terceira Island, and Võru County.

Furthermore, for their better comparison and understanding, these destinations have been divided into groups considering their characteristics and similarities, according to the types of Lands already defined in previous deliverables:

1. RURALIA: Tartu County, Võru County, Kyperounta and Palentian Romanesque.
2. URBANALIA: Almada, Cascais, Milano Periphery and Museum of Pontevedra.
3. ITINERIALIA: Camino de Santiago, Chemin d'Arles, Chemin d'Aveyron, Strasse der Romanik, Rota do Românico.
4. NATURALIA: São Miguel Island, Corvo Island, Faja dos Cubres, Lagoa das Furnas, Pico Island, São Jorge Island, Terceira Island.

### 3.2 Ruralia overview

For the Ruralia Land group, the pilots involved were Tartu County (although this particular pilot, is placed in the group of Ruralia due to the extension of its County, it also has some characteristics more related to the group of Urbanalia, because of size of the capital of this area – Tartu city: around 93.000 people), Võru County, Kyperounta and Palentian Romanesque. (For the last one, some data are still being provided, so the analysis is not available at this stage of the process, but it will be included partially in further chapter, deliverables and actions). In the following subsections, a global analysis is given for each one of them according to the domains of characterisation, economic, social, cultural, environmental, resilience and a final chapter for the challenges detected.

#### 3.2.1 Characterisation

##### PILOT 1: Tartu County

The population of Tartu County is 153,918 (in 2021). The total area is 3,349 km<sup>2</sup>. Most of the population is concentrated in the city of Tartu. In 2021 Tartu County was visited by 223,913 visitors (update in February 2022), and in 2019 (before the pandemic) there were 352,257 tourists. More than half of the tourists in 2019 were domestic tourists and in 2021 the majority of tourists were domestic tourists (only ~40,000 were foreign tourists). There is no data regarding cultural tourists' number because it is not collected separately.

There are two tangible (Struve's Geodetic Arc, Tartu Observatory) and one intangible (Tartu – City of Literature) UNESCO World Heritage sites. Additionally, to that, there are almost 3,000 national protected tangible CT sites and one intangible (Wolverine evening

celebration in Tartu) cultural heritage event. At the regional or local level, there are almost 2,000 tangible and one (First Song festival, the Song Festival tradition) intangible cultural heritage. There are some EU Cultural/Natural Heritage labels including Cultural Capital, Creative Cities, Protected designation of origin (PDO), Traditional specialties guaranteed (TSG), CoE Cultural Routes, and Cultural Routes mapping.

Tartu County has a lot of different cultural facilities (museums (29), smaller and bigger exhibition halls (308), theatres (15), monuments (70), libraries (125), archives (6), performing arts venues, and concert halls (108), creative hubs (11), and other cultural facilities (31)). There are 194 cultural tourism attractions and 33 of them are key sites (most of them are museums, but also a gallery, Town Hall and Town Hall Square, some thematic centres, theatre). The distribution of cultural attractions (65) is more dispersed in the county – they are located across the county, but the concentration is higher in the east of the county. In the Tartu city all the cultural tourism attractions are easy to reach.

Tartu County has a Destination Management Organization (VisitTartu). The destination is accessible by plane (closest airport located near Tartu city and that have flight connections with several European countries, for example, Finland, Germany, etc.). Due to the good bus connection, Tartu is also reachable from Tallinn and Riga airports. There are good road, bus, and rail connections with various destinations including neighbouring countries). The destination is also accessible by boat, but only viarivers and lakes (river Emajõgi connects Lake Peipus and Lake Võrtsjärv and it flows through the county (also City of Tartu).

## **PILOT 2: Võru County**

Võru County is Estonia's southernmost county, a predominantly rural area of 2,773 km<sup>2</sup> with a population of 34,898 inhabitants as of 2021. It is accessible by road and rail, but has no airports. It has no regular boat transportation; however, domestic visitors can access the county from Lake Peipus or Lake Pihkva by private boats.

Võru's tourism policy is steered by the Võrumaa Development Center. In addition to that, there are other organizations such as the Võro Institute and Seto Institute that develop and market sub-destinations. In 2019, Võru had close to 88,000 overnight tourists, but the number dropped to about 66,000 in 2020 due to the COVID-19 pandemic. As a tourism destination, Võru mostly attracts tourists interested in its diverse nature and opportunities for outdoor sports and recreation. There is no exact data on the number of cultural tourists. According to tourism managers in the county, the share of cultural tourists out of all visitors may amount to some 5–8%.

Võru has close to 2000 tangible cultural heritage sites, including 60 nationally protected and 1980 regionally protected heritage sites. The county also boasts two entries in the UNESCO list of Intangible Cultural Heritage – the county's historic smoke sauna tradition and the unique "leelo" singing tradition of the Seto ethnic-linguistic minority. The region has 39 libraries, 20 monuments, 14 museums, 11 creative hubs, 5 exhibition halls, 3 cultural routes and several other types of cultural attractions, such as manors, historic buildings, ruins and historical sites. In total, there are close to 100 cultural attractions, out of which 15 are regarded as key sites. To date, Võru County has not analysed the geographical dispersal of cultural attractions across the region.

## **PILOT 3: Kyperounta**

The population of Kyperounta is 1,500 (2011). A new census is taking place at the moment but no official data is yet available. The total area is 8,773 km<sup>2</sup>. The total number

of tourists that visited the pilot before COVID-19 was between 50,000 and 80,000 (2019) and most of them related their visit within the areas of Cultural Tourism.

There are six (6) tangible and four (4) intangible registered Cultural Heritage sites. Tangible Cultural Heritage Sites: Church of Saint Marina, Church of Saint Arsenios of Cappadocia, Church of Virgin Mary, Church of Holy Cross, Museum of traditional Rural life and natural history, Struggle Museum. Intangible Cultural Heritage Sites: Lountza Pitsilias, Loukaniko Pitsilias, Hoiromeri Pitsilias, Halloumi Pitsilias. There is also the Pitsilia Wine Route which is listed in the Council of Europe (CoE) Cultural Routes. Kyperounta also hosts cultural facilities which include the Museum of the EOKA Struggle of 1955-59, Museum of Folklore Agriculture Tradition and Natural History and Ecclesiastical Museum. The Pilot also has an exhibition hall in development, Heroes Monument, Council Library, Village Square where events and festivals are happening and also an online collection at Europeana, the EU digital library.

All the CT attractions are within the centre boundaries of the Pilot Site and are open all year round. The Key site is the Church of Saint Arsenios of Cappadocia, Holy Cross & Saint Marina. The pilot has a Destination Management Organization (MyTroodos). The access to the site can be gained by car, bus, taxi, motorcycle, bicycle and on foot as there is no airport or port.

### **3.2.2 Economic**

#### **PILOT 1: Tartu County**

Looking at longer-term trends, Tartu County has enjoyed increasing economic benefits from (cultural) tourism. The number of overnight tourists has increased twofold, from 161,000 in 2010 to 352,000 in 2019, although dropped significantly in 2020 due to the global Covid-19 crisis. However, the recovery process has been slightly more rapid compared to national average, mostly thanks to the large share of domestic tourism among all tourists.

For Tartu County (being a Local Administrative Unit, LAU13), data on the most common economic indicators is easily available from the national statistical board. This includes nights spent and occupancy rate in official tourist accommodation establishments. Data on nights spent and number of bed-places is also available for sharing accommodation from the Estonian Tourist Board, who uses data intermediaries to access data from larger sharing economy platforms (Airbnb, Booking, Expedia, Tripadvisor). However, these datasets include no data on the number of visitors associated with each booking, nor the occupancy rate of bed-places. More importantly, no data is available on cultural tourism employment and turnover per cultural tourism activity. This is due to three main reasons: first, there is no uniform definition of cultural tourism and a lack of clarity on what types of businesses and establishments are considered cultural tourism facilities. Second, there is no agreed-upon classification of cultural tourism activities. Third, in the absence of official statistics on cultural tourism as a separate domain, planning and conducting surveys to collect this data directly from companies would not be feasible for pilots with limited (human) resources. As long as definitions and classifications have not been harmonized, this data would not be comparable across tourism sites even if pilots made the effort of collecting the data on their own.

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<sup>3</sup> For details, see:

[https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Local\\_administrative\\_unit\\_\(LAU\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Local_administrative_unit_(LAU))

## **PILOT 2: Võru County**

After several years of slow tourism growth, Võru County experienced a rapid leap in visitor numbers in 2017-2018 when the number of overnight tourists increased by 50 % and the number of overnight visits grew from around 100,000 in 2016 to 171,000 in 2019. However, this trend was interrupted in 2020 due to the global COVID-19 pandemic.

Regarding the availability of tourism data, some common indicators such as the number of overnight tourists, and capacity and occupancy rates of official accommodation establishments, is provided by the national statistical board. Through data intermediaries (e.g. Transparency), the Estonian Tourism Board also provides data on nights spent in sharing accommodation (Airbnb, Booking, Expedia, Tripadvisor), although there are more gaps in data than in official accommodation statistics – for example, it is not known how many visitors are associated with each night booked. Nevertheless, existing data reveals an interesting picture: the number of stays in sharing accommodation facilities made a sudden leap in 2021. Compared to the last pre-pandemic year (2019), the increase of overnight stays in sharing accommodation establishments exceeded 100 percent in certain months.

It is important to note that data is only available for general tourism indicators, but not for cultural tourism specifically. This is likely related to the lack of uniform definitions and classifications of cultural tourism activities, as well as pilot sites' limited capacity to design and conduct large-scale surveys on their own.

## **PILOT 3: Kyperounta**

There isn't any clear data stating specifically if there was an increase in economic benefits from Cultural Tourism in the latest years (until 2019). Most of the Tourist spent an average of two-three nights and the pilot site can host 100-150 persons. A tourist spends around 130 euros including overnight accommodation and 30-40 € without accommodation. (2021). Pilot employs around ten people directly on CT and another thirty to forty that are indirectly connected to CT (2021). Total occupancy of bed-places and bedrooms in hotels and similar accommodation is around 80% average for private accommodation and none for shared as there isn't any shared accommodation on the site (2021). Finally, there isn't any separated data about cultural tourism activity turnover.

### **3.2.3 Social**

#### **PILOT 1: Tartu County**

The number of visitors in Tartu County is 232,720 and the number of residents is 153,912 (in 2021). Information regarding the number of principal and second homes is not available. Despite a slight decrease compared to the pre-COVID-19 period, there is a significant number (112 in 2020) of accommodation service providers (hotels, guesthouses, apartments, hostels, etc.) in Tartu County.

There are 194 cultural tourism attractions and almost 100 local training programmes in traditional skills (woodwork, ceramics, cooking, bread making, handicraft, singing and dancing, gardening, etc.) that are offered by museums, schools, local entrepreneurs, and non-profit organizations. Most of the cultural tourism sites and attractions are managed by private enterprises and only a few are owned by state and local governments. There are also some community-based attractions, mostly in a rural area. Historical buildings and sculptures are mostly owned and managed by local governments.

Information regarding the number of employees and people working as volunteers in cultural tourism sites/attractions and the number of attractions/sites providing multilingual signage and interpretation and information for visually impaired visitors is not available. Obtaining that information requires contacting and asking separately each cultural site, company, attraction, and event organizer. However, even then, it is not sure, that the required information could be presented.

None of the cultural tourism attractions have free or discounted access for locals. However, there are some tourism attractions with free entrance to everyone or a lot of those, who offer a discount for older visitors, students, families with three and more children, etc. Due to lack of data, it is difficult to estimate, how many of the attractions and sites operate an Accessibility Plan. But there are some programmes at the museums for visitors with intellectual impairments and several buildings, sites, bigger museums, and attractions are also accessible for visitors with mobility impairments.

There is no full data regarding the number of visitors attracted by intangible cultural heritage events. In addition, local authorities consider most of the events as intangible. In 2020, 232,720 visitors were attracted by cultural heritage events. The presented visitor numbers take into consideration only cultural programmes and events that are supported by local administrations, due to the obligation to collect and present data.

### **PILOT 2: Võru County**

The number of visitors in Võru County is 66,365 (in 2020) and 71,270 (in 2021, update in February 2022). Compared with previous years, the number of residents is slightly decreasing, and in 2021 it was 34,898. There are 71 accommodation establishments, some of which are hotels (mostly small- and middle-size), and most of them are holiday houses, guesthouses, tourism farms. There are approximately 110 cultural tourism attractions (museums, churches, chapels, manors, cemeteries, villages, monuments, (smoke) saunas, etc.) and 59 local training programmes in traditional skills and heritage tourism (including heritage tourism development and design courses) that are offered by museums, schools, local entrepreneurs, and non-profit organizations.

None of the cultural tourism attractions have free or discounted access for locals. However, there are some tourist attractions with free entrance to everyone or those (for example, museums, manors, theatres, or concert halls) who offer a discount for older visitors, students, families. There is no information on how many of the attractions and sites operate an Accessibility Plan. There could be some that are accessible for certain user groups. However, because of some restrictions regarding heritage protection regulations, it is sometimes difficult to add physical solutions to improve the accessibility of sites or attractions for visitors with mobility impairments.

Information regarding the number of principal and second homes; the number of employees and people working as volunteers in cultural tourism sites/attractions; the number of cultural tourism sites operated per operator; the number of visitors attracted by intangible cultural heritage events, the number of attractions/sites providing multilingual signage and interpretation and information for visually impaired visitors are not available.

### **PILOT 3: Kyperounta**

The number of visitors in Kyperounta is 50,000 – 80,000 per year (2019) and the number of residents is 1,500. (2011). Tourism pressure to residents is not intense as only five principal homes are owned by tourists and around 100 homes are used as secondary homes. Kyperounta offers accommodation with one Hotel and five agro-tourism

accommodations. The site also enjoys twenty to thirty volunteers that are working in Cultural Tourism Sites/attraction.

Recently, the Deputy Ministry of Tourism has provided local training programmes in traditional skills at the site. All the Cultural Heritage Sites are a responsibility of the local community (Kyperounta Council), and they provide free access; there is also an accessibility plan addressed to all user groups and to all the sites. Around 30,000 tourists are attracted to the pilot site by its intangible Cultural Heritage events (Apple Festival for example). Finally, the site offers multi-lingual information in Greek and English Language.

### **3.2.4 Cultural**

#### **PILOT 1: Tartu County**

There are approximately 1,500 historical buildings and sites (including bastions, churches, manors, schools, museums, squares, parks, districts, historical villages, watermills, etc.). Approximately 400 of them belong to the private sector and others to the public sector. 8-10% of the historical buildings and sites in the city and ~15-20% of the building and sites in the rural area are damaged, degraded, or classified as in danger. The number of restored buildings and sites or buildings and sites that are added to the damaged lists or classified as dangerous per one year is variable. In 2021, 11 buildings were restored and three buildings were added to the damaged and danger list. There is no information about economic spent on restoration of historical buildings/sites at the destination.

Several cultural indicators are difficult to evaluate due to a lack of information. There is no available information regarding cultural tourism total economic contributions; total economic funding coming from public/private entities; total economic spending in the improvement of the physical urban environment and detecting any visual change/impact/anomaly and cultural activities plans and promotion. There is no information about the number of visits to cultural attractions and the number of total visits to cultural attractions. There is some data regarding museums, theatres, events, galleries, and other attractions that have an entrance fee, but mostly that information is provided to specific organizations and ministries or is used only by companies who collect that information for their own needs. There is no single database. Gathering that information assumes separate study and communications with different departments, associations, entrepreneurs, etc. However, due to budget and time constraints, it is not always possible to obtain such data.

In addition to 194 cultural tourism attractions, there are nine “alternative” cultural attractions (mainly events but also places, tours). However, nowadays it is difficult to define what is an alternative in Estonia and what is to other European countries. For example, are street art tours alternative events or not? Even home cafes are not so alternative anymore. These examples show that to collect comparable data regarding this indicator, the exact parameters need to be considered and clarified.

#### **PILOT 2: Võru County**

There are approximately 1,100 historical buildings and sites (including monuments, churches, cemeteries, old town area, manors, gardens, watermills, stone graves, mass graves of the fallen, chapels, buildings of schools, etc.). Approximately 25% of the historical buildings and sites are damaged, degraded, or classified as in danger.

There are several cultural indicators that are difficult to evaluate or present in numbers due to a lack of information. The number of total economic contributions coming from Cultural Tourism as well as the number of total economic spend on the restoration of historical buildings/sites at the destination is unknown. Information regarding the funding of public and private finance spent in the improvement of the physical urban environment and detecting any visual change or impact is also not available. The total number of historical buildings/sites restored in one year as well as the total number of historical buildings/sites damaged or in classified danger added to the list in one year is also not presented. Local DMO does not have this information because it is not public.

Culture and cultural attractions are sometimes highlighted separately on websites, brochures, and other channels. However, there is generally no separate plan for the development and marketing of cultural tourism (they are part of the destination's general development and marketing plan). Brochures and other marketing materials are also made by local entrepreneurs separately and at the regional and national levels where Võru County and its culture/cultural attractions are presented. Therefore, it is difficult to say, how many leaflets, postcards, brochures, roll-ups there are. There is no specific data of visits to cultural attractions and number of total visits to cultural attractions.

In Võru, there are approximately 110 cultural tourism attractions. However, it is difficult to evaluate how many there are “alternative” cultural attractions or how many visitors visit them (or attend). One reason is that it is difficult to define what an alternative cultural attraction is. For example, smoke-sauna or Võnge (so-called vibration) festival which directs you to take time off and focus on being, good music and enjoying the moment, or small cultural site called Seto-kingdom and choosing Seto kingdom king For Võru County, it is not alternative cultural attractions or activities, it is part of (local) culture, history, traditions, and trends.

### **PILOT 3: Kyperounta**

There are six Cultural Heritage Sites at this Pilot. The total economic contributions coming from the Cultural Tourism are not available but nevertheless funding is given for this purpose but it's not from an exclusive Fund so it cannot be calculated. This one also applies to funds that are exclusive for restoration of historical building/sites. Regarding total economic funding coming from public/private entities or spends in improvement of the physical urban environment at the destination site is not clear but again as the previous category funding is given for this purpose but it's not from an exclusive fund so it cannot be calculated.

Furthermore, there isn't any visual change/impact/anomaly on a CT Monument. One site has been restored in the past year (2021). The council provides cultural activities plans and promotions (leaflets, brochures, roll ups etc) regarding Tourism. The area also provides another two alternative cultural attractions such as Apple festival and the Adventure Park where they attract around 40,000 tourists.

## **3.2.5 Environmental**

### **PILOT 1: Tartu County**

In Tartu city and Tartu County, there is no traffic disturbance due to tourism. Only during major events (concerts, rallies, etc.), there could be some disturbances and traffic jams. However, those last only for short time and do not affect public transportation strongly

(delay is only 1-1.5 minutes). However, if the event will be bigger (over 100 000 participants), then the delays of public transportation could be in certain areas up to 4 minutes.

The noise level, light and air pollution in Tartu city is, when compared with other European cities, rather low, and in the rural area (outside the city) even lower. Tourism activities do not affect noise level, light and air pollution (even during summer as a high season). Only major events can slightly rise noise and air pollution levels. During the high tourist season, the number of police and ambulance cases increase, but not significantly. Even during major events, the number of traffic complaint calls to public authorities is only slightly higher than usual. The number of other complaints even declined. Data of noise level, light and air pollution, traffic disturbance, police and ambulance cases are available because, it was conducted during one study which involved researching, measuring, and analysing different data from different channels. Usually, such information is not presented at one channel and not collected from the tourism point of view. Such data can be found in different institutions, but obtaining them requires separate inquiries and, in some cases, their approval. Information regarding light, noise, and air pollution is easy to find in specific world level databases and maps. However, that data is mostly presented in a more general form (especially regarding rural areas).

There are around 430 enterprises in the tourism sector. It is difficult to establish how many of them focus on environmental awareness. There are no companies with the Green Key label, but seven companies have a service with Estonian ecotourism quality label. Additionally, there are 411 local companies (not only in tourism) that have other labels (including EU Ecolabel, catering eco-label, Estonian ecolabels) and a little bit more than 18,000 products that have some kind of eco-labels. The number of days per year where there are water supply shortages is five to ten days. However, the water supply shortage is presented only in one part of Tartu County (Elva region), and it depends on the particular summer – if it's a more rainy and cold summer, then there are no problems with water supply.

There are 194 cultural tourism attractions. Out of them, 129 cultural attractions are located in Tartu city and 65 in Tartu County (rural area). Total dispersed tourist attractions is ~70. Most of them are in the rural area (outside of the city) and some of them are located in the Tartu city suburb area. Approximately 30% of dispersed cultural tourism attractions that are in the rural area are accessible by public transport (by bus or by train). In Tartu city, all attractions are accessible by public transport. All cultural tourism attractions are accessible by bike. Even though there are no special bike trails, the roads are quite safe to travel by bike. Information about local public transportation or bikes is available, but it will take time to collect because to gather that information, the website of each cultural tourism attraction and the local transport network has to be examined.

## **PILOT 2: Võru County**

In Võru County, there are no problems with the noise level and no light/air pollution or traffic disturbance complaints due to tourism activity. Maybe there is a slight change during summer (during bigger international sports events) or winter period (when it is snow and more visitors), however, it is minimal (if at all) and short-term. Information regarding light and air pollution is easy to find in specific world-level databases and maps. However, that data is mostly presented in a more general form (especially regarding rural areas). Data of noise level, traffic disturbance, and police and ambulance cases are not collected and

analyzed from the tourism point of view. Assessment of these factors is based on observation and experience.

There are approximately 250 enterprises in the tourism sector. There are no companies with the Green Key label. There are seven companies have a tourism service with Estonian ecotourism quality label and 64 companies (not only tourism enterprises) have local ecological quality label UMA-MEKK (for food and beverage products). Information regarding products and enterprises with the ecological label is not presented. Based on local water supply company data, the number of days per year where there are water supply shortages is 68 (in 2021) due to an exceptionally hot and light summer. Mostly water supply shortage is not so remarkable.

There are approximately 110 cultural tourism attractions. Most of them are in rural areas. The exact number of cultural attractions that are accessible by public transport is unknown. Based on observation it could be approximately 20% in the rural area and almost all in the Võru city. Approximately 90% of cultural attractions are accessible by bike via several special bike roads, but also via roadways. There is no information regarding total economic contributions coming from Cultural Tourism and total economic spend on restoration of historical buildings/sites at the destination.

### **PILOT 3: Kyperounta**

In Kyperounta Pilot there isn't any official recorded number of noise levels, light/air pollution or traffic disturbance complains due to tourism activity. Last year (2021) there was one local enterprise that is involved in CT which actively supported economically the restoration of a historical building and that was Photiades Group which spent 50,000 euros for the renovation of a museum. Also, in Kyperounta there is one enterprise which is officially focusing on environmental awareness, as also Dymatou Estate business with seven products that under national or international ecological label. In Kyperounta an average of five days a year there is a problem with water supply shortage due to low temperatures that are freezing the water pipes.

## **3.2.6 Resilience**

### **PILOT 1: Tartu County**

There are 15 vulnerable zones in Tartu County. There is more infrastructure in the Old Town of Tartu and less in the natural area, but there is something everywhere (including cultural tourism attractions and other facilities). However, the information regarding tourist infrastructure in vulnerable zones is limited. There are several grants for culture, but those are wider (not only for cultural tourism). Additionally, there are several grants and support measures to reduce the negative effects of Covid-19 (including labour issues) that are also available for cultural tourism organizations and stakeholders. Based on that, various public support measures have been implemented in Estonia, both on the national as well as regional levels. However, it is hard to say to what extent it has reached cultural tourism organizations because that data is not collected and evaluated separately.

In response to the crises various strategies, plans and interventions have been developed (both at the local and regional level). At the regional level diversification is a central topic in the national Tourism Development Strategy and there are various support measures to implement it. At the local level development strategies are composed. The main aim of those strategies is to raise visitor numbers (in the tourism field). Overtourism is not focused on the strategies due to the lack of that problem. Because of that, there are no

tools for monitoring and management of tourists' masses or sudden tourism growth (neither local nor at regional level). However, in some cases (for example bigger events) Mobile Positioning data are used to have a better overview of visitors' numbers and flow.

In 2019 there were almost 156,000 foreign tourists and 197,000 domestic tourists, but in 2020 it drops to 49,000 foreign and 157,000 domestic tourists. Data of regional tourists are not available. The total visitors' number in 2019 was 352,257, and in 2020 it was 205,601. Those numbers include holiday trips, business trips, and trips with another purpose. Holiday trips could be looked also separately (in 2019 there were 216,783 and in 2020 there was 125,456 holiday trips to Tartu County). However then, it is not possible to present data regarding visitors' origin and for that additional data need to be collected and analysed.

Information regarding cultural tourism income and employees in the cultural tourism sector is not available. (In addition, due to the changes in the data collection, only tourist expenditure in the country is available, and to have data per region or destination, needs additional data collection. There is some information regarding the decrease in expenditure and employees' number by categories due to Covid-19, however, the culture facilities presented there with sport and free-time activities and couldn't be presented separately).

### **PILOT 2: Võru County**

Results were similar to the ones presented on the previous Tartu County pilot.

### **PILOT 3: Kyperounta**

COVID-19 has played a significant role in Cultural Tourism income of the pilot as it has resulted in a reduction of 80% as also a 50% reduction in total employees. There isn't any vulnerable zone geo-located. The economic public support participation in financing the response to emergencies/external factors in Local Level as also Regional Level has been around EUR 175.000.000 (For Cyprus not just Kyperounta) which funded the National Health System (all Cypriot citizens have free access to the National Health Service, which includes Kyperounta) and also 60% salary coverage for unemployed people that couldn't work due to COVID-19. The pilot has a fire and flood contingency plan and currently a more completed recovery plan is under development, which will include various hazards. They also have a diversification strategy in case of sudden tourism growth which involves cooperation with nearby communities. The origin of the tourists arriving to Kyperounta are classified as: 20% International tourists, 70% National tourists, 10% Regional tourists (2019).

## **3.2.7 Challenges for indicators**

### **PILOT 1: Tartu County**

While several challenges were already mentioned in the description of different results, the following summarizes the faced challenges.

Information based on most characteristics is easy to find using different sources and databases. However, specific information regarding cultural tourist numbers is not presented. It was also difficult to present information and data of different cultural facilities. The main reason for that is that in the destination, there are a lot of very small museums, libraries, monuments, and concert venues, whose significance and impact in terms of

tourism is minimal or even non-existent. It raises the question, of how important or relevant those facilities are from a comparative study point of view.

A more precise definition of cultural tourism facilities by type (including size, etc.) and other terms (for example, what is meant by “alternative cultural tourism opportunities”) would allow a more systematic and targeted comparative analysis.

Lack of data or instances where the information has not been verified or the information (pieces of needed information) is in various sources and organizations. Obtaining information requires contacting and asking separately each cultural site, company, attraction, and event organizer. This is a time-consuming task and, furthermore, there are no guaranties that the required information is present. The representatives of the pilots sometimes (regarding some indicators) often do not see a reason why they should collect this information (especially, only regarding cultural tourism).

Sometimes, data is presented in a more general form (especially regarding rural areas), than it is needed.

Lack of time (mostly due to COVID-19 pandemic) and other duties of representatives of pilots also reduce availability of data.

### **PILOT 2: Võru County**

Same, as in a Tartu County case. However, in Tartu there were at least several additional studies, that were made previously under a project or other initiative. Also, thanks to the application of the Tartu city as the European capital of culture 2024, various information related to culture was collected. This made it possible to obtain information in the case of Tartu within the several indicators, which were not answered in the case of Võru county.

### **PILOT 3: Kyperounta**

The challenges faced while collecting data were mostly the lack of official verified data. On the other side the community council is the best source of collecting data as they are all locals from families that live for generations in the area and know the site better than anyone. Furthermore, since the government funds various initiatives or plans for the whole region (Troodos Mountain villages) it was very difficult or impossible to isolate the specific funds spent exclusively on Kyperounta. This barrier is also visible when collecting data for private enterprises since these data are classified most of the times. With the new strategies that are followed in the region we believe that this lack, the verification, and the diversification of the data will improve.

## **3.3 Urbanalia overview**

For the Urbanalia Land group, the pilots involved were Almada, Cascais, Milano Periphery and Museum of Pontevedra. In the following subsections, a global analysis is given for each one of them according to the domains of characterisation, economic, social, cultural, environmental, resilience and a final chapter for the challenges detected.

### **3.2.1 Characterisation**

#### **PILOT 1: Almada**

The municipality of Almada is located in the region of Lisbon on the northwest edge of the Setúbal Peninsula. It comprises a territory of 71 km<sup>2</sup> that encompasses the entire riverfront accompanying the "throat" of the Tejo river - as the river becomes narrower in this area - and 13 km of Atlantic coast, with approximately 23 km<sup>2</sup> destined for Tourism. With its 174,030 inhabitants, it is the main municipality of Setúbal Peninsula in terms of population density. Almada's territory is strongly influenced by its relationship with the Tejo river and Lisbon, providing the best views of the country's capital. To the west, the Atlantic front offers more than 13 km of continuous beaches, many of them located in natural areas and ideal for the practice of water sports, such as surfing, bodyboarding, windsurfing, or kitesurfing.

Almada also offers important points of interest, where Cristo-Rei (Christ statue) stands out, offering a 360° panoramic view over the whole region. Apart from the frigate ship D. Fernando II e Glória, the City Museum, Casa da Cerca - Contemporary Art Centre -, the Joaquim Benite Theatre, Solar dos Zagallos (Manor House) and the Capuchos Monastery contribute to the municipality's strong cultural identity. Almada has three strategic products already consolidated - City Break, Sun & Sea, and Gastronomy Tourism - and four developing ones: Nature Tourism, Business Tourism, Military Tourism, and Golf.

### **PILOT 2: Cascais**

Data collection was subject to a simplified analysis, as there has been a structured work for the identification and classification of its historical heritage by the municipality, whether material or immaterial, with a portal dedicated to the theme for a long time. Cultural Museum facilities are spaces frequently visited by the occasional tourist in Cascais, who haven't planned to do it, but ends up visiting them through the proximity to the historic centre (where the majority is concentrated). These visits reach around 20% of the tourists who travel through the territory. Despite presenting an enormous diversity in terms of cultural offer (typology of available facilities), the demand for these facilities is circumstantial and more dedicated on the part of residents, the same happening in terms of cultural attractions, which do not have a passable power of attraction of new newcomers, with rare exceptions.

### **PILOT 3: Milano Periphery**

The number of cultural tourists per year in this Municipality is around 2,000. Under the Regional protection there is "Parco Martesana" (The "PLIS Martesana" at the moment is known in the Municipalities of Bussero and Cassina de' Pecchi, but it is the first step in order to extend this protection from Milan to the Adda River). In this area it is possible to highlight also the presence of Business Tourism (the latter especially because in Municipio 2 there the Central Station of trains, the skyscraper of Regione Lombardia, Hilton hotel, and several international companies: Versace, Suning, Samsung, etc.).

An interesting feature is the Accessible and Inclusive Sport on the border between the Municipio 2 and 8, thanks to a public sport centre managed by a private society "Playmore!". They are also founder of the Run Challenge, which is an inclusive run inside the Milano City Marathon (organized every year). Hundreds of people with and without disabilities run together. Furthermore, the River Martesana is important in this area under the nature tourism point of view. There are also Churches, Theatres, Street art, Museum, and Business Tourism (the latter especially because in Municipio 2 there is the Central Train Station, the skyscraper of Regione Lombardia, Hilton hotel, and several international companies).

Finally, Municipio 2 of Milan comprises a territory of 12.58 km<sup>2</sup>; the entire peripheral area of Milan is more or less 170 km<sup>2</sup> (the City Centre comprises 9 km<sup>2</sup>). The number of inhabitants of Municipio 2 of Milan is 155 ,000 (high number of people in a territory that is not very large). There are no coastal areas; but Milan is not so far from the Como Lake. There is no strong gastronomy and lifestyle identity in the offer to the tourists in the Municipio 2 of Milan.

#### **PILOT 4: Museum of Pontevedra**

Pontevedra is a city of more than 80 000 inhabitants, capital of its homonymous province (950 000 inhabitants). It is located in the centre of the Rías Baixas, in Galicia, right at the mouth of the river Lérez, which surrounds it to form the Ría de Pontevedra.

The origin of the city was always related to its strategic location, both on the first Roman roads and later on the medieval route of the Portuguese Way to Compostela. Bridges are the most significant elements of the city's history, both the Burgo bridge in the capital and the Ponte Sampaio bridge in the south.

Most of the municipal population lives in the city centre, although a significant part is distributed throughout the 15 parishes that surround it, two of them facing the Vigo estuary in the south. Since 1999, Pontevedra has grown in population by an average of about 1,000 people per year, and is the first Galician city in growth. Typically, the city has the lowest urban unemployment rate in Galicia, the newest urban population in Galicia, the lowest rate of urban citizens emigrating in the country and the highest urban birth rate.

The city leads a county area of 121 000 inhabitants, and is the centre of several county initiatives related to strategic planning, rural development, tourism promotion, water management, public transport, etc. The municipalities that form part of the Urban Territorial Area (ATUP) are Poio, Marín, Vilaboa and Pontevedra, which are joined by Barro, Cotobade, Campo Lameiro, Pontecaldelas and A Lama for some joint initiatives.

The city is located in the centre of the Atlantic Axis, between the urban areas of Vigo and Vilagarcía. It is connected to the AP-9 motorway, which runs through Galicia from north to south and is 30 km from Vigo airport and 60 km from Santiago airport. By sea, it is communicated through Oporto de Marín Pontevedra, located 3 km from the city centre and the main communication routes.

Regarding Cultural Tourism, the council has carried out a study on Cultural Tourism. There were difficulties in that the information had to be requested through various channels until the documentation was obtained. On the other hand, there is no unitary study, so it was necessary to request information from different administrations, and the results did not coincide in the same indicators.

As a general comment for all the indicators, there is a general question of unclear information. There are registers in different public administrations but they are not updated, generating information that is more at regional than local/provincial level. It has been necessary to access companies or groups that for various reasons or because of their importance have collected this information.

### **3.2.2 Economic**

#### **PILOT 1: Almada**

Almada, due to its unique location and endogenous natural resources, is a territory of great touristic potential. Although there are some economic records that validate the

economic value of cultural tourism, there are no means of tracking the behaviour of tourists within the municipality. According to the Portuguese National Statistics Institute (INE), it was possible to collect data regarding visitors that have stayed in the city accommodations, largely in hotels and local lodgings, valuing the investment in tourism. In the 2019 the ranking of overnight stays in the Lisbon Metropolitan Area was as follows: Lisboa ranks 1<sup>st</sup>, Cascais 2<sup>nd</sup>, Sintra 3<sup>rd</sup>, and the 4<sup>th</sup> place goes to Almada with 482,212 stays (INE 2020), also standing out for its leadership in the Setúbal Peninsula.

### **PILOT 2: Cascais**

The economic impact of Cultural Tourism is not easily measurable, not only because it is not measured as a whole, but also because it is stratified by specific actions, such as live shows. Although there are some economic records that validate the economic value of this type of tourism, there are no means of tracking the behaviour of tourists within the municipality, so the definition of a profile by interest or volume of expenditure becomes inaccessible. Some of the measured indicators were collected with some temporal bias, so they do not allow a more immediate interpretation resulting from the application of certain promotion and intervention actions in the considered niche.

### **PILOT 3: Milano Periphery**

Accommodation offering in Municipio 2 covers any price, from the Hilton Hotel to the Airbnb opportunities. There are no relevant economic data available from public sources. There are data but these statistics are not shared per Municipalities of the city. The potentiality of this area is related not only to the natural resources but also to the old-style identity that needs to be raised.

### **PILOT 4: Museum of Pontevedra**

The urban reform of Pontevedra, initiated in 1999, is guided by a concept of city in which the human being and his activities are the absolute protagonists of urban life. In the economic domain this reform has strengthened the city's tertiary vocation, which means that the model responded to the needs of commerce, finance, professional services and the civil service, but also to those of industry, helping to generate an industrial environment suitable for business activity. The recovery of the city according to the new model also served to recover its demographic, economic and vital dynamism.

In general, it has been possible to access to the data but in many cases some kind of elaboration has been necessary in order to establish consistent data. The most difficult one has been the one regarding turnover, these data were provided by the institutions and public administrations at the destination. The data had to be searched as they were not provided individually.

## **3.2.3 Social**

### **PILOT 1: Almada**

No specific information is available.

### **PILOT 2: Cascais**

Although there are means to assess the distribution of equipment and accommodation by the municipality, the correlation with the remaining variables can become challenging. For the dimension of Intangible Heritage, the transfer of knowledge of “know-how” was valued,

mostly related to the windmill of Armação de Alcabideche and the traditional art of bread making. It may also be possible to allocate to this accounting the routes defined as cultural routes, which although often focus on built heritage, reflect patterns of Local History and chronological events. Most of the most relevant cultural promotion equipment is under the responsibility of the local government. Even so, there is a strong community component in the dynamization of the performing arts, although this ends up focusing mainly on residents and on proximity interventions. No information was available regarding the destination's accessibility plans.

### **PILOT 3: Milano Periphery**

Under the point of view of accessibility for persons with disabilities and others with any kind of reduced mobility, in the Municipality 2 there is not official accessibility plan. Consulta Periferie Milano, and its local association of citizens, want to extend the awareness on accessibility (and accessible tourism) in all the peripheral areas of the city, starting from the experience of "Cascina Bellaria" of AtIha Onlus (Municipality 7), one of the Consulta's members. Cascina Bellaria (one of the Public "Cascine" of the City of Milan) is a best practice in terms of accessible tourism and leisure. It reveals that often the best practices are better developed if they start as "bottom-up" initiatives by the civil society with the support of the Public (that for example, introduces accessibility measures in buildings such as Cascina Bellaria).

One best practice in Municipio 2 is the idea of Accessible and Inclusive Sport on the border between Municipio 2 and 8, thanks to a public sport centre managed by a private society "Playmore!". They are also founder of the Run Challenge, which is an inclusive run inside the Milano City Marathon (organized each year). Hundreds of people with and without disabilities run together.

### **PILOT 4: Museum of Pontevedra**

The urban reform also has allowed the city to be the framework for the majority of social activities, both economic and leisure or consumption, responding to a quality model, with a diversity of urban functions, activities aimed at the whole population and advanced public services. This urban reform aims for a city guided by universal accessibility. It took into account above all the mobility needs of the people who have the most difficulties, either because they have to use wheelchairs or other assistive devices, or because of their age, or because they use prams, etc. By designing the city for them, it is also suitable for the rest of the citizens, thus achieving a city for everyone.

In the case of Pontevedra, there is a variability in the availability to access the information to generate the indicators. In the case of tourism pressure, data existed but not elaborated as an indicator so the institution had had to request each part individually to the data providers. The question of volunteering has been more difficult to obtain and has been provided by institutions like the public shelter of Pontevedra and Camino de Santiago route.

The availability of skill is reported as a difficult data point, and in fact there has been a possible misunderstanding because Pontevedra has reported way more traditional skills than the rest of pilots. In general, almost every indicator has required a great elaboration from the pilot, being necessary to gather information from several sources and then aggregate and elaborate it.

### **3.2.4 Cultural**

#### **PILOT 1: Almada**

Almada understands the structural dimension of Culture as an element that unites communities and essential for the balanced development of territories. Investing in the creative capacity of civil society, in the promotion of the network of cultural facilities and in the implementation of differentiating proposals, has been seen as the path to guarantee the quality of the cultural offer in the municipality. As a commitment with Culture, an intense relationship also stands out with the professional cultural fabric, associative movements, with the educational community and informal groups of individuals, seeking to promote the most diverse areas of the cultural spectrum: from plastic and visual arts to music, from architecture to design, from archaeology to history, from theatre to dance and from literature to the performing arts. But other areas of intervention, such as the requalification of Old Almada, the historic centre of Porto Brandão or Trafaria, are designed to emphasize the commitment to Culture as a lever for economic recovery, increasing the quality of life and the self-esteem of communities. According to the Portuguese National Statistics Institute (INE), it was possible to collect part of the needed data. Although, data regarding historical buildings, public/private funding or specific economic indicators was not possible to obtain due to the lack of such specific information.

#### **PILOT 2: Cascais**

Many buildings of heritage value are private property, so the mapping of levels of degradation, maintenance of equipment or monitoring of restoration processes ends up being dispersed among various stakeholders, not allowing a cohesive collection of information or capable of comparing trends. For this reason, this was the dimension with the greatest difficulty to be filled in, being incomplete for some of the required data. Several of the cultural attraction activities are also of a private nature. These, although lacking prior authorization from the municipality, often take place without accounting for indoor entries, so it was not possible to collect a global reading of their impact on the territory. Events of this nature also ended up being suspended with the proliferation of the pandemic in the world from 2020, so the impact assessment is compromised due to the lack of comparative data.

#### **PILOT 3: Milano Periphery**

Presence of the creative capacity of civil society, the action of associative movements, with the educational community and informal groups of individuals, seeking to promote the most diverse areas of the cultural spectrum, and also for the requalification of old quarters, the Martesana river, the local history. Consulta Periphery of Milano, and its associations of citizens, contribute to the local identity. Furthermore, Local and Regional policies for the tourism are focused especially on the City Centre. The consequence is that many of the funds are allocated to the centre of the city and much less to the peripheral areas. Here, the main strengths are associations of people, which act with their own funds, or with some support i.e. from Fondazione Cariplo or similar. Any municipality has a public local control, but not important budget to be managed for the tourist sector.

#### **PILOT 4: Museum of Pontevedra**

The most relevant aspects of the path followed by the City Council of Pontevedra in recent years in relation to the entire rich heritage that exists in the city can be summarised in two basic aspects:

- On the one hand, a global, systemic, integral approach to the enhancement of heritage, well known in theory but profoundly novel in its practical application.
- On the other hand, the intensity, quantity and speed of the actions, which in record time became practically massive and profoundly changed the dynamic to transform it into a very positive one.

To conceive a City Council project, an urban planning model, an economic and social dynamic in which the enhancement of heritage is a key element integrated into other lines of action, overcoming a strictly conservationist and isolationist conception, was the theoretical starting point on which the decisions and actions on heritage, understood in the broadest sense, were based.

In general, for the set of indicators regarding heritage there is a general lack of data. They are data not defined in detail. The Council has made a generic study and a temporary project that includes several years and total expenditure, but does not detail where the expenditure is going to be made or the percentage of it individually. For the ones related to cultural activities and attractions, data exists but have to be elaborated. These data, although not difficult to analyse, have been time-consuming to search through the different media. The data themselves are up to date. There is no website or institution that collects them all, so it is also likely that they are not complete.

### **3.2.5 Environmental**

#### **PILOT 1: Almada**

As a destination that promotes nature and sea related activities, the environmental aspect is of major importance. As so, the municipality promotes several activities that focus on raising the community's awareness of local and global sustainability and its active and informed participation in the preservation of Almada's natural heritage and natural resources, as well as in the adoption of consumption patterns and lifestyles with less environmental and carbon impact. Most of the general data was easily collected from the municipality services or from the Portuguese National Statistics Institute (INE). Therefore, global numbers and/or indicators were obtained from those two institutions and the environmental dimension was easily characterized. On the other hand, it was not possible to accurately associate indicators with specific aspects such as the number of companies working on environmental awareness, local products, etc.

#### **PILOT 2: Cascais**

There is a concern with the municipality's environmental quality that transcends the tourism component. For this reason, this dimension was easily characterized, even though it was not possible to accurately associate indicators with the issue of cultural tourism. Accessibility is guaranteed to the majority of facilities, and several are accessible through the provision of municipal transport. It will be interesting to develop a mapping project of all the nature and ecology promotion businesses existing in the municipality, whether they have the associated tourist component or not. The resulting added value also provides the recognition of products of cultural value, and a joint strategic bet that rewards culture, quality of life and nature.

#### **PILOT 3: Milano Periphery**

The requalification and promotion of the Martesana River is a crucial goal. This action, that have to be implemented yet, should be take into consideration the importance of being

able to collect data for our own interest (in order to influence local policies, especially; it is true for the other sectors; cultural; social; economic). Moreover, it was not possible to accurately associate indicators with specific aspects such as the number of companies working on environmental awareness, local products, etc.

#### **PILOT 4: Museum of Pontevedra**

The integral sanitation of the city was one of the main priorities of the environmental plan, today practically completed. Thanks to this action, Pontevedra became the first city in Galicia with an integral treatment of water, which is returned to the environment in the best conditions. The city aims to relocate a polluting factory located in a stretch of the estuary, and plans its urban planning with maximum respect for the environment and the parameters of sustainability. The Monte Vivo programme has an impact on the recovery of the forest environment with the progressive substitution of eucalyptus for autochthonous forests, of greater value and environmental diversity.

In general, for all the indicators, data are not collected from official sources due to lack of data collection by officials. Data provided has been mainly elaborated as a one by one, making requests and web research. In the case of local enterprises that support conservation of local biodiversity they only provided their own information on expenditures and generic, not detailed, descriptions. Regarding labels, the continuous generation of BIO or KM0 labels makes it likely that it is no longer up to date. There is no register focused on these indicators. Existence of several registers at regional but local level, it was necessary to request information as well as our own analysis from those already known.

### **3.2.6 Resilience**

#### **PILOT 1: Almada**

Resilience is achieved by investing in education for entrepreneurship and creativity, and creating incentives to make ideas happen and call the population for an active participation.

#### **PILOT 2: Cascais**

Being one of the first dimensions collected within the scope of the project, the perception is to have a broader view going beyond the most immediate component of cultural tourism (archaeological and museological spaces, historical centrescentres), adding the entertainment component. To that extent, the calculation of income from cultural tourism should be revised, so that it also includes the component of live shows (as well as workers assigned to the cultural tourism niche, which appear more comprehensive and complete in the economic dimension). There is a lack of tools that facilitate the accounting at the time of the impact of mass tourism in certain places, as well as key KPIs that facilitate the measurement of the impact of this recurring visitation. Although there are impact and resilience plans for cultural facilities, they are aimed at interventions in the event of a natural disaster, possibly lacking an intervention/strategy component resulting from the established visitation trends. Tools such as data from mobile operators may be crucial for a more impactful analysis of this dimension.

#### **PILOT 3: Milano Periphery**

A calendar of events both for citizens and tourists was promoted after the first lockdown in 2020. The strategy was to offer several events spread all over the peripheries of Milan (one of them the Municipio 2), for a selected number of public participants (less is more).

In this way Consulta Periphery Milano managed events in a sustainable way thanks to its volunteers (because of its reduced budget), and at the same time could manage at the best the restrictions due the pandemic. The major problem is that some number of accesses are missing, they exist but they are not officially published.

#### **PILOT 4: Museum of Pontevedra**

Information about resilience is not available for the public domain, being necessary to request it to each administration who owns the data, not encountering problems to have access to it. Regarding the percentage of employments affected by crisis, through studies carried out by Tourism and Rias Baixas on this indicator (although there is no exact correlation between these two), they have provided the Museum of Pontevedra with information on these indicators, both of which provide a fairly detailed analysis. The lack of updating of other public services such as the Spanish National Institute of Statistic (INE) does not allow for a more detailed analysis of this information.

### **3.2.7 Challenges for indicators**

#### **PILOT 1: Almada**

One of the transversal challenges of the process of creating strategies and measures and even of decision-making in any of the indicated areas requires in-depth knowledge of reality for a period of time, which is intended to be as long as possible. Thus, it is understood that the characterization of the Municipality of Almada, with regard to the various areas, is absolutely fundamental and constitutes a permanent challenge. It is also important to monitor as accurately as possible what is happening in the territory, in terms of flows and inflows, and also through economic indicators. The difficulty lies in understanding the true motivations and expectations of those who are at certain events or places or pass on mobility. For example, the reading of flows is dubious in this case, as Almada is a municipality bordering the capital, many of those who pass do not enter or stay, often do not even know the territory. Many of the measurement indicators are isolated, do not provide continuity, others are merely qualitative, without statistical or comparative validity. Extracting information from data is in itself a strong challenge across all areas. It was not possible to get information regarding Almada's accessibility plans.

#### **PILOT 2: Cascais**

As mentioned above, the lack of tools that facilitate the accounting at the time of the impact of mass tourism in certain places, as well as key KPIs that facilitate the measurement of the impact of visitors, is a barrier that must be overcome. Such kinds of tools or data information services would be very helpful in order to allow a detailed analysis per sector and/or sub-sector of different activities.

#### **PILOT 3: Milano Periphery**

One of the transversal challenges of the process of creating strategies and measures and even of decision-making in any of the indicated areas requires in-depth knowledge of reality for a period of time, which is intended to be as long as possible. Consulta Periphery Milano action is focused on systematic planning and data collection (and not only for the tourism sector), but needs more funds to ensure better results.

Moreover, the process described above is a consolidated action in Municipality 2 of Milan, thanks to the action of Consulta Periphery Milano and its associations, which curate the history of old quarters, and the new one, and offer it to both tourists and citizens. This is a

constant action. So, the Municipality 2 (as well as the other municipalities of the city of Milan), as a public body, is formed by politicians that every five years change. Often, the consequence of new elections is the need to restart a dialogue between local stakeholders (of tourism in our case) and the Municipality. For this reason, some projects may suffer delays or, at worst, be closed.

Another point is the difficulty in understanding the true motivations and expectations of those who are at certain events or places or pass through. Thanks to the IMPACTOUR experience, the Consulta Periphery Milano now understands the importance of registering and collecting data. From now on Consulta Periphery Milano will try to monitor as accurately as possible what is happening in the territory, in terms of flows and inflows, and also through economic indicators.

During the IMPACTOUR experience, the Consulta Periphery Milano started to work for an improvement of the IMPACTOUR research in the local peripheral areas, involving all Municipalities of the City (as public bodies), Universities (i.e. Cattolica), local and international Associations (e.g. AMATEO Cultural network), and the European Institutions (we are in contact with European offices).

#### **PILOT 4: Museum of Pontevedra**

The most reported challenge for Museum of Pontevedra has been dealing between the lack of data and the necessity to elaborate them in a very time-consuming task. Many of the indicators needed data that are not available online and have to be requested to different institutions. Then, once the data have arrived, information has to be processed to fill the template.

### **3.4 Itineraria overview**

For the Itineraria Land group, the pilots involved are Camino de Santiago, Chemin d'Arles, Chemin d'Aveyrom, Strasse der Romanik and Rota do Românico (for this pilot, some data is still being provided, and it is expected to be included in further upcoming deliverables). In the following subsections, a global analysis is given for each one of them according to the domains characterisation, economic, social, cultural, environmental, resilience, with a final chapter addressing the detected challenges.

#### **3.2.1 Characterisation**

##### **PILOT 1: Camino de Santiago**

The Camino de Santiago has been considered as a unit, regardless of the fact that the administrative and morphological reality is very heterogeneous along the route. There are large cities and small towns distributed along its entire length. For the analysis, all the municipalities that the Camino de Santiago crosses in Castilla y León were considered. With this criterion, a population of half a million inhabitants is to be considered, of which approximately half are concentrated in large cities.

On Camino de Santiago there is a differential fact which is the existence of pilgrims, difficult to distinguish for the purposes of quantification from occasional tourists, as well as cultural tourists. The overall numbers are provided by the Pilgrim's Office in Santiago de Compostela (the most representative city of the Pilgrim's Camino as a final destination, and outside the region of Castilla y León). The numbers relating to the Castilla y León area

have to be worked out by means of approximations of partial statistics from some localities that carry out counts. This circumstance means that both the number of cultural tourists and the number of tourists are estimations.

The concept of dispersion does not make sense in the Camino de Santiago, since all the elements and activities are concentrated along the route, which is, on the other hand, the final objective of the destination.

### **PILOT 2: Chemin d'Arles**

To calculate the total population, the population of all the municipalities crossed by the path was summed. This method has presents some limitations, as this pilot is very extended (almost 1,000 km long, crossing three regions and seven departments) and heterogeneous pilot, as it crosses both small villages with hundreds of inhabitants and large cities such as Toulouse with nearly 500,000 inhabitants. Yet, the Arles Way essentially crosses rural areas. Eight UNESCO components, out of the 78 components that form part of the St James Ways UNESCO Heritage inscription, are located on this pilot. This pilot benefits from the two international recognitions (European Cultural Route of CoE and UNESCO World heritage).

This Pilot is characterized by a very high number of tangible cultural heritage, with different levels of protection and labels. There are in these pilot very famous sites (Saint Guilhem, Arles, Montpellier, Toulouse) with different types of labels and recognitions, some of them not being directly linked to the St James Way (the example of the heritage of the city of Arles, Toulouse or Montpellier for instance).

Some difficulties were observed at this stage, such as:

- Difficult to separate the number of tourists from the number of cultural tourists;
- The number of cultural tourists is different from the number of pilgrims / walkers;
- Difficult to collect the number of cultural facilities, as this is a very extended pilot;
- There is no DMO specific for the Chemin d'Arles, yet for some indicators, the indicator will be tentatively isolated, so municipalities crossed by the Route need to be isolated (through the support of the Regional tourist office);
- The concept of key sites (World heritage sites selected, which are not so many compared to the high number of monuments);
- The concept of dispersion.

### **PILOT 3: Chemin d'Aveyron**

To calculate the total population, it has been needed to sum the population of all the municipalities crossed by the path. The Way in Aveyron crosses a rural area over a distance of 100 km, the biggest town counting 5,500 inhabitants. Seven UNESCO components out of the 78 components being part of the St James Ways UNESCO Heritage inscription are located on this pilot.

This path is one of the most famous and most visited (by approximately 15,000 walkers a year), because of the beauty of the landscapes, atypical villages and the number of historical monuments. The two international recognitions (European Cultural Route of CoE and UNESCO World heritage) are two drivers for this attendance. There are in these pilot very famous sites (Conques, Estaing) with different types of labels and recognitions.

Some difficulties were observed at this stage, such as:

- Difficult to separate the number of tourists from the number of cultural tourists;

- Difficult to collect the number of cultural facilities, as cultural routes are extended pilots;
- There is no DMO specific for the St James Way destination in Aveyron, yet for some indicators, it was possible to isolate the municipalities crossed by the Route;
- The concept of key sites (World heritage sites selected, which are not so many compared to the high number of monuments);
- The concept of dispersion.

#### **PILOT 4: Strasse der Romanik**

It was complicated to get the population density of the pilot as it needed to differentiate between the Federal Bundesstate of Saxony-Anhalt and all cities with heritage sites belonging to the Strasse der Romanik. There are just a few big cities as most of the sites are in rural areas. The same methodological issues on how to collect the data just as Pilot 1-3 were encountered. As Saxony-Anhalt is including Cultural Tourists into regular Tourism it was not possible to define this content in detail but considerate the estimated numbers. As all 88 Sites of the Strasse der Romanik are key sites, we considered to just take the UNESCO sites but decided to take all 88 as key sites as they are all important for the pilot.

Some difficulties were observed at this stage, such as:

- Concept of dispersion;
- Number of cultural facilities (e.g. creative hubs).

#### **PILOT 5: Rota do Românico**

Since its creation, in 1998, the Route of the Romanesque (Rota do Românico) positions itself as a public supra-municipal project, which aims to contribute to the integrated and sustained development of the whole region, fostering territorial competitiveness, cohesion and identity, through the qualification and economic enhancement of a set of distinctive endogenous resources – the dense and rich heritage of this territory, both in terms of buildings and intangible elements. Anchored in a set of monuments of great value and exceptional characteristics, this Route intends to take on a role of excellence in the scope of cultural tourist, able to position the region as a reference destination for Portuguese Romanesque. The improvement of the environmental quality and the physical restructuring of the territory, protecting it and boosting its correct redevelopment, through a tourism-based planning of resources, support infrastructures and tourist support facilities; the development of a new productive chain, associated with tourism and with a strong potential for stimulating related activities, which could mitigate the region's traditional mono-dependency on industry; the promotion of courses and training initiatives that contribute to qualifying professionals for tourism and associated activities, promoting an increase of qualified employability; and, finally, the enhancement of the internal and external image of the region where it is located, reinforcing the collective self-esteem, are also other important objectives of the Route of the Romanesque.

### **3.2.2 Economic**

#### **PILOT 1: Camino de Santiago**

All the data referring to this indicator suffers from the same methodological problems as those referred to in the characterisation indicators. In general, all these indicators require a very high degree of elaboration, being difficult to parameterise and automate. As an example, it is difficult to disaggregate in the large cities the tourism data specific to the Pilgrims' Route from the one-off tourists who do not follow the Route.

There is no elaborated data on people employed in Cultural Tourism or on the return from Cultural Tourism activities.

#### **PILOT 2: Chemin d'Arles**

Some information is still missing which make it difficult to draw conclusions on this domain. The main difficulty encountered here is to isolate the data from the municipalities that are located along the St James Way. There are no figures at a regional level, and sometimes at a departmental level. The process of obtaining information from the regional tourism office is still ongoing (it would take too long to inquire the numerous stakeholders along the route).

Cultural tourism is an important source of income, in view of the average daily tourist visitor spending (56 €).

#### **PILOT 3: Chemin d'Aveyron**

Information is still missing to draw major conclusions on this domain. The main difficulty encountered here is to isolate the data to the municipalities that are located along the St James Way. There are also no figures at a regional level, and sometimes at a departmental level. Yet, Aveyron is a culture and nature tourist destination, beyond the St James Way destination. So, in some way, the resulting current figures may be extrapolated to the Pilot.

It is important to comment that Cultural Tourism is an important source of income, in view of the average daily spending (56 €) and the number of overnights spent in Aveyron in 2021: 10.313.660, Cultural tourism is a driver for local development.

#### **PILOT 4: Strasse der Romanik**

All of the data referring to this indicator suffer from the same methodological problems as those in the characterisation indicators. This report refers to Saxony-Anhalt and not to single cities and municipalities of the pilots and its sites as there is no data available; also by considering the total amount of nights spent (1-4 nights) in shared accommodations. There is no elaborated data on employees in CT or on the return from CT activities.

#### **PILOT 5: Rota do Românico**

With regard to this indicator, the Route of the Romanesque has available the Tourism Activity Monitoring System, an integrated system for collecting and processing information on the tourism sector in the territory of Tâmega e Sousa. The information gathered from this system will make it possible to evaluate the satisfaction of visitors and tourists from the Route of the Romanesque and the region, define their profile and identify new market segments, as well as support the planning and definition of strategies related to the promotion of the tourist-cultural product. One of the weaknesses in collecting this data is

that the indicators are given by tourists/visitors who have already chosen to visit this territory, so this information is already conditioned. In any case, there is a way of checking the average expenses with the visit to the territory, how many nights you stay in the territory, if people sleep inside or outside the territory, with whom people travelled, among many other data. Outside this platform, unfortunately, there is no data that allows assessing the impacts. These data are available in national statistics and in the regional tourism entity of Porto and North, but they do not accurately reflect who visits the Route of the Romanesque.

### **3.2.3 Social**

#### **PILOT 1: Camino de Santiago**

As in the previous domains, all indicators require a very high degree of elaboration. There is no information on the number of volunteers working in Cultural Tourism, nor on the number of visitors attracted by Intangible Cultural Heritage events.

#### **PILOT 2: Chemin d'Arles**

The observations written for the following Pilot 3 also apply for Pilot 2.

It has been considered the number of walkers (around 1,500 according to the local counting systems in 2019) on the Chemin d'Arles to answer the indicator "Number of visitors attracted by intangible cultural heritage events". More information is still missing to go further in the analysis of this domain.

#### **PILOT 3: Chemin d'Aveyron**

As mentioned for Pilot 1, it seems a challenge to evaluate the number of volunteers. This route faces the same issue as Pilot 1 regarding the need to elaborate data specifically for the Route (accessibility data, free access to key sites). There are training programmes to maintain traditional skills which is also an important economic activity. It is difficult to get the number of cultural tourism sites operated per operator (state, NGO, community, commercial...). Regarding the management and responsibilities, most of the museums are upon responsibility of the Department Council, most of the monuments are upon responsibility of the municipalities.

It has been considered the number of walkers (around 20,000 according to the local counting systems in 2019) on the Route in Aveyron to answer the indicator "Number of visitors attracted by intangible cultural heritage events".

#### **PILOT 4: Strasse der Romanik**

As most of the sites from the pilot are in municipal hands but living from the work of volunteers, there is no problem to collect this data. There is no elaborated data for numbers of principal or second homes. Also even if there are traditional skills, e.g. chess, writing and dance, there are no training programmes - just workshops. Considering the legal form of the sites, it can be suggested to add "church". Besides this there is a lot of data missing as it is still to elaborate by the sites themselves, e.g. the number of cultural attractions with free or discounted access to locals; the number of sites with measures to support the accessibility of persons with physical or mental impairments. As pilot 1-3, there is no data available for the indicator of the number of visitors attracted by intangible Cultural Heritage.

## **PILOT 5: Rota do Românico**

Regarding these indicators, unfortunately it is not possible to find a volunteering culture, so there is no information on the number of volunteers working in Cultural Tourism. It will be important to highlight here an innovative project. The Route of the Romanesque established the 18th of October as the Day of the Caregiver of Heritage. Celebrated in 2020 for the first time, and already replicated this year, this initiative, unprecedented in Portugal, aims to honour all those who, in a dedicated and unconditional way, care and cherish Route of the Romanesque's monuments, also constituting an invaluable living memory of the place.

### **3.2.4 Cultural**

#### **PILOT 1: Camino de Santiago**

Due to the size of the pilot, in general the information is complex to compile, and more specifically in the indicator related to the degradation of monuments, as the actors involved are varied and the information is dispersed. In this case it is also assumed that the information is only valid considering a wide time range, which should be consistent across all pilots. There is no information on the total economic contributions due to Cultural Tourism or on the investment in refurbishment of urban spaces. The indicator on visual impacts would need to be developed, which would be time-consuming and lengthy.

#### **PILOT 2: Chemin d'Arles**

The observations written for following Pilot 3 also apply for Pilot 2.

Several information is still missing to go further in the analysis on this domain. To answer the indicator "Cultural activities plans and promotion", it has been decided to compile those activities that are gathered in the cultural season ACIR Compostelle coordinated in 2021. The figure provided is not exhaustive. 2,800,000 € were spent in 2021 (by the Occitanie Regional government) on restoration of historical buildings/sites in this Pilot.

#### **PILOT 3: Chemin d'Aveyron**

The Cultural domain is one of the domains presenting more difficulties to acquire the data related to indicators. The data to be provided is very precise. So, at this stage there is no relevant data to analyse.

Regarding the indicator "Cultural activities plans and promotion", it has been decided to compile those activities that are gathered in the cultural season ACIR Compostelle coordinated in 2021.

#### **PILOT 4: Strasse der Romanik**

This pilot presented the same issues as pilots 1-3. And further to the indicators of visual impacts, alternative cultural attractions and total economic contribution spent on restoration/coming from CT. There is no data available, especially for visual impacts at the sites and the spending on restorations as this is mostly financed privately.

#### **PILOT 5: Rota do Românico**

The Route of the Romanesque is considered, nationally and internationally, a true case of success and an example of good practices with regard to the conservation and enhancement of cultural heritage. It has contributed, in a way, to the development of its

territory. It will continue to contribute to the economic decision, to the promotion of employment in the region, with direct and indirect effects on the creation of wealth. Executed/planned investment (1998–2022) of 29.4 million euros divided between investment in infrastructure, intangible investment and mixed investment. More than 80% of the investment was co-financed by the European Union on a non-refundable basis. 13.6 thousand visitors registered by the Route of the Romanesque, not counting autonomous or school visits.

### **3.2.5 Environmental**

#### **PILOT 1: Camino de Santiago**

Due to the size of the pilot, in general the information is complex to compile, especially in some indicators with very complex information to build it, such as the rate of noise. The concept of dispersed attractions does not make sense, because Camino de Santiago is all concentrated along the route, and pilgrims/tourists are searching to do the way, not so much on exploring the surroundings.

#### **PILOT 2: Chemin d'Arles**

The observations written for following Pilot 3 also apply for Pilot 2.

Many information is still missing to go further in this domain's analysis. Water supply shortages is not amongst the main concerns in Chemin d'Arles. The train and bus network only serve the main municipalities, there are small villages that are not served by public transportation. All the sites are theoretically accessible by bike, but they are not necessarily prepared with bike infrastructures.

#### **PILOT 3: Chemin d'Aveyron**

The same issues encountered in the cultural domain were faced on this domain. So, at this stage there is not substantial information to share. Yet, it is possible to observe that there are several existing local product brands in Aveyron, this area being famous for local food products. Aveyron is not concerned by water supply shortages.

The train and bus network only serve the main municipalities, there are small villages that are not served by public transport. All the sites are theoretically accessible by bike, but they are not necessarily prepared with bike infrastructures.

#### **PILOT 4: Strasse der Romanik**

The environmental domain has the most missing data coming from this pilot. As there is in environmental cases very less or no data available, and it has been asked for in several departments and ministries to obtain more data and complete it. This missing data is not foreseen to be elaborated.

#### **PILOT 5: Rota do Românico**

With a view to promoting the environmental and energy sustainability of the Romanesque Interpretation Center Buildings and the Romanesque Sculpture Interpretation Center, a study is underway with the aim of making an energy assessment of the building as well as

drawing up an energy rationalization plan. This study aims to assess the energy efficiency of the complex and highlight options for improvement with a view to making them self-financing. The Energy Rationalization Plan resulting from the energy audit will aim to establish a set of priorities for action with a view to reducing operating costs, and at the same time, reducing the building's carbon footprint, options that may include, for example, taking advantage of the roofs of the building for the installation of photovoltaic panels. In terms of lighting, almost all systems are made up of LED luminaires. Also in terms of the Water resource, there was a concern for the building to be equipped with equipment that minimizes the consumption of this increasingly scarce resource, namely the installation of double flush toilets and timed faucets. In relation to monuments, protocols were established with the municipalities with a view to maintaining the spaces surrounding them. When carrying out interventions in monuments and their surroundings, priority is given to the installation of lighting with LED technology, as well as the installation of waste disposal equipment.

### **3.2.6 Resilience**

#### **PILOT 1: Camino de Santiago**

In general, there is no information available on the economic and employment impact of the COVID-19 crisis. In relation to indicators related to mass tourism, the Camino de Santiago in the Castilla y León area has not been affected by this problem, although there are some cities that have experienced, prior to the pandemic, some stress situations due to the growth of tourism and Cultural Tourism.

#### **PILOT 2: Chemin d'Arles**

The observations written for the following Pilot 3 also apply for Pilot 2.

If regional natural park is considered as “vulnerable zones”, there is tourist infrastructure in this area (parc naturel régional du Haut-Languedoc) that takes into account environmental and social considerations for local activity and development (through among other initiatives the “Valeurs Parc” Brand).

#### **PILOT 3: Chemin d'Aveyron**

It is difficult to get information on the economic and employment impact of the COVID-19 crisis. There were fewer walkers in 2020 from abroad but the local tourism quite compensated this “loss”. It is possible to observe that the majority of tourists that visited the sites along the route (not the Walkers) were French.

Generally speaking, Aveyron (not only the Pilot, but the whole department) has not suffered too much from the crisis, because of this “local tourism” effect. Although it was not possible to have the precise figures, an important emergency plan was implemented to support the tourism sector during the crisis (through grants and/or loans), from the national and regional government (fond l'Occal). Sudden tourism growth is not a concern for Pilot 3.

If regional natural parks is considered as “vulnerable zones”, there is tourist infrastructure in this area (PNR de l'Aubrac), that takes into account environmental, social considerations for local activity and development (through among other initiative the “Valeurs Parc” Brand).

#### **PILOT 4: Strasse der Romanik**

As there is no annual elaboration, it was not possible to answer several questions when is considered a crisis year in comparison to a “normal” year. The elaboration of the total tourism income is a five-year period. The current on-going period ends in 2024. The report refers to the period 2014-2019, except for the affected employees as there is an elaboration from the State Statistics Office every year. There are no vulnerable zones geo-located, or in regards to, infrastructure in Saxony-Anhalt. There is no existing contingency plan or a diversification plan and a tool for mass tourism plan so far. What has been elaborated was that in general inhabitants of Saxony-Anhalt explored their own region (mostly as day tourists) while the crisis years 2020 and 2021 after a huge campaign for vacation in your own home region and because of the travel restrictions during the crisis.

#### **PILOT 5: Rota do Românico**

With the COVID-19 pandemic, the tourism sector and the Romanesque Route had a 75% drop in the number of visitors. Naturally, this impact was felt throughout the territory with the closure of dozens of establishments in the sector. However, it has been continued to develop digital content throughout the period of confinement, which allowed to publicize and promote Romanesque Route and the territory. This work had positive results since in 2021 there was a 57% growth in the number of visitors compared to 2020. The growth prospects for these coming years are very positive and encouraging given the numbers of reservations available on this date.

### **3.2.7 Challenges for indicators**

#### **PILOT 1: Camino de Santiago**

No relevant information is available.

#### **PILOT 2: Chemin d’Arles**

Regarding Chemin d’Arles there are some general comments mentioned to be highlighted. The specificity of a Cultural Route makes the collection of the data harder, mainly because the area is extended and, when data is collected, the different stakeholders do not have the same methodology to collect it. It is sometimes time consuming to get data. Several indicators require very specific data that need to be elaborated. Amongst them it is important to highlight:

- Difficulties encountered for Characterisation domain:
  - percentage of cultural tourists: difficulty to isolate cultural tourists from tourists
  - percentage of disperse Cultural Tourism attractions: difficulty to understand the concept of dispersion
- Difficulties encountered for Cultural domain:
  - percentage funding of public-private: very difficult to get this type of data
  - Cultural activities promotion: difficult to collect the number of visitors (sometimes this data does not exist)
  - Alternative Cultural Attraction: difficult to harmonize the concept of “Alternative”
- Difficulties encountered for Economic domain:
  - Employment in CT: very difficult to get this data (at the level of a route)

- Turnover per CT: very difficult to get this data (at the level of a route)
- Difficulties encountered for Environmental domain:
  - Rate of noise, light/air pollution or traffic disturbance complaints per 100 inhabitants: unavailable data
  - Number of local enterprises in the tourism sector which actively support conservation of local biodiversity and landscapes: difficult to identify the number of enterprises that comply with the category “support of conservation of local diversity and landscapes”
  - Number of enterprises focusing on environmental awareness: difficult to get this data (this category can be understood as very large)
- Difficulties encountered for Resilience domain:
  - CT income decrease: difficulty to have the cultural tourism specific income
  - percentage of employments affected: difficult to collect this data
- Difficulties encountered for Social domain:
  - percentage volunteering in Cultural Tourism: difficult to collect this data because it is quite dispersed
  - No data was collected regarding accessibility plans

### **PILOT 3: Chemin d’Aveyron**

Same observations applied as for Pilot 2.

### **PILOT 4: Strasse der Romanik**

The consortium had the same issues and challenges as for Pilot 2. It is important to highlight:

- Data collection difficulties at the environmental domain as there is very small amount of data elaborated and available.
- The resilience domain could not be answered in consideration to the COVID-19 pandemic crisis years (2020 and 2021) as there is a five year report policy and no data yet available.
- Within the characterisation domain it was difficult to distinguish the percentage of cultural tourists and to isolate them from the cultural tourists as they are not separately considered.
- In the cultural domain the same challenges as Pilot 2 are faced. Mostly with the concept of dispersion and the related difficulties encountered.
- For the economic domain it was very hard to get the data for the tourism turnover, the general information of nights ‘spent in shared accommodations and the occupancy of shared accommodations as they are not elaborated. The number of employees of cultural tourism activities is not separated from the general tourism employees.
- Within the social domain the challenge of getting data for the number of visitors attracted by intangible cultural heritage attractions/events was faced. Getting the data (list of sites) which operate an accessibility plan and the number of sites offering free or discounted entry for locals it is still an ongoing process. Considering the responsibility balance the legal form “church” was added as this is something that haven’t been considered.

### **PILOT 5: Rota do Românico**

There is great difficulty in obtaining statistical data in the territory. It is necessary to create conditions (also human resources) for this very important information to be gathered. The creation of a regional tourism observatory in Porto and North is underway. This tool will be absolutely crucial for the characterization of the sector. Amongst the barriers and challenges that the Route of the Romanesque faces, one can mention the articulation between various entities with high levels of bureaucracy, which makes it difficult for the project to progress consistently, excessive dependence on European funding and the need for a more comprehensive and effective governance model, prepared for the challenges of project expansion.

## **3.5 Naturalia overview**

For the Naturalia Land group, the pilots involved are all part of Azores archipelago, therefore, all of them present some common features regarding the characteristics of an island or coastal destination. In the following subsections, a global analysis is given for each one of them according to the domains of characterisation, economic, social, cultural, environmental, resilience and a final chapter for the challenges detected.

### **3.2.1 Characterisation**

#### **PILOT 1: São Miguel Island**

São Miguel Island is the largest island in the Azores Archipelago, being the most expressive in terms of tourism, which is mostly “natural tourism”. Thus, it was difficult to find information that could respond to the indicators related to culture. Culture is more present in this Pilot in the form of intangible heritage, as is the case of religious festivities, pilgrimages, gastronomy, typical festivities, among others, being data more difficult to obtain through official sources. However, through the Azores’ Regional Statistics Service, existing at the regional level, it was possible to acquire some information about Cultural Tourism on São Miguel Island, such as the number of museums, theatres, concert halls and its visitors, that could be easily adapted as much as possible to the proposed indicators of cultural tourism in the Pilot.

#### **PILOT 2: Corvo Island**

Corvo Island is the smallest island of the Azores’ Archipelago, and its tourism is mostly “natural tourism”, similar to the other islands. As such, the situation was similar in terms of finding information related to Cultural Tourism. Being a small Pilot, the tourists who visit it are less expressive, as well as the existing cultural attractions, standing out the immaterial culture in the form of religious festivities and typical festivities of the island. Information regarding statistics of museums was obtained through the Azores’ Regional Statistic Service, which managed to reach some notions of cultural tourism in the Pilot. Considering the size of the Pilot, the existing tourist attractions are not dispersed, which can all be visited by walking or by car.

#### **PILOT 3: Fajã dos Cubres**

Regarding Fajã dos Cubres, being a more specific Pilot, information related to tourism was collected considering the parish in which it is located. Through the same statistical source,

it was possible to obtain data related to the existing museums and monuments, as well as the number of cultural tourists, obtained approximately considering tourism in general. Once again, the Pilot's strong component of intangible culture is highlighted, in addition to the main natural cultural attraction, the Fajãs of São Jorge Biosphere Reserve, which attracts many tourists every year.

#### **PILOT 4: Lagoa das Furnas**

Lagoa das Furnas is, such as Fajã dos Cubres, a more specific Pilot, located on the island of São Miguel. Its natural importance stands out, which attracts many tourists every year, in addition to the intangible culture inherent to the Pilot, including the typical gastronomy and religious festivals. It was only possible to obtain statistical information considering the municipality where it is located, so some data were not available on the official statistical sources, such as the number of cultural tourists. All cultural attractions on the Pilot are close to each other, facilitating access between them.

#### **PILOT 5: Pico Island**

Pico Island is well known for its Vineyard Culture, which is part of its cultural heritage. Additionally, in the Pilot there can be visited several monuments, museums and theatres, which were possible to ascertain from official statistical sources, also highlighting its intangible cultural attractions related to the traditions and customs of the island. The number of visiting tourists was calculated considering an approximation of data related to visitors of museums and other cultural spaces on the island, due to the lack of more objective data in this matter from official sources.

#### **PILOT 6: São Jorge Island**

In São Jorge Island stands out the Fajãs of São Jorge, which are classified as UNESCO world heritage site (Biosphere Reserve), and its natural component is the one that most touristic attraction items. Through official statistical sources in the region, it was possible to obtain data also related to cultural attractions, such as museums, libraries, churches and other monuments, as well as to obtain the number of cultural tourists through the number of visitors to these attractions. The intangible culture is well defined in this Pilot, being one of the most important and, therefore, more difficult to obtain through official sources.

#### **PILOT 7: Terceira Island**

Terceira Island is the second most populated island in the Azores' Archipelago, standing out for its religious and typical festivities, as well as its Carnival, which attracts many tourists every year. The highlight is, therefore, again for its intangible culture, with the Historic Center of Angra do Heroísmo, one of the island's municipalities, considered an UNESCO World Heritage Site. Through the same official sources of tourism in the Region, the number of monuments, theatres, libraries, museums, among others were collected, as well as the respective number of visitors that were automatically related to cultural tourists.

### **3.2.2 Economic**

#### **PILOT 1: São Miguel Island**

From the Azores' Regional Statistics Service, it was possible to obtain a set of data regarding guests who visit the island of São Miguel and stay in their tourist accommodation, detecting a great expressiveness in hotels and, increasingly, in local lodgings, valuing the investment in tourism. However, regarding income and number of

jobs by tourism activity, there is no information available that allows relating directly to cultural tourism, but to tourism in general, so these were estimates considering the current reality in the Pilot.

### **PILOT 2: Corvo Island**

Through official sources, it was possible to obtain information regarding guests who visit the island of Corvo and stay in their tourist accommodation, being of little expressiveness compared to the other pilots, since this pilot is very small and one day is enough for tourists to know the island. When it comes to the indicators regarding income and number of jobs by tourism activity, there is no information directly related to cultural tourism, so the responses were given considering tourism in general. Additionally, the employment by Cultural Tourism activity was impossible to find, due to the unavailability of information directly associated with Cultural Tourism.

### **PILOT 3: Fajã dos Cubres**

Considering the specificity of this Pilot and having in mind that the information available regarding the indicators of occupancy, nights spend, average spending by tourist, among others on the economic matter were only available for the island itself and the regional official statistic sources weren't able to provide it for the municipality, it was impossible to find data related to this Pilot on the economic template.

### **PILOT 4: Lagoa das Furnas**

For this Pilot, finding data presented some challenges when coming from the official sources that could respond to most of the economic indicators, highlighting the occupancy rate in the tourist accommodations, as well as the night spends. However, regarding the turnover per Cultural Tourism, the employment and the average daily per tourist, those information were not publicly available regarding the municipality, but only on the island, so this implied some missing data for this Pilot.

### **PILOT 5: Pico Island**

The situation is similar to São Miguel Island, having been able to collect the data through official sources, regarding guests who visit the Pilot and stay in their tourist accommodation, with a higher expressiveness in hotels and increasingly in local lodgings, valuing the investment in tourism. On the matter of income and employment in cultural tourism there was no information available connected to cultural tourism, so the answers were estimations on the basis of the tourism in general. The number of persons employed by cultural tourism activity was a gap that could not be filled by lack of information available for the public.

### **PILOT 6: São Jorge Island**

The previous situation is also present in São Jorge Island, with the completion of the indicators related to the tourists and their accommodation, with a higher expressiveness in hotels and increasingly in local lodgings. The employment by tourism activity was not possible to fill in, due to the lack of information available in the official sources. The number of persons employed in Cultural Tourism and the turnover for cultural tourism were obtained through estimates of the tourism in general.

## **PILOT 7: Terceira Island**

In Terceira Island the situation is the same as most of the Pilots, having already been mentioned that information regarding the guests and their tourist accommodations were collected, highlighting a greater expression on the island, but indicators such as the employment by tourism activity was impossible to fill in, since there wasn't information available from the official sources. The indicators of persons employed in cultural tourism and the turnover for cultural tourism were obtained through estimates of the tourism in general.

### **3.2.3 Social**

#### **PILOT 1: São Miguel Island**

The relevance of cultural tourism attractions that were established within the scope of São Miguel Island were highlighted, focusing on the importance and attention given to special groups, such as younger, elderly, students, people with specific access requirements, etc., highlighting the access discounts they have in the cultural attractions and the existence of accessibility plans for visitors with special needs, in addition to the promotion of training programmes in traditional skills, taking into account the specificity of Pilot and the importance of valuing their traditions.

Despite the relevance of intangible cultural events on the island of São Miguel, as mentioned in Characterization, it was very difficult to find specific information for visitors to events that are part of intangible culture, as well as for Cultural Tourism attractions' volunteers because, although it exists, it is not provided by most cultural tourism attractions nor by the Azores' Regional Statistical Services, so it was impossible to establish this value. With regard to Cultural Tourism sites that allow multilingual signage and interpretation and information for visually impaired visitors, Pilot shows little action in this matter, and should be an issue to overcome in the future.

#### **PILOT 2: Corvo Island**

In general, all indicators were answered efficiently, thanks to the contributions of the official statistics sources, which allowed to have an idea of the cultural attractions existing in the Pilot, although few, as well as the accessibility conditions offered to vulnerable groups. The number of visitors attracted by intangible cultural events could not be ascertained, as this is information that could only be obtained from private entities. The number of employees in Cultural Tourism attractions was only possible to obtain through tourism data in general, as there is no data directly related to culture in this aspect. Additionally, in the Pilot lacks actions and information directed to visually impaired visitors, and should be an issue to work in the future.

#### **PILOT 3: Fajã dos Cubres**

As this is the case of a more specific Pilot, there it was more difficulty to find information that responded to the indicators of the number of visitors attracted by intangible cultural events, as well as volunteers and employees in Cultural Tourism attractions, given that the available information only concerned the island and not the municipality. However, it was possible to verify the existence of training programmes in traditional skills, valuing the Pilot's culture, as well as to conclude about the expressiveness of attractions that provide access discounts for certain groups and the attention given in terms of accessibility and

conditions for vulnerable groups. Besides that, the Pilot lacks actions and information directed to visually impaired visitors, and that should be an issue to overcome in the future.

#### **PILOT 4: Lagoa das Furnas**

The situation is similar to what is seen on the previous Pilot, given that the available data related to the municipality to which the Pilot belongs managed to respond to most indicators, but with the exception of the number of visitors attracted by intangible cultural events, as well as volunteers and employees in cultural tourism attractions, which there were no data available. In general, all other indicators related to accessibility, training programmes, discounts on access to cultural attractions and the number of tourists were obtained based on the usual official sources, highlighting its relevance and importance for the Pilot. Besides that, the Pilot lacks actions and information directed to visually impaired visitors, and that should be an issue to overcome in the future.

#### **PILOT 5: Pico Island**

In Pico Island, importance was highlighted on the training programmes, the number of cultural attractions with free/discounted access, as well as the accessibility conditions to special and vulnerable groups, as part of their policies. Similar to what happened on the other Pilots, the indicators more difficult to fulfil were the number of people working as volunteers in cultural tourism and the number of visitors attracted by intangible Cultural Heritage events, since that information would require asking private entities. Concerning accessibility plans for cultural tourism sites, offering multilingual signage and interpretation and information for visually impaired visitors has not been developed but this should be addressed in the future.

#### **PILOT 6: São Jorge Island**

In São Jorge Island, the information from official sources allowed to fulfil most of the indicators, giving special attention to the cultural attractions with free/discounted access, as well as the accessibility conditions to special and vulnerable groups. However, the indicators of volunteers in the Cultural Tourism and visitors in the intangible cultural events were not possible to fulfil. Concerning accessibility plans for cultural tourism sites, offering multilingual signage and interpretation and information for visually impaired visitors has not been developed but this issue should be addressed in the future.

#### **PILOT 7: Terceira Island**

Similarly with the other Pilots, the data collected by the official sources manage to give information about the cultural attractions on the Pilots and their visitors, as well as get the relevance of them that have accessibility plans for special groups and make efforts in order to have discounts or free access to the attractions. Regarding the indicators of volunteers in the cultural tourism and visitors in the intangible cultural events, there was no information available. Additionally, the Pilot lacks actions and information directed to visually impaired visitors, and should be an issue to address in the future.

### **3.2.4 Cultural**

#### **PILOT 1: São Miguel Island**

As already previously mentioned, the Cultural indicator was the most complicated to fill in, considering that the “nature” component is the one that stands out the most in this Pilot, so only the information related to the economic contributions of Cultural Tourism were able to

be determined with the assistance of the Azores' Regional Statistics Service. Indicators related to the determination of historic buildings restored or in classified danger, as well as aspects related to the promotion of cultural plans and activities and their visitors were therefore impossible to fill, since most of them are from private entities, which made it difficult to find information that could efficiently respond to what was intended. The indicator on visual impacts would need more time and attention to be established.

### **PILOT 2: Corvo Island**

Considering the relevance of natural tourism, Cultural Tourism ends up being less expressive in terms of information available from official sources, so most of the indicators could not be answered due to lack of information that could be adjusted or because the information required the participation of private entities, which made the work very difficult. Thus, it was noted that the number of cultural attractions, the economic support of entities in terms of the environment and the economic contributions from Cultural Tourism were possible to determine, adjusting the existing information to the reality of Pilot. The indicator on visual impacts would need more time and attention to be established.

### **PILOT 3: Fajã dos Cubres**

The situation is the same as the previous Pilot, with most of the indicators being left to respond thanks to the lack of information available. The indicators of number of cultural attractions, economic support of entities in terms of the environment and economic contributions from Cultural Tourism being able to be responded with success, highlight the number of visits to the attractions valuing the Pilot. The indicator on visual impacts would need more time and attention to be established.

### **PILOT 4: Lagoa das Furnas**

The situation is the same as the previous Pilot, with most of the indicators being left to respond thanks to the lack of information available. Similarly, the indicators of number of cultural attractions, economic support of entities in terms of the environment and economic contributions from Cultural Tourism were responded, highlighting the relevance of it for the Pilot. The indicator on visual impacts would need more time and attention to be established.

### **PILOT 5: Pico Island**

The situation is the same as the previous Pilot, having had trouble with most of the indicators, since there was no information from the official sources that could refer to that. Thus, the number of cultural attractions, economic support of entities in terms of the environment and economic contributions from cultural tourism were able to be fulfilled, highlighting the importance it has for the Pilot's tourism. The indicator on visual impacts would need more time and attention to be established.

### **PILOT 6: São Jorge Island**

In São Jorge Island it is observed that, as with the rest of the Pilots, the indicators were mostly not possible to get due to the lack of information available, since the participation of private entities would be crucial to manage that. A few indicators were able to have efficient answers thanks to the official statistics, like cultural attractions, economic support of entities in terms of the environment and economic contributions from Cultural Tourism. The indicator on visual impacts would need more time and attention to be established.

## **PILOT 7: Terceira Island**

In this Pilot the cultural indicators lacked almost all answers, due to the fact that this information can only be verified by private entities. Thus, just the indicators of cultural attractions, economic support of entities in terms of the environment and economic contributions from cultural tourism were able to be completed, being extremely important for the Pilot. The indicator on visual impacts would need more time and attention to be established.

### **3.2.5 Environmental**

#### **PILOT 1: São Miguel Island**

As a destination that promotes nature, the environmental heritage on the island of São Miguel is extremely important, being increasingly protected, considering the growing tourism on the island and the disadvantages and/or risks that may arise from it. Therefore, companies dedicated to the tourism sector stand out, particularly those dedicated to the protection and sustainability of the island and its natural resources, preserving them. Also noteworthy is the creation and promotion of a local brand that sponsors Azorean products, valuing their origin and enriching the Pilot's tourism. Means of transport considered less polluting and sustainable are also widely used as a way of visiting the cultural attractions around the island of São Miguel, contributing to the creation of a more sustainable nature. In this way, the environmental indicators were mostly managed to be acquired, with the exception of the noise level produced by cultural tourists, considering that in the island's municipalities there is no way to get that data, since noise complaints are filled, but are not that specific.

#### **PILOT 2: Corvo Island**

The preservation of nature in Corvo Island is a goal, due to the small population that lives there. In terms of the indicators for the environmental aspect, the number of noise levels, light/air pollution or traffic disturbance due to tourism was the only indicator hard to find, considering that that is information that is not that specifically presented to the public. The other indicators were successfully completed through official sources, like the creation and promotion of a local brand that sponsors Azorean products, valuing their origin and enriching the Pilot's tourism, as well as the relevance of the means of transport, making the destination less polluting and more sustainable.

#### **PILOT 3: Fajã dos Cubres**

Being a small pilot, the environment is also an extremely important aspect, being highlighted through the relevance of companies dealing with preservation of the environment and sustainability, as well as the promotion of means of transport, making the destination less polluting and more sustainable. Another important indicator is the existence of a local brand that promotes Azorean products, showing the importance of the Pilot's sustainability. Like the other Pilots, the number of noise level, light/air pollution or traffic disturbance due to tourism were the only indicators hard to find, considering that that is information that is not that specifically presented to the public.

#### **PILOT 4: Lagoa das Furnas**

Lagoa das Furnas is one of the most important natural sites of São Miguel, being relevant the indicators of companies dedicated to the tourism sector, particularly those dedicated to

the protection and sustainability of the Pilot, as well as the existence of a local brand that promotes Azorean products, making the destination more visible to the tourist. The only indicators that could not be completed were the number of noise level, light/air pollution or traffic disturbance due to tourism, considering that that is information that is not that specifically presented to the public.

#### **PILOT 5: Pico Island**

The natural importance of Pico Island shows through all the indicators presented, highlighting the number of companies that promote sustainable tourism and protect the environment, as well as a local brand that promotes Azorean products, showing their traditions and value. Also, the cultural attractions can be visited by means of transport less polluted, contributing for the protection of the Pilot. As with the other Pilots, the number of noise level, light/air pollution or traffic disturbance due to tourism couldn't be completed according to the official sources, considering that that is information that is not that specifically presented to the public.

#### **PILOT 6: São Jorge Island**

In São Jorge Island the nature is also well preserved, being the indicator on the template well connected to that, as is the case of the enterprises that work on the protection of the environment, as well as the local brand that promotes Azorean products, contributing to a more sustainable destination and attracting more visitors to the Pilot. The only indicators that could not be completed were the number of noise level, light/air pollution or traffic disturbance due to tourism, considering that that is information that is not that specifically presented to the public.

#### **PILOT 7: Terceira Island**

In Terceira Island, we came up with a similar situation as the other Pilots, where the environmental indicators were mostly fulfilled, being relevant the enterprises with a sustainable goal, as well as the existence of a local brand that promotes Azorean products, being part of their value and traditions. The cultural attractions can be visited by means of transport less polluted and environment friendly. However, the indicators of noise levels, light/air pollution or traffic disturbance due to tourism couldn't be completed, considering that that is information that is not that specifically presented to the public.

### **3.2.6 Resilience**

#### **PILOT 1: São Miguel Island**

With the appearance of the pandemic, resilience was an extremely important factor to boost tourism on São Miguel Island, since it is a key activity for the Pilot. In this way, contingency plans were established, both at the level of the island and its municipalities, as well as strategic tourism plans already existed in two municipalities, valuing tourist activity considering several factors. Using the Azores' Regional Statistical Services once more, it was possible to ascertain the number of regional, national and international tourists who travelled to the Pilot. Similar to the economic indicator, in terms of Cultural Tourism indicators regarding revenue and number of employees in the sector, it was only possible to get information associated with tourism in general and in the public sectors' participation indicator there was no information available for the Pilot, since it is more specific and not publicly available as the others are.

#### **PILOT 2: Corvo Island**

With the emergence of the pandemic, containment measures were taken on the Pilot, causing tourism to be affected and, consequently, it was necessary to take measures to boost it. Thus, it denotes the existence of contingency plans, as well as sustainable tourism strategies at the regional level, valuing tourism. Through official statistical sources, it was possible to determine the number of tourists who visit the Pilot considering their nationality, but data related to cultural tourism income and respective employees in this sector were only possible to determine by approximation to tourism data in general. In the public sectors' participation indicator, there was no information available since it is more specific and not publicly available as the others are.

### **PILOT 3: Fajã dos Cubres**

In Fajã dos Cubres, more specifically in the Municipality of Calheta where it is located, measures were also taken to contain the pandemic, acting according to resilience factors, such as contingency plans at the municipality level, in addition to the already existing tourism strategies. The number of tourists according to nationality was determined, revealing difficulties in obtaining more specific data related to culture, such as financial support from the public sector, employees in cultural tourism and cultural tourism revenues, since they weren't available from official sources or they were just related to tourism.

### **PILOT 4: Lagoa das Furnas**

Lagoa das Furnas, being a major target location for tourism on the island of São Miguel, was also affected by the pandemic measures, putting into practice its contingency plan for its Municipality, in addition to those existing at a regional level and tourism strategies already formulated, giving special focus to tourism. As such, through regional statistical sources, data related to tourists by nationality were obtained, but it was not possible to obtain information related to cultural tourism revenues, their employees and financial support from the public sector in cultural tourism, since there was no information disaggregated by municipality.

### **PILOT 5: Pico Island**

As resilience was an extremely important factor to boost tourism after the pandemic, contingency plans were created both at the level of the island and its municipalities, as well as strategic tourism plans already formulated at regional level. Through the official sources, it could be obtained the number of regional, national and international tourists who travelled to the Pilot, but the public sectors' participation indicator wasn't possible to fulfil, since there was no information publicly available. As for the indicators of employees in the cultural tourism sector and the Cultural Tourism income, both were obtained by approximation of the tourism in general data.

### **PILOT 6: São Jorge Island**

São Jorge Island has created two contingency plans for its municipalities, also considering the tourism strategies already in line, contributing to the valorisation of the tourism. Like the other Pilots, indicators such as the public sectors' participation couldn't be obtained, and some of them were created by approximation of the tourism in general data. The number of tourists by nationality was fulfilled, with national and international tourists.

### **PILOT 7: Terceira Island**

The situation is similar to the other Pilots, considering the resilience factor in Terceira Island. Contingency plans were created for the two municipalities of the island, and also tourism strategies were already created in the past in order to value and protect tourism in the Azores. Some indicators were possible to collect by searching the official statistical sources, highlighting the number of regional, national and international tourists that visit the Pilot, but others were hard or even impossible to find, since they were not available publicly or had to be fulfilled considering a proxy.

### **3.2.7 Challenges for indicators**

#### **PILOT 1: São Miguel Island**

After filling in all the templates, it was concluded that the existence of an official source of information has greatly facilitated the completion of most indicators, through official data and with a high degree of confidence and that, despite the existing information being fragmented or not immediately available, it was possible to adapt some of it to Cultural Tourism, managing to obtain some approximate data.

#### **PILOT 2: Corvo Island**

Being the smallest island, with fewer cultural attractions, it was somehow easier to get the indicators, although some of them were too specific and depending on responses from private entities, which was not possible to manage. An alternative way to get the data was through questionnaires to the representative of the municipality in order to achieve a greater knowledge of the subjects treated on the templates, but that was also difficult to manage considering the time and human resources constrains.

#### **PILOT 3: Fajã dos Cubres**

Since this was a Pilot that only could obtain information regarding its municipality, the official statistical sources most of the time only had information related to the island, so it was a challenge to obtain approximate data that could respond efficiently to some indicators requested. A possible solution was, as mentioned before, the elaboration of questionnaires so that the representative of the municipality could respond through a more accurate vision and perception in these matters, enriching and valuing the indicators presented.

#### **PILOT 4: Lagoa das Furnas**

The situation is the same as mentioned before, since Lagoa das Furnas Pilot's information could only be obtained by the municipality's information given by the statistical sources; therefore, the project faced some challenges collecting the data as approximate as possible to the Pilot itself, considering its own reality. In the future, some the indicators could be obtained from other sources, for example, by sending questionnaires to the representatives of the municipality in order to understand their point of view.

#### **PILOT 5: Pico Island**

In general, the indicators were fulfilled mostly thanks to the statistical information provided by the official sources, making it easier and more effective. The indicators that proved to be more difficult to answer were related to the fact that the information inherent was not public and, consequently, needed the support of private entities in other to get a correct interpretation, which made it difficult to pursue the work.

### **PILOT 6: São Jorge Island**

As mentioned in the previous Pilots, most indicators were obtained through accredited and official data, which made the work more complete. The challenges were based precisely on the indicators that required more specific information and that had to come from private sources, making it hard to complete all the templates.

### **PILOT 7: Terceira Island**

Similar to São Miguel Island, almost all the templates were possible to fill in, thanks to the regional official sources, since there were larger Pilots and the information was better distributed and presented, considering most of the indicators presented. Although there was some information disaggregated, it was possible to find an approximate answer, adapting the data to the cultural tourism indicators on the Pilot.

## 4 First systematisation of data. Indicators analysis

### 4.1 Introduction

Out of the 30 pilots currently belonging to the IMPACTOUR pilot community (20 initial pilots plus 10 added later), a total of 115 questionnaires have been received as of 28/02/2022 with the following breakdown:

Pilots	Characterisation Template	Resilience Template	Cultural Template	Social Template	Environmental Template	Economic Template
30	19	21	19	18	19	19
	63,33%	70,00%	63,33%	60,00%	63,33%	63,33%

Table 4-1 – Available information from pilots

While these numbers are quite reasonable, given the difficulties in obtaining the data due to the COVID-19 pandemic and the complications in getting the different actors involved, a more detailed analysis indicates that it is important to continue working to improve both the quantity and quality of the data used for future analyses.

Some of the challenges encountered are that many pilots, especially those in the pathways group (Itineralia), have left much of the information to be filled in as unavailable or pending, indicating that either the data does not exist, or that its preparation requires much more time than is available for this first collection of information.

All these issues are discussed in the following sections in which the process carried out for this first systematisation of information will be described. Moreover, in this first organisation of the information the consortium has begun to find some of the questions that will be developed later in the specific analysis of each of the domains.

Number formatting issues have been solved and it will be considered while designing the input automatic procedure of the IMPACTOUR tool. The case of the pollution indicator is particularly complex, it has either been left empty or, where the information exists, it is not comparable. Further work on specific guidelines should be made to be incorporated on the IMPACTOUR tool.

A deeper analysis is carried out below for each of the baseline indicators present in the first data collection. The methodology of the analysis includes, in addition to the comparison between existing values, their absence. That is, when the pilot is present in the table, but without values, it means that some of the data necessary for the calculation of the indicator is missing. If the pilot does not appear on the X-axis, neither of the two data is present.

### 4.2 Analysis per indicators

In this case, the criteria established for the analysis is based on the domain groups used during the data collection process (characterisation, economic, social, cultural, environmental and resilience), considering for the revision only the available data from the previously mentioned active pilots.

All the results obtained from this analysis have served for the second systematization phase, in the sense that when some anomaly has been discovered a consultation process with the pilot responsible has been opened, to further clarify the information or to recover new data in case it was needed.

These are the different levels defined for the accuracy of the indicators according to the answers received, as stated in section 1.2.3 of the present deliverable:

- Level 1 – The indicator presents no issues and the collected data is sufficient
- Level 2 – The indicator presented minor issues associated with the necessary data
- Level 3 – The indicator presented major issues associated with the collected data and they were solved by re-consulting the pilots for clarification
- Level 4 – The indicator presented major issues and will be further analysed and reformulated when developing the KPIs

Furthermore, in the analysis we indicate the number of pilots that have provided data, and the ones that the data they have provided serve to calculate the baseline indicator. When these two numbers diverge too much it means that some reflection on the indicator or the data collected needs to be done to improve their accuracy.

### 4.2.1 Characterisation indicators (CH)

Characterization indicators serve to categorize and cluster pilots according to their characteristics and to make comparisons among pilots already grouped into different lands. They provide insights on different national policies to consider heritage protection, type of cultural facilities. In general, all the indicators associated with this domain are well represented.

#### CH01: Population density.

##### LEVEL 1

- Pilots with full valid data: 21
- Pilots with some valid data: 21

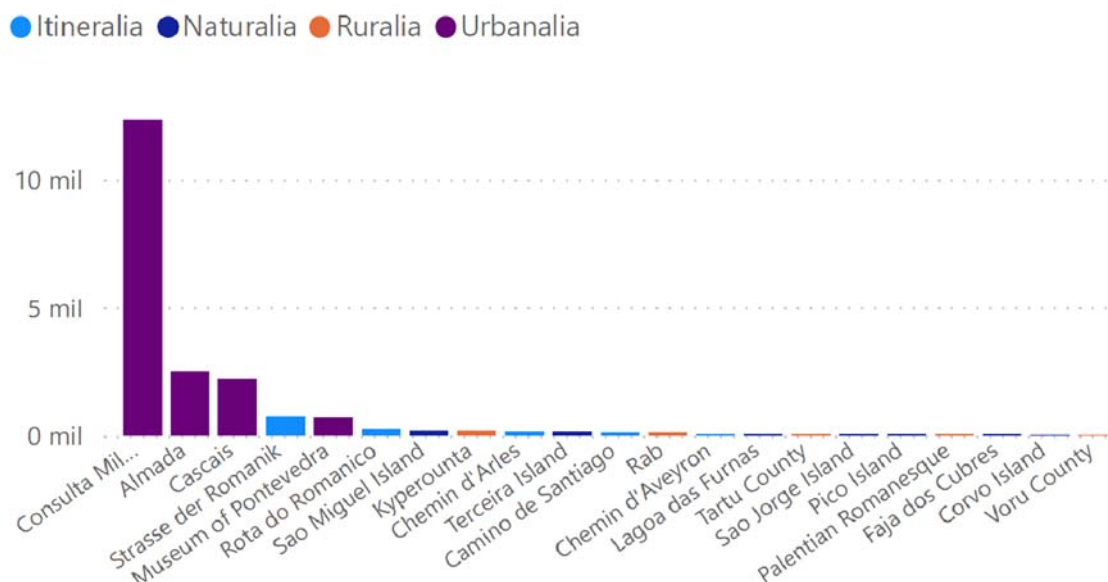


Figure 4.1 - Population density (All pilot data present)

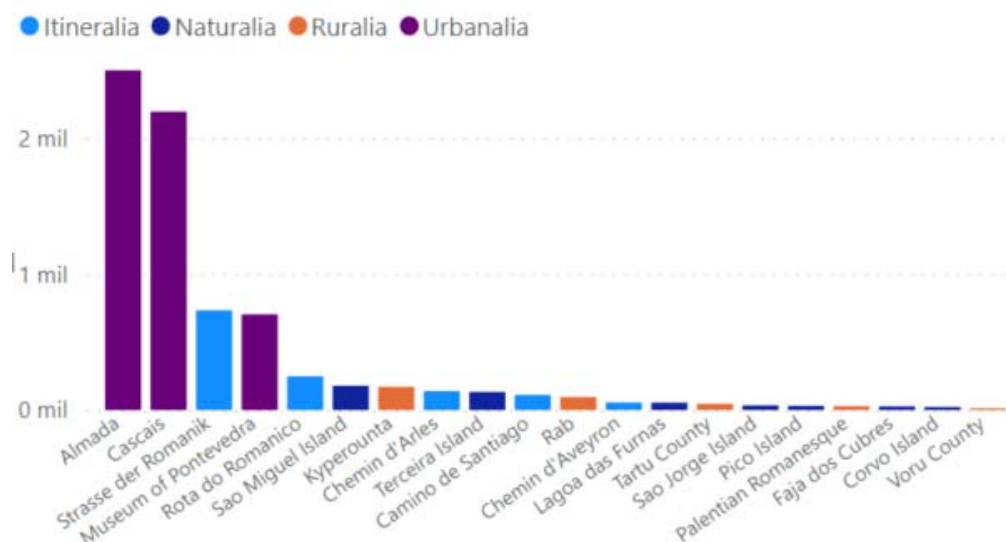


Figure 4.2 - Population density (Highest values excluded)

All pilots that have answered this question have provided information and its results are consistent with the type of pilot to which they refer. The issue of different measuring units was solved in the 2nd systematisation phase.

As the information provided from one of the pilots alters significantly the interpretation of the pilots with less population density, on the other hand, it offers a clear view of the distribution of pilots according to their population density. For a more detailed analysis, filtering was considered, as shown in the Figure 4.2.

With the information received, it was easy to perceive that the major density destinations are placed in urban areas, which include not only the Urbanlalia pilots, but also the ones in the Itineralia group, as they combine different types and sizes of cities and villages.

## CH02: Percentage of cultural tourists (compared to the total number of tourists).

### LEVEL 3

- Pilots with full valid data: 12
- Pilots with some valid data: 16

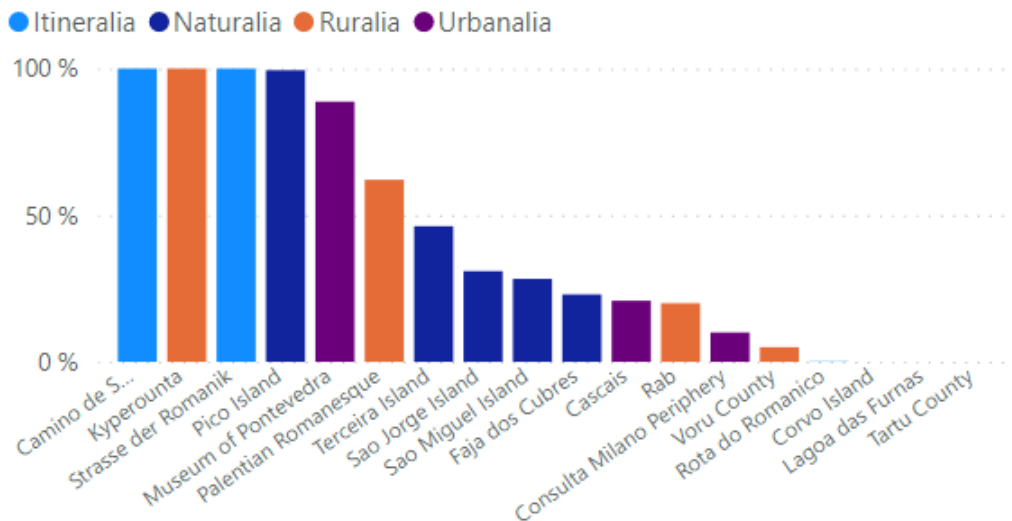


Figure 4.3 - Percentage of cultural tourists

This indicator is mostly obtained by the application of a perceived percentage, based on the characteristics of the destination. There are pilots who consider that 100% of their tourism is cultural and others where it was not possible to obtain the data. This indicator has been difficult to obtain because, in general, pilots do not possess this information in a disaggregated manner.

With the information received, a high Cultural Tourism level was found in all types of destinations, including pilots from Itineraria, Ruralia, Naturalia and Urbanalia.

Consultations have been made to clarify the origin of the information.

### CH03: Number of listed tangible or intangible Cultural Heritage.

#### LEVEL 2

- Pilots with full valid data: 16
- Pilots with some valid data: 16

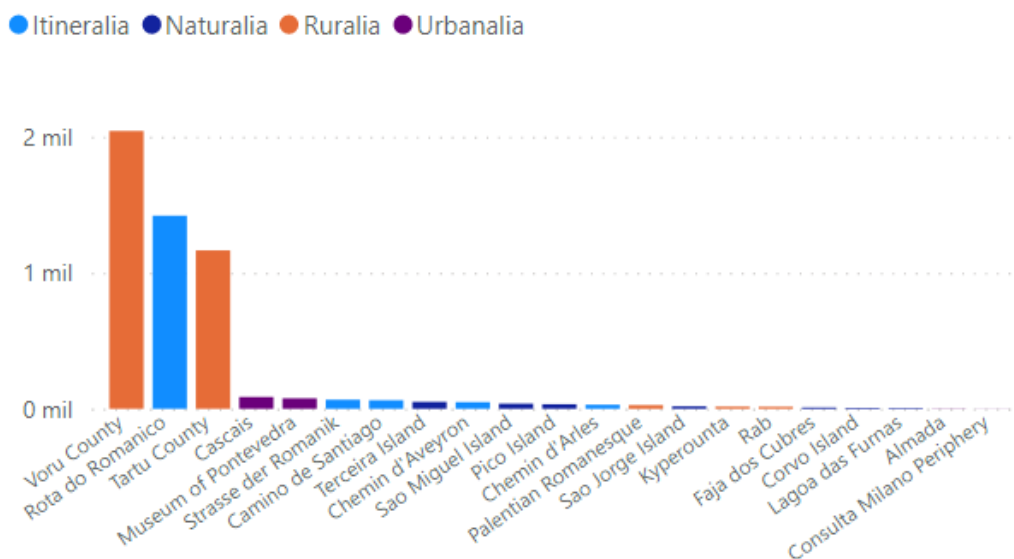


Figure 4.4 - Number of listed tangible or intangible Cultural Heritage. (All data present)

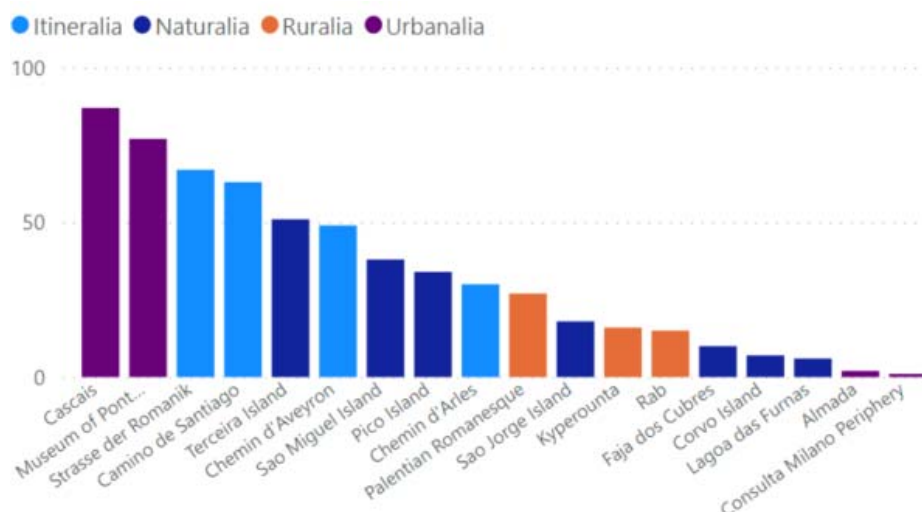


Figure 4.5 - Number of listed tangible or intangible Cultural Heritage. (Highest values excluded)

This indicator needed homogenization or some filtering procedures, as some pilots reported numbers well above the rest of the pilots, making the global figures difficult to interpret. After consultation with the referred pilots it was clear that this was due to a difference in the criteria established by the authorities to consider an element as protected. This issue has been solved in the 2nd characterization phase.

Regarding the chart, Urbanalia and Itineralia groups register a higher level of declared Cultural Heritage than Naturalia and Ruralia, mostly due to having a bigger influence area and cultural and heritage resources.

#### CH04: Number of other EU Heritage/Natural Labels

##### LEVEL 2

- Pilots with full valid data: 14
- Pilots with some valid data: 14

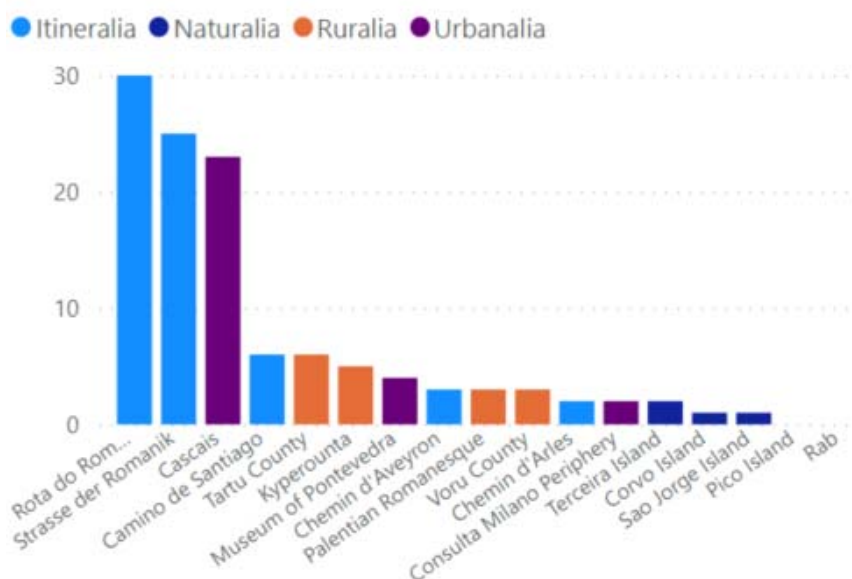


Figure 4.6 - Number of other EU Heritage/Natural Labels

Indicator with responses from 14 of the 30 pilots (20 initial + 10 added). It's significant that two routes have reported way more items than the rest of the routes. This could be due to different criteria in considering the data or structural differences between territories. This issue will require further analysis to be included on the tool development.

#### CH05: Number and type of cultural facilities, museums, theatres, monuments, etc.

##### LEVEL 3

- Pilots with full valid data: 17
- Pilots with some valid data: 17

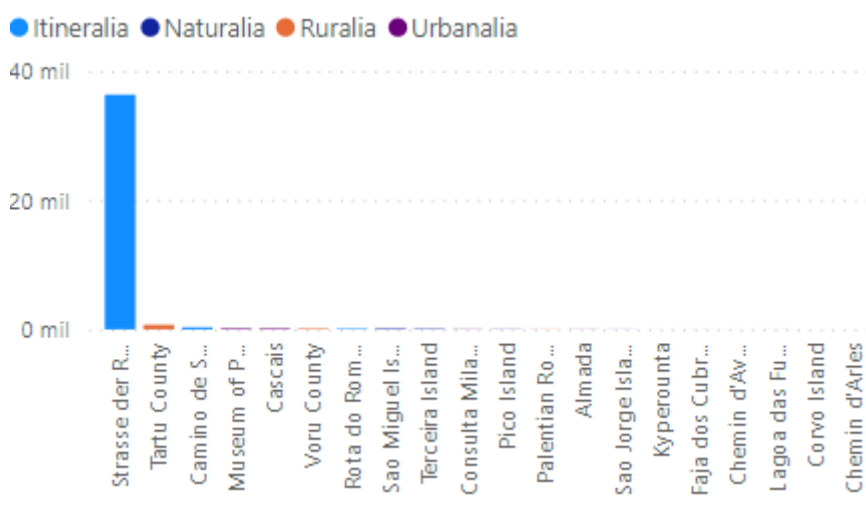


Figure 4.7 - Number and type of cultural facilities, museums, theatres, monuments, etc. (All data present)

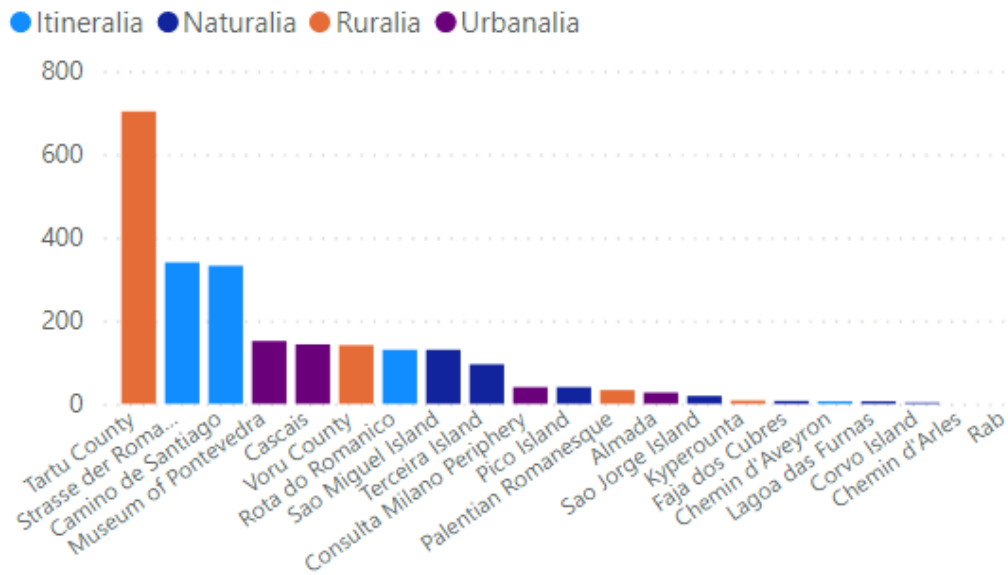


Figure 4.8 - Number and type of cultural facilities, museums, theatres, monuments, etc. (Highest values excluded)

Since one pilot reported 36,343 facilities this indicator interpretation is significantly altered. There is information from most of pilots, but it is invisible given the number discrepancy between pilots. This issue was solved in the 2<sup>nd</sup> characterization phase, and the pilot who yield the inconsistent data have corrected the figures.

Moreover, in the second filtered chart, it is possible to observe that pilots from all types of lands have different cultural facilities, showing a high variety when analysing this factor.

### CH06: Percentage of dispersed Cultural Tourism attractions

#### LEVEL 4

- Pilots with full valid data: 3
- Pilots with some valid data:14

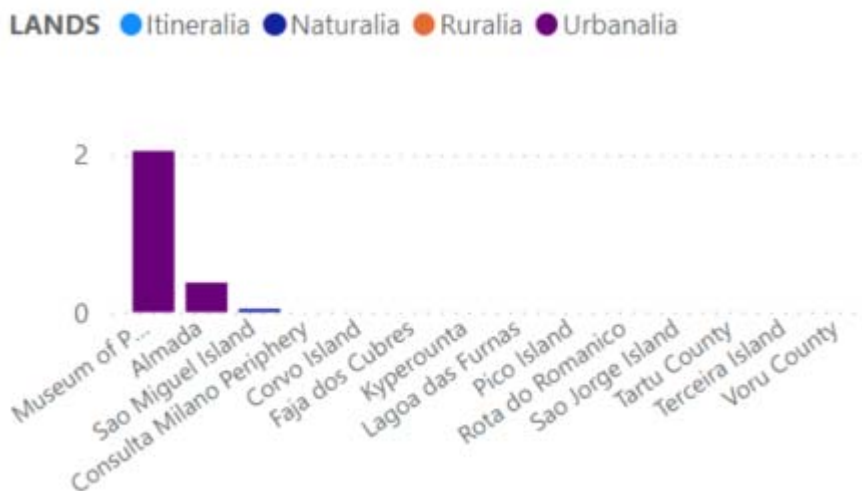


Figure 4.9 - Percentage of dispersed Cultural Tourism attractions

For this indicator, three pilots provide complete information and 14 have provided some of the data needed to calculate it. There is a need to further define or clarify the concept “dispersed”. In some cases, this concept may not be applicable, as for example in itineraries (cultural walking routes). This information becomes very relevant to better analyse not only the destinations themselves, but also the surrounding areas with their dispersed Cultural Heritage elements. This issue has to be considered while designing the IMPACTOUR tool.

### CH07: Percentage of key sites operating all year

#### LEVEL 4

- Pilots with full valid data: 4
- Pilots with some valid data: 13

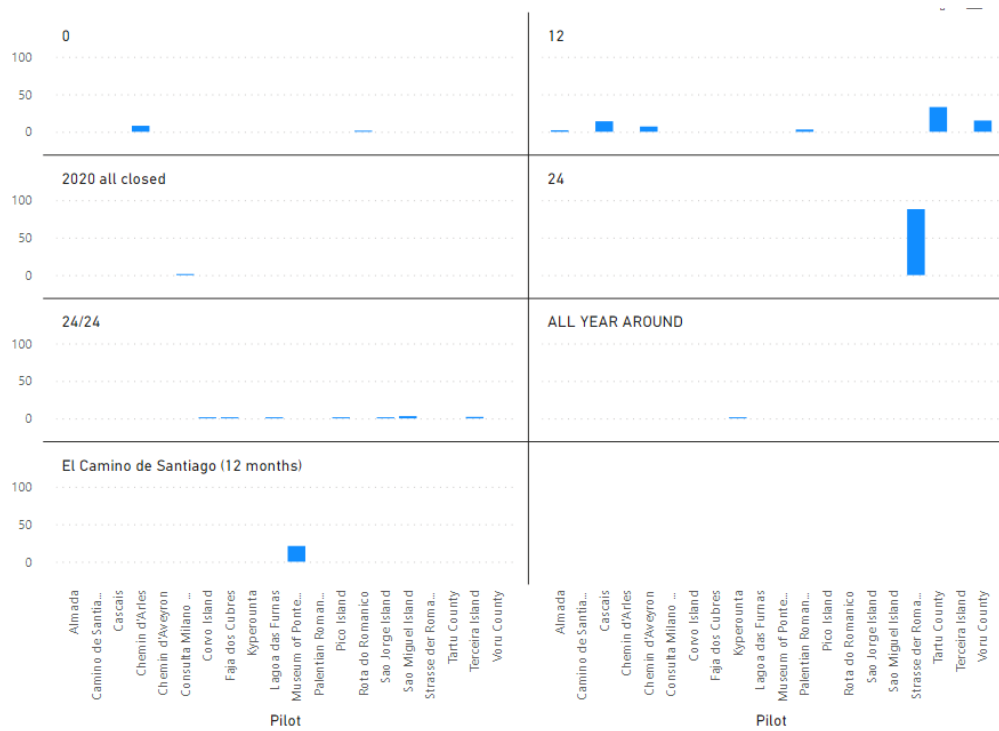


Figure 4.10 - Percentage of key sites operating all year. Graphs before homogenization of information. It shows the variety of answers on the number of days open all year

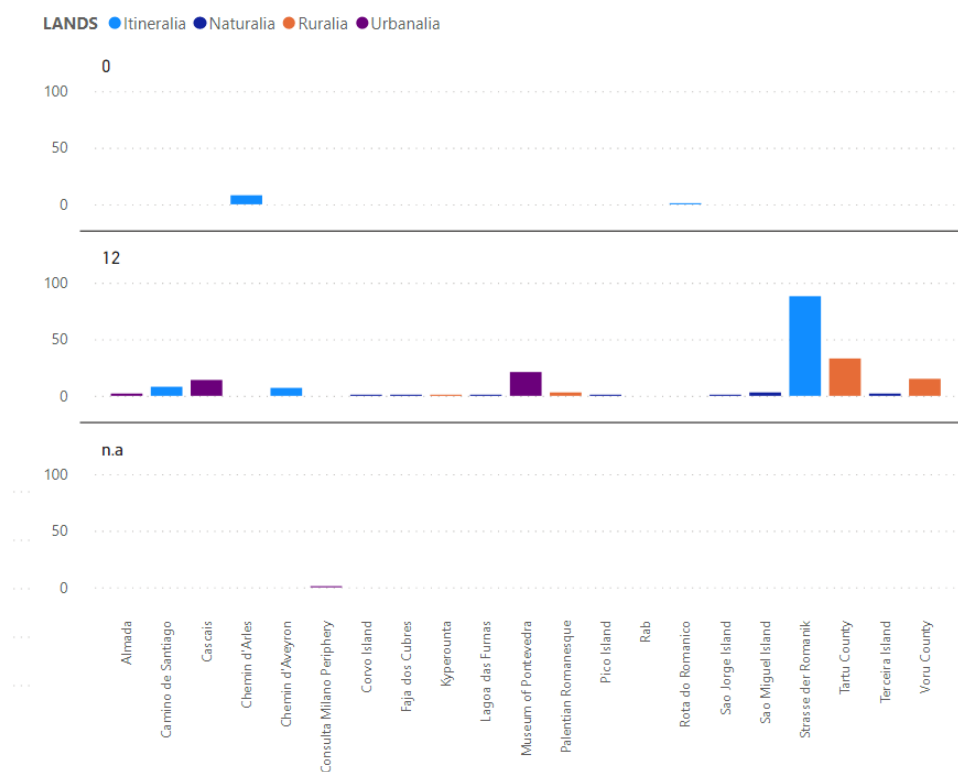


Figure 4.11 - Percentage of key sites operating all year. Graphs after homogenization of information

This indicator has been answered by 13 pilots and 4 provided information that could be analysed at the first stage. There is a need to further clarify the concept of Key site, however this was not considered a major issue.

Some of the responses will need a homogenization of the data provided to be comparable. Clarification of the data format will be necessary in further requests of information. On a first stage, the graph was constructed with the data provided and not with the indicator itself. The graph shows the disparity of criteria when filling in the form. This issue was solved in the 2<sup>nd</sup> characterization phase, after the homogenization of the information. The 0 in the graph means that some pilot have reported 0 days open all year.

## CH08: Destination Management Organization (DMO)

### Level 2

- Pilots with full valid data: 28
- Pilots with some valid data: 28

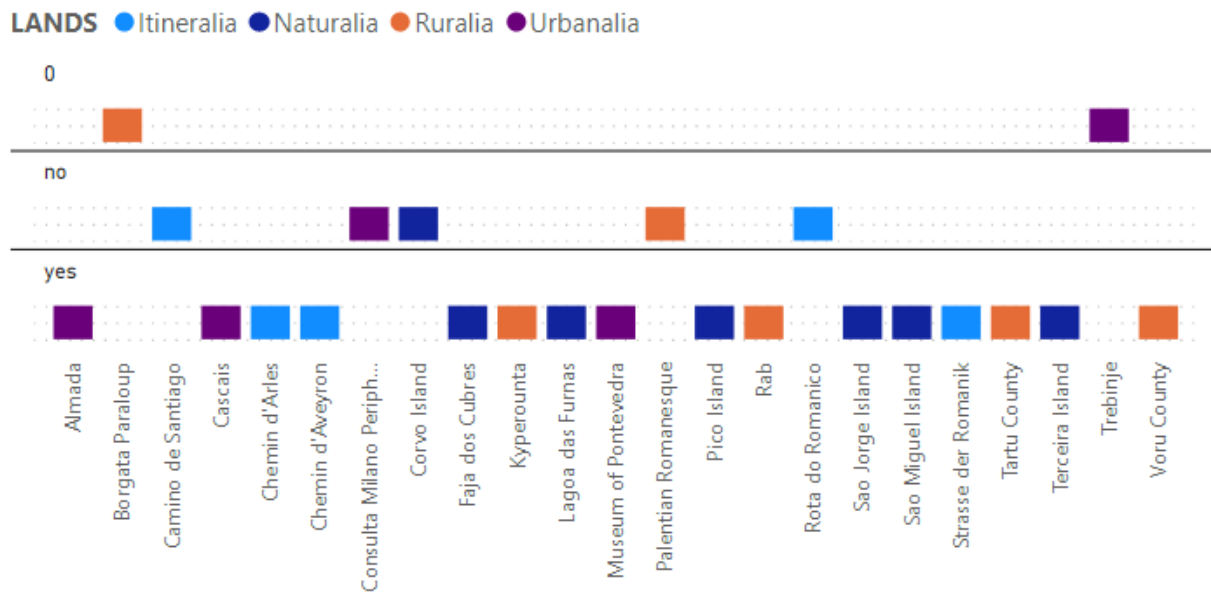


Figure 4.12 - Destination Management Organization. Graphs after homogenization of information

This is a very well represented indicator, with a vast majority of Pilots declaring the existence of a DMO. Only slight revision on the format of data has been needed.

Clearly, the importance of this indicator in the context of the project deserves to be investigated by exploring the correlation between the existence of DMO and the results obtained in the development of the destination.

In this graphic the 0 is because the cell to use to make the calculation is empty, but the formula returns a 0 value. So, it has to be assimilated a no answer. This will be corrected in the last version of the systematization of data, in the benchmarking report.

### CH09: Connectivity to site

#### LEVEL 2

- Pilots with full valid data: 26
- Pilots with some valid data: 26

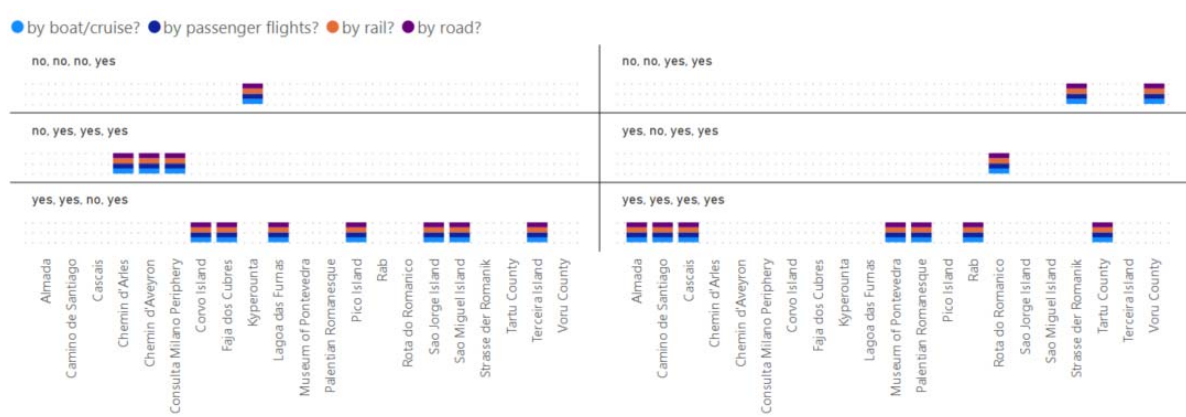


Figure 4.13 - Connectivity to site. Graph after the homogenization of information

The initial graph allows us to observe the different response ranges, as well as the need to systematize the responses so that they have comparable values, which was also solved in the 2<sup>nd</sup> characterization phase. As with the previous indicator, the value of the data will depend on the relationships that can be established.

## 4.2.2 Economic indicators (EC)

Economic indicators aim to understand the economic activity of a destination in relation to the cultural tourism activity, aiming to ensure that the available resources supporting tourism are used efficiently

Economic indicators are well represented when dealing with more general data available. The challenge arises, as expected, when trying to get data from the cultural tourism domain. The consultation with pilots allows us to enhance the collection of information.

### EC01: Average nights spent at tourist accommodation establishments

#### LEVEL 1

- Pilots with full valid data: 13
- Pilots with some valid data: 13

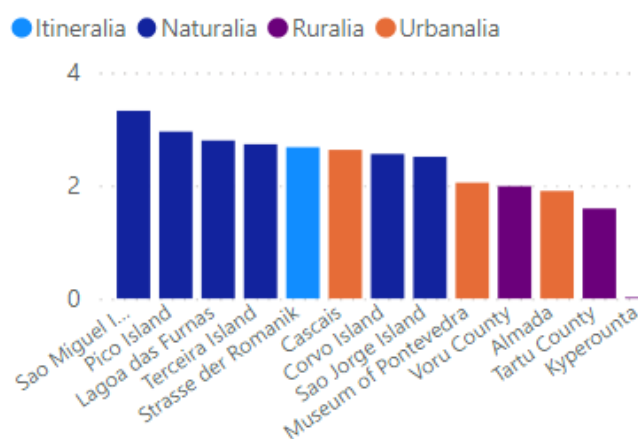


Figure 4.14 - Average nights spent at tourist accommodation establishments

The indicator is well defined and brings useful information. It is an indicator difficult to elaborate, depending on the characteristics of the destination. It was harder for pilots with several sources of information, such as the ones classified as routes. This is due to the dispersion of information and there is not an established local strategy to collect all this data. They exist in regional and national databases but needs to be extracted and systematized and, in many cases, pilots have not qualified personnel to perform this task.

The most relevant information shows a higher average of nights spent by tourists in Naturalia destination. However, it is important to consider that more of these pilots are not only natural destinations but also islands; so, tourists usually spend more time at destinations when spending higher resources to reach them, such as plane or boat transport.

### EC02: Average nights spent at sharing economy accommodation establishments

LEVEL 1

- Pilots with full valid data: 7
- Pilots with some valid data: 7

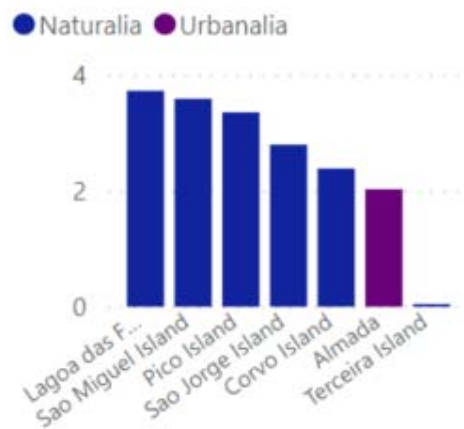


Figure 4.15 - Average nights spent at sharing economy accommodation establishments

The indicator is well established in theoretical terms. The reality of the information gathered is that this indicator presents less information than the previous one, pointing to a great complexity in its collection in terms of time dedicated to elaborate it. For some pilots, information exists but it is dispersed and needs to be gathered and systematized. This does not mean it cannot be achievable, because it's well defined and the information required is clear.

Similar consideration as the previous indicator with the data available, regarding the major tendency of island pilots in the group of Naturalia.

**EC03: Average daily spending per tourist/visitor**

LEVEL 2

- Pilots with full valid data: 11
- Pilots with some valid data: 11

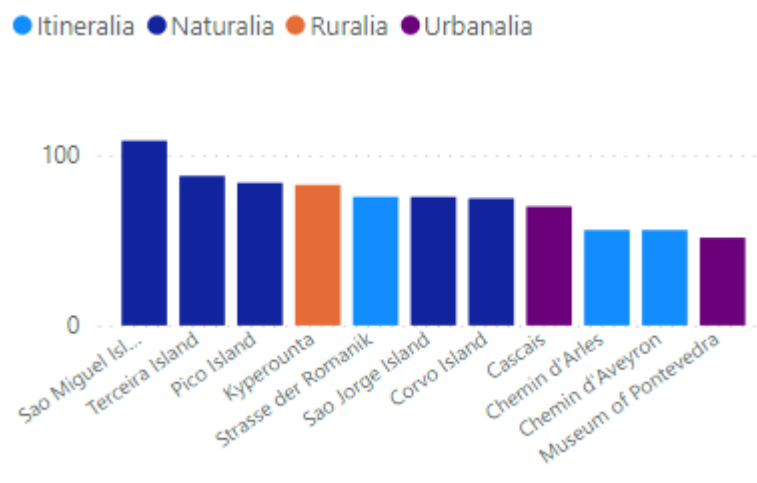


Figure 4.16 - Average daily spending per tourist/visitor

The indicator is well defined and brings useful information. It is an indicator difficult to elaborate, depending on the characteristics of the destination. It was harder for pilots with

several sources of information, such as the ones classified as routes. This is due to the dispersion of information and there is not an established local strategy to collect all this data. They exist in regional and national databases but needs to be extracted and systematized and, in many cases, pilots have not qualified personnel to perform this task.

According to the graph, the analysis is related with comments in previous indicators EC01 (Average nights spent at tourist accommodation establishments) and EC02 (Average nights spent at sharing economy accommodation establishments), as transport to reach and leave these natural destinations, the islands, increase the average spend of the tourists.

#### EC04: Employment in cultural tourism activities

##### LEVEL 4

- Pilots with full valid data: 0
- Pilots with some valid data: 0

There is no data associated with this indicator. This indicator is important but represents the reality of pilots and the general situation on CT measurements. Pilots are not disaggregating this information, so they cannot provide it for analysis, even if some of them have expressed their willingness to have it.

#### EC05: Occupancy rate in commercial accommodation per month / average for year

##### Level 4

- Pilots with full valid data: 13
- Pilots with some valid data: 13

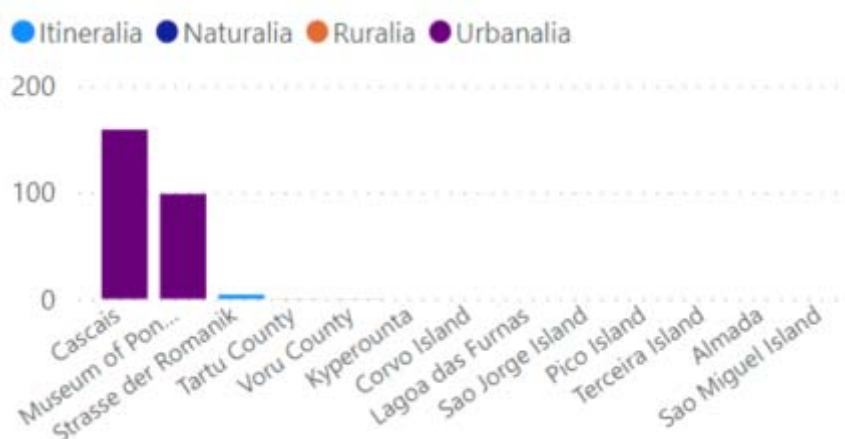


Figure 4.17 - Occupancy rate in commercial accommodation per month / average for year. (All data present)

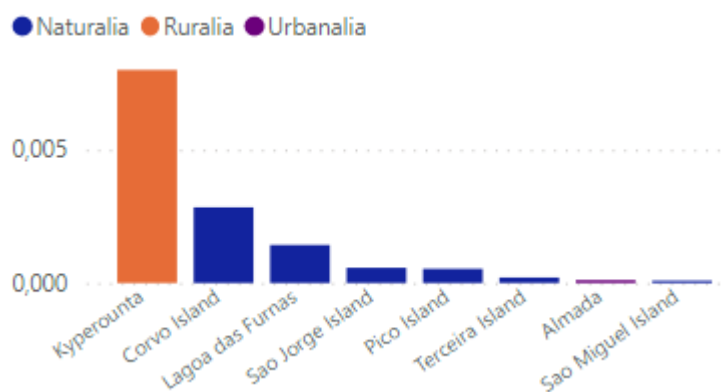


Figure 4.18 - Occupancy rate in commercial accommodation per month / average for year. (Highest values excluded)

The data provided by pilots show a number of calculated values with very high discrepancies among their results. Calculated figures vary from 158% to 0,02%. This requires a revision on the information gathered and in the formula applied to make the calculations.

#### EC06: Occupancy rate in sharing economy accommodation establishments

##### LEVEL 4

- Pilots with full valid data: 8
- Pilots with some valid data: 8

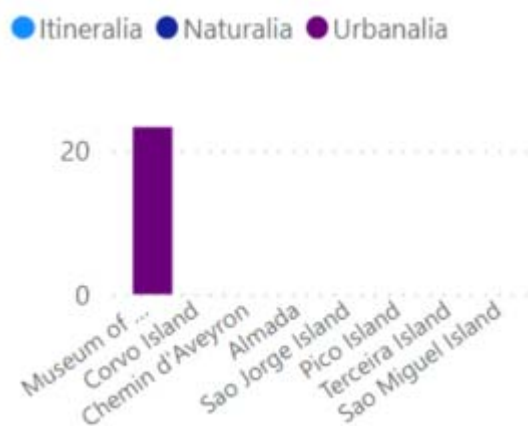


Figure 4.19 - Occupancy rate in sharing economy accommodation establishments. (All data present)

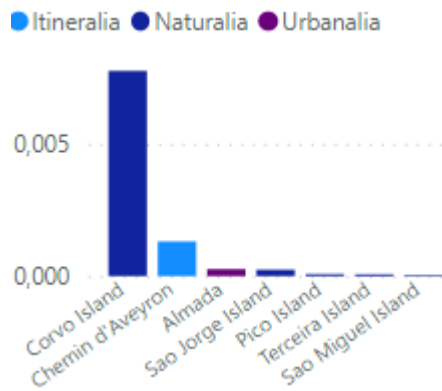


Figure 4.20 - Occupancy rate in sharing economy accommodation establishments (Highest values excluded)

The data provided by pilots show a number of calculated values with very high discrepancies among their results. This requires a revision on the information gathered and in the formula applied to make the calculations.

### EC07: Turnover per Cultural Tourism activity

#### LEVEL 3

- Pilots with full valid data: 8
- Pilots with some valid data: 8

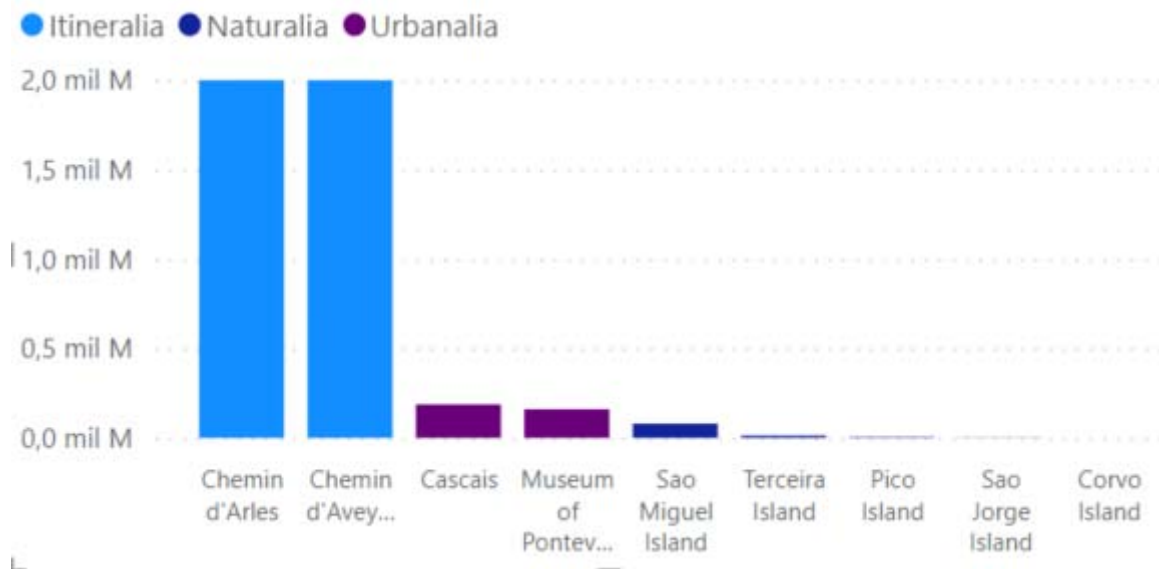


Figure 4.21 .- Turnover per Cultural Tourism activity.( All data present)

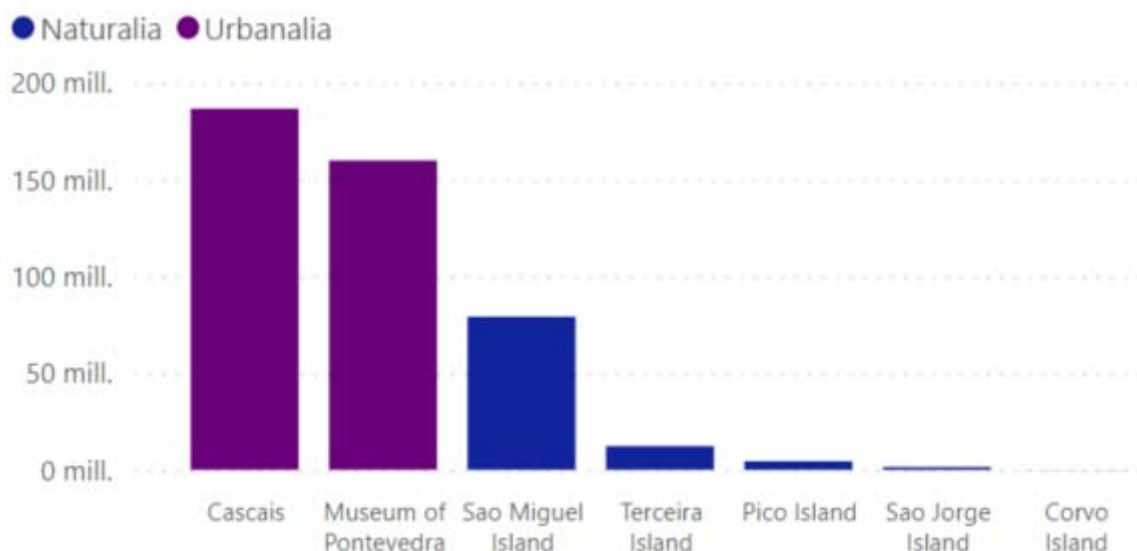


Figure 4.22 - Turnover per Cultural Tourism activity. (Highest values excluded)

The indicator is well defined and is highly valued by pilots even if they do not have this information available. It shows a significant difference in criteria between pilots who have filled the information. Pilots have been requested for clarification and the figures will be adjusted after the second systematization phase, especially the two routes (Chemin d'Arles and Chemin d'Aveyron) that have provided data from their whole provinces.

### 4.2.3 Social indicators (SC)

Social indicators aim to measure the effect that cultural tourism has on host communities, taking into account the relations between the tourism industry and its direct and indirect relations with tourists.

They are represented in general, in the case of easily available information. A further investigation is needed in indicators that have deployed less valid answers or lack of information to calculate them.

#### SC01: Number of tourists/visitors per 100 residents

##### LEVEL 2

- Pilots with full valid data: 13
- Pilots with some valid data: 14

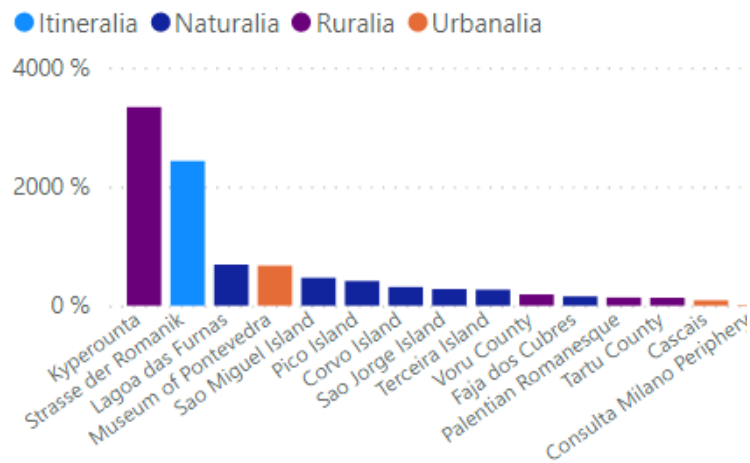


Figure 4.23 - Number of tourists/visitors per 100 residents. (All data present)

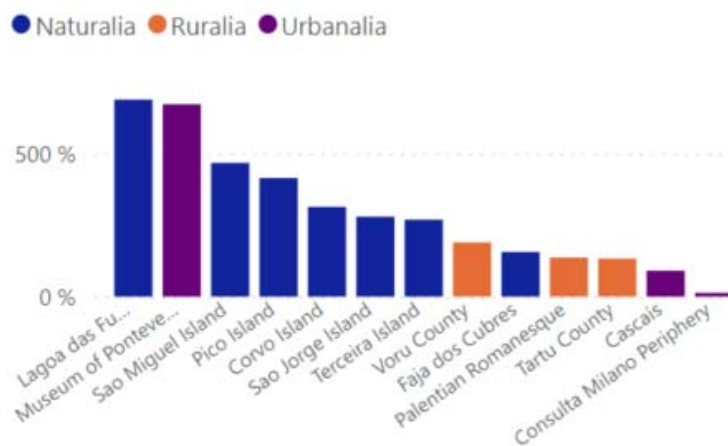


Figure 4.24 - Number of tourists/visitors per 100 residents. (Highest values excluded)

The values of two of the pilots significantly alter the interpretation of the results; it is related with the way in which the number of tourists on the routes is understood. Consultations have been made in the second systematization phase and conclusions will be presented in the final Benchmarking Report.

Once analysed the data, it is possible to detect a diverse and variety of responses, being the islands of Naturalia an example of percentage of tourists per inhabitant not related with the size of the destination, because, in this case, Lagoa das Furnas and Faja dos Cubres have different realities although they have more similar characteristics than other natural pilots in the group.

## SC02: Tourism pressure to residents

### LEVEL 3

- Pilots with full valid data: 9
- Pilots with some valid data: 10

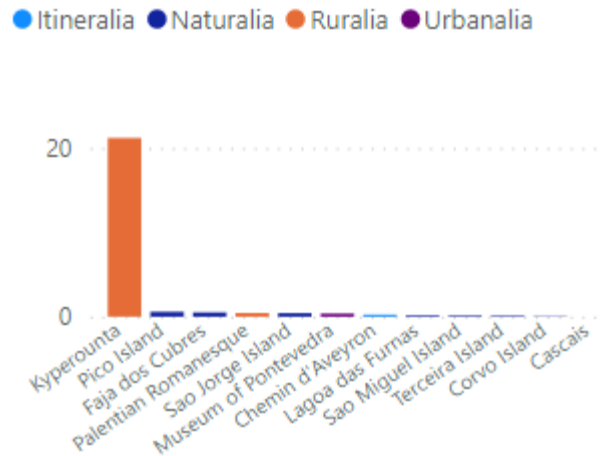


Figure 4.25 - Tourism pressure to residents. (All data present)

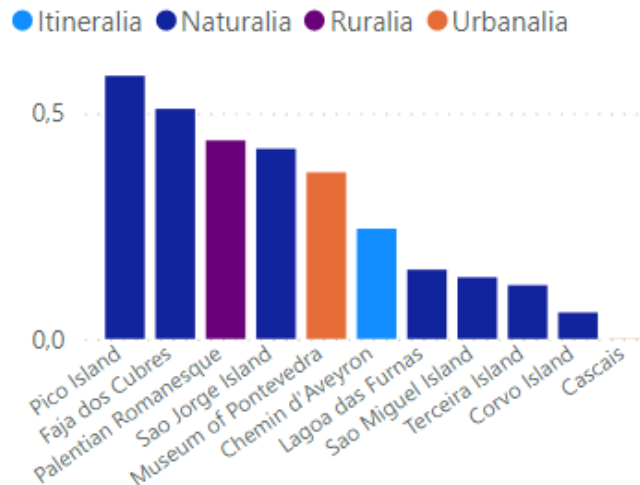


Figure 4.26 - Tourism pressure to residents. (Highest values excluded)

In this case, it was necessary to revise the value of some pilots, which shows figures inconsistent with the rest of the pilots with data. The information provided about the number of principal homes shows an incoherence compared with the rest of pilots. Consultations have been made and the answer corrects the first figures. Data corrected will be presented after the second systematization phase in the Benchmarking report.

### SC03: Percentage of residents employed in tourism

#### LEVEL 2

- Pilots with full valid data: 11
- Pilots with some valid data: 15

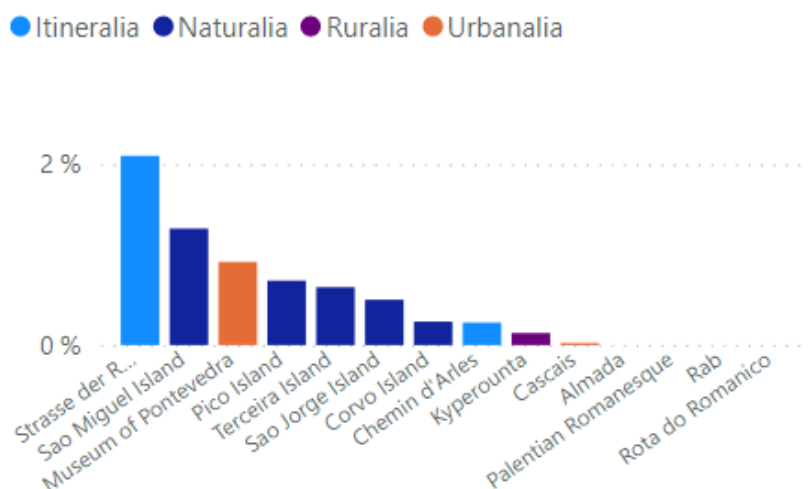


Figure 4.27 - Percentage of residents employed in tourism

The indicator is well defined and brings useful information. However, it is an indicator difficult to elaborate, depending on the characteristics of the destination. It was harder for pilots with several sources of information, such as the ones classified as routes. This is due to the dispersion of information and there is not an established local strategy to collect all this data. They exist in regional and national databases but needs to be extracted and systematized and, in many cases, pilots have not qualified personnel to perform this task.

Once again, all lands have relevant pilots with a higher percentage of employees in the tourism sector, except in the case of Ruralia.

#### SC04: Percentage of volunteering in Cultural Tourism sites/attractions

##### LEVEL 3

- Pilots with full valid data: 4
- Pilots with some valid data: 5

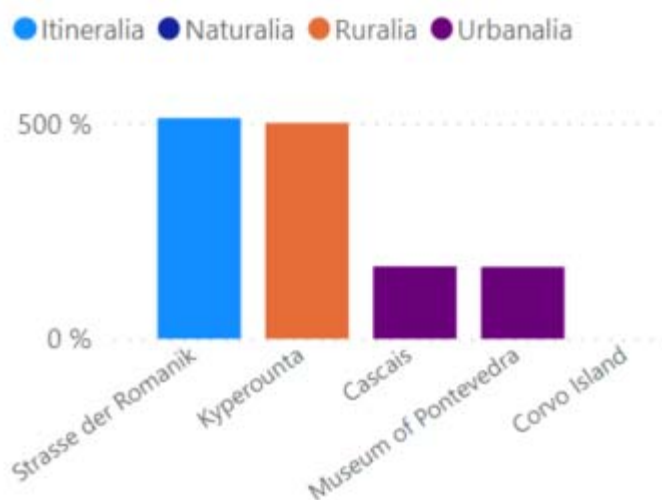


Figure 4.28 - Percentage of volunteering in Cultural Tourism sites/attractions

Indicator difficult to elaborate. Apparently this information is not available in most of the pilots, or it is difficult to elaborate. It's available mainly in routes and even in this pilots information is complicated to gather due to the dispersion of information and because there is not an established local or regional strategy to collect all this data. The urban pilot that has provided information about this activity is Museum the Pontevedra, but linked with Camino de Santiago.

Regarding the volunteering participation in Cultural Tourism, it appears to be significantly important in some selected pilots from different lands, such as Strasse der Romanik in Itineralia, Kyperounta in Ruralia and Cascais and Pontevedra in Urbanalia. Due to this pilot diversity, it seems interesting to detect future common factors to promote and attract volunteering in Cultural Tourism activities at destinations.

### SC05: Local availability of traditional skills

#### Level 3

- Pilots with full valid data: 13
- Pilots with some valid data: 13

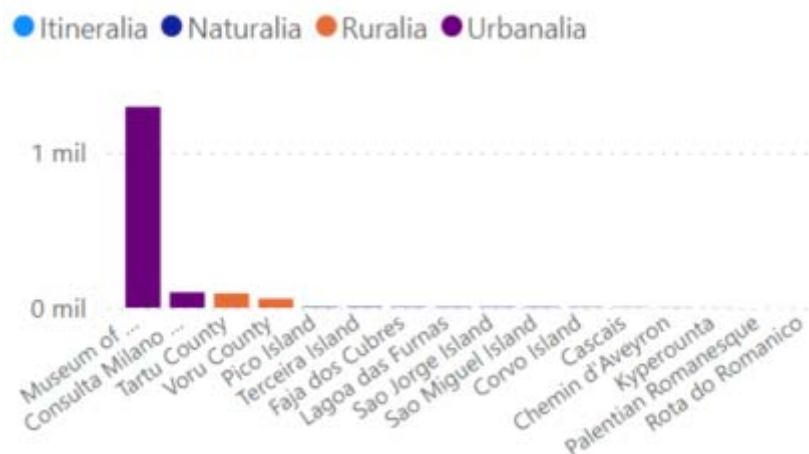


Figure 4.29 - Tourism pressure to residents. (All data present)

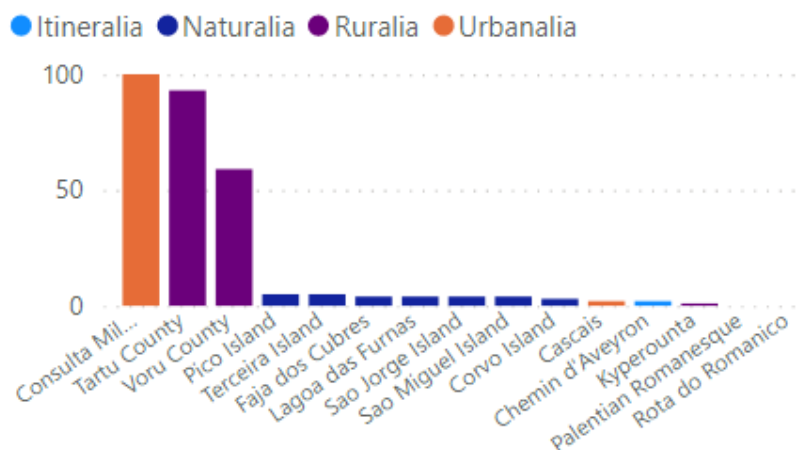


Figure 4.30 - Tourism pressure to residents. Highest values excluded

The value provided by one of the pilots significantly alters the interpretation of the graph. After consultation with the pilot the value is aligned with the requisites of the template so, It will be considered in the final analysis without excluding its figures.

From the data of the graph, it is possible to observe a consistent similarity in natural destinations in the islands and some other destinations with a visible center pole, such as the city of Milano or Tartu capital in the Tartu County.

### SC06: Responsibility balance (public / private) for Cultural Tourism sites

#### Level 4

- Pilots with full valid data: 3
- Pilots with some valid data: 11

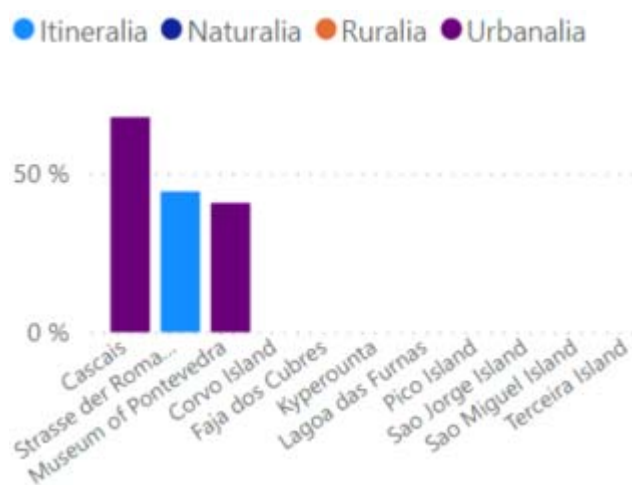


Figure 4.31 - Responsibility balance (public / private) for Cultural Tourism sites

Indicator with a great disparity between pilots when filling it in. The formula to obtain it, should be revised. In many responses the main figure used for the calculation, the number of cultural sites operated by public entities is 0, so the indicator reports a zero value. The information of the rest of the values used in the calculation is lost, those who come from NGO, community based and Commercial sites, that have data but are not reflected in the presentation of the indicator. Ways to show this indicator are being explored.

### SC07: Availability of free/discounted/educational access by locals to key sites

#### LEVEL 1

- Pilots with full valid data: 10
- Pilots with some valid data: 10

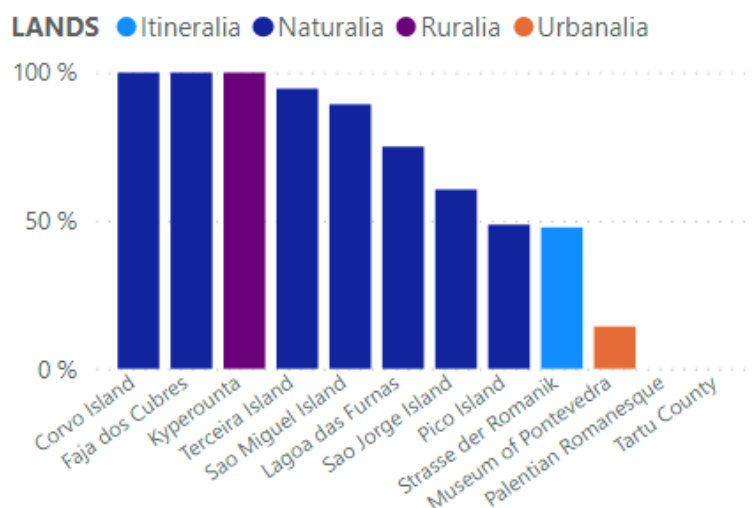


Figure 4.32 - Availability of free/discounted/educational access by locals to key sites

Indicator mainly represented by natural destinations.

This availability of access to locals appears to be very relevant in Naturalia, as all pilots have similar characteristics and might have similar policies criteria; moreover, some other lands and pilots also show this situation, such as Kyperount in Ruralia or Strasse der Romanik in Itineralia.

**SC08: Accessibility plan: physical (wheelchair/child pushchair/assisted mobility into and around site), mental, visual, affordable; official information available in advance**

LEVEL 1

- Pilots with full valid data: 11
- Pilots with some valid data: 11

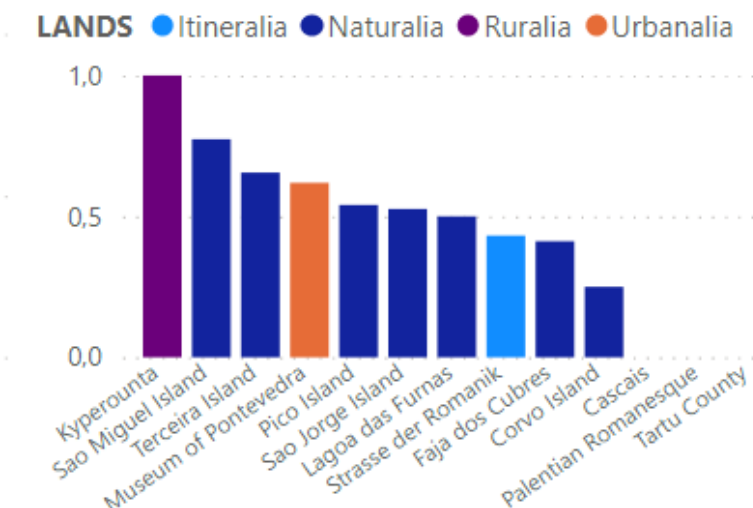


Figure 4.33 - Accessibility plan: physical (wheelchair/child pushchair/assisted mobility into and around site), mental, visual, affordable; official information available in advance

Indicator with consistent values among the pilots who have responded. For some of the pilots this information is not available or has to be elaborated, especially in some itineraries. More specific information can be found in a deeper data analysis during the second systematisation of data chapter (see figure 5.7).

## SC09: Cultural Tourism for defined social purposes: pilgrimages, folk or religious festivals, diaspora/reunions, ancestral tourism, club/association gathering

### LEVEL2

- Pilots with full valid data: 3
- Pilots with some valid data: 4

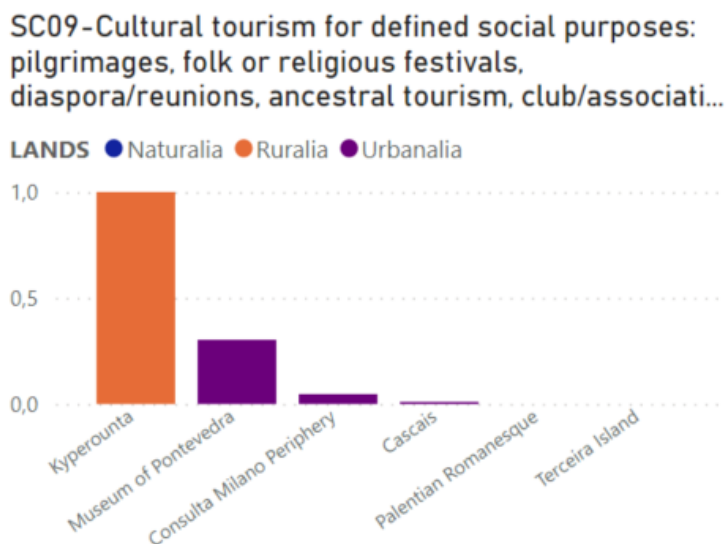


Figure 4.34 - Cultural Tourism for defined social purposes: pilgrimages, folk or religious festivals, diaspora/reunions, ancestral tourism, club/association gathering

According to the number of answers, this indicator seems to be too specific and not broad enough. In the case of itineraries, it was considered not applicable, as the main purpose of these destinations is pilgrimage.

## SC10: Accessible multi-lingual directions, signage and interpretation at venue

### LEVEL 3

- Pilots with full valid data: 10
- Pilots with some valid data: 16

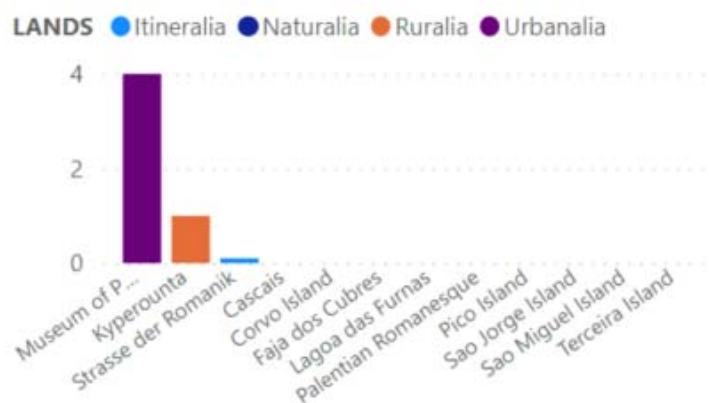


Figure 4.35 - Accessible multi-lingual directions, signage and interpretation at venue

Indicator in which some pilots have misinterpreted the information by declaring more accessible elements than actual attractions, which is not possible. Consultation have been made to clarify and result will be exposed in the Benchmarking report after the second systematization phase

#### 4.2.4 Cultural indicators (CL)

Cultural indicators monitor the effect that tourism has on the cultural activity, including damage and refurbishment of built heritage and effects on all cultural resources.

In general, the cultural indicators have a rather low degree of representation and reliability, with significant differences in interpretation when filling them in. This was somehow expected due to a general absence of disaggregated data in the cultural domain.

##### CL01: Buildings/ Sites degradation by usage/massification

###### LEVEL 4

- Pilots with full valid data: 5
- Pilots with some valid data: 13

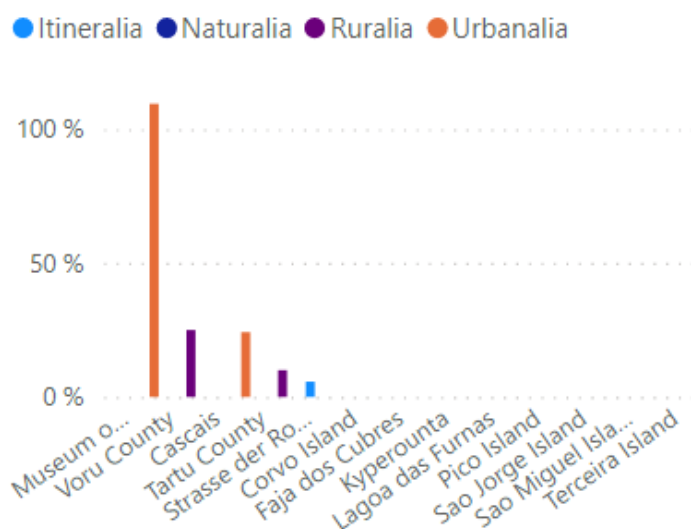


Figure 4.36 - Buildings/ Sites degradation by usage/massification

It is an indicator difficult to elaborate, and some pilots have provided information on one of the necessary parameters, namely the number of degraded buildings. On a first stage, one

pilot provided more degraded buildings than elements considered. After a consultation, the figures were corrected, and it will be presented after the second systematization.

### CL02: Tourism contribution to protect/restore historic building/sites in the area

#### LEVEL 1

- Pilots with full valid data: 4
- Pilots with some valid data: 5

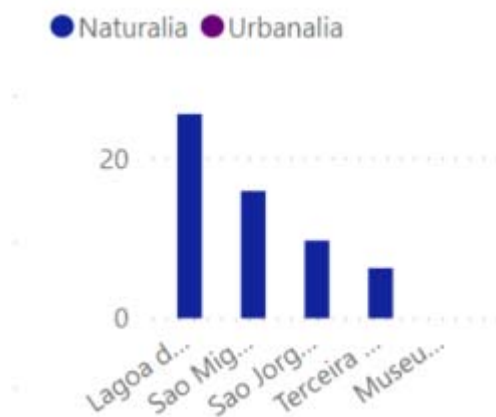


Figure 4.37 - Tourism contribution to protect/restore historic building/sites in the area

The indicator is considered valid even if it is difficult to obtain due to the lack of disaggregated data. Only the natural destinations and one urban destination provided information,.

### CL03: Percentage of funding of public and private finance spent in improvement of the physical urban environment over the total amount

#### LEVEL 3

- Pilots with full valid data: 1
- Pilots with some valid data: 9

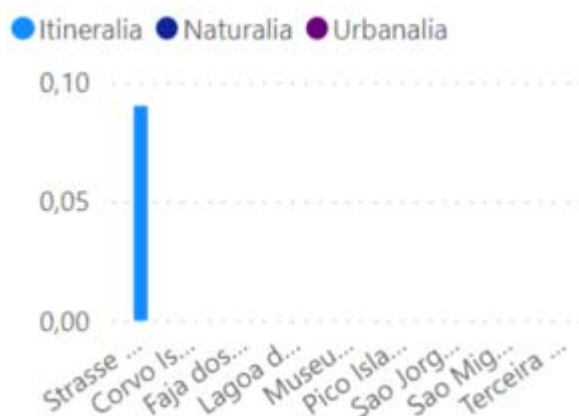


Figure 4.38 - Percentage of funding of public and private finance spent in improvement of the physical urban environment over the total amount

Indicator with little valid information. The specificity of the information required makes it difficult to build. There is some information on the total economic spent in improvement of the physical urban environment at destination but not on the total economic funding coming from public/private entities

#### CL04: Visual impacts

##### LEVEL 3

- Pilots with full valid data: 1
- Pilots with some valid data: 11

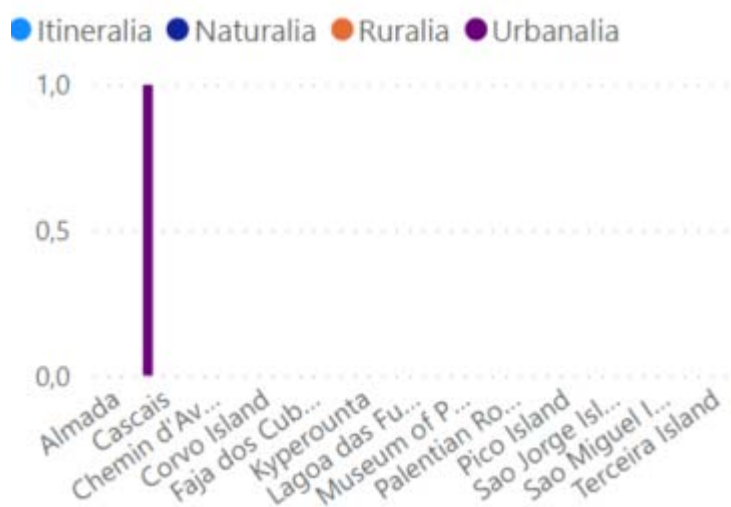


Figure 4.39 - Visual impacts

Pilots have reported this as a difficult indicator to gather, with many answers reflecting the unavailability of the data.

#### CL05: Percentage of restored historic buildings and sites

##### LEVEL 4

- Pilots with full valid data: 0
- Pilots with some valid data: 0

This indicator needs to be proposed and defined in a common and wider time range, because pilots have filled it in distinct ways. With the information obtained, it is not possible to calculate consistent values.

#### CL06: Cultural activities promotion (museum, festivals, traditional events, local culture, guided tours, publications, etc.) & Attendees per activity/event and year

##### LEVEL 3

- Pilots with full valid data: 3
- Pilots with some valid data: 11

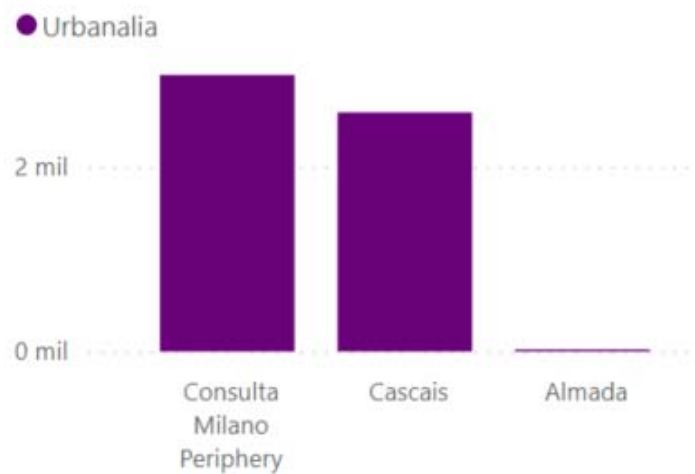


Figure 4.40 - Cultural activities promotion (museum, festivals, traditional events, local culture, guided tours, publications, etc.) & Attendees per activity/event and year

Indicator that could not be calculated in most destinations due to the absence of the value corresponding to promotional activities, which were also understood by the pilots in different ways. A clarification in the request of information will be made in next data gathering.

**CL07: Alternative Cultural Attractions (considering the surrounding area or territory near to the destination: surrounding resources + diversification options)**

LEVEL 3

- Pilots with full valid data: 3
- Pilots with some valid data: 11

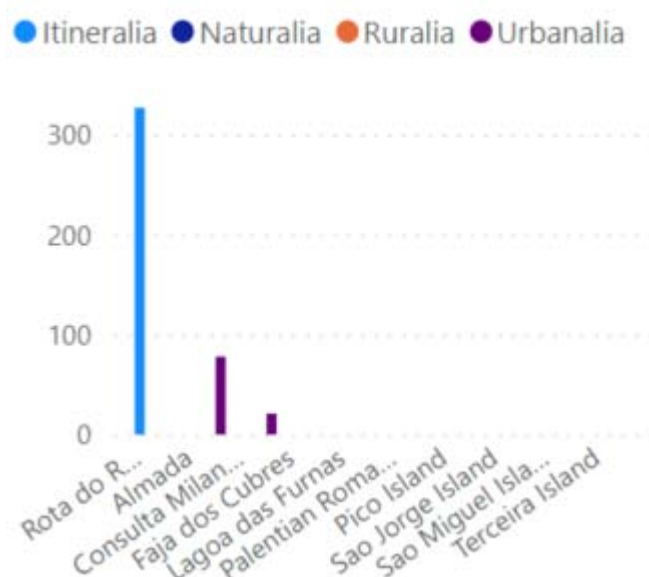


Figure 4.41 - Alternative Cultural Attractions (considering the surrounding area or territory near to the destination: surrounding resources + diversification options)

The value determining the indicator for the number of alternative cultural attractions is affected by the different interpretation of the required information by the pilots. A clarification in the request of information will be made in next data gathering.

### **CL08: Number of cultural attractions that tourists visit (average) in the destination (compared to total visits)**

#### LEVEL 3

- Pilots with full valid data: 4
- Pilots with some valid data: 6

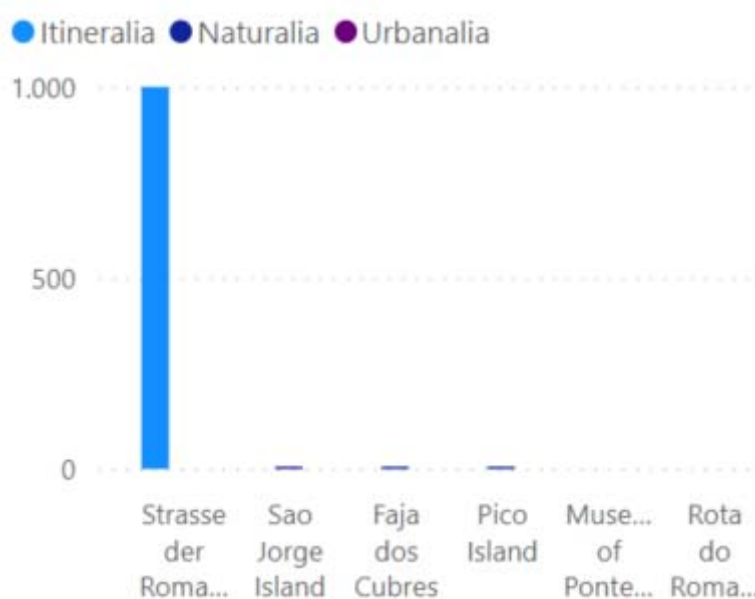


Figure 4.42 - Number of cultural attractions that tourists visit (average) in the destination (compared to total visits)

This indicator has very low values after calculation and makes it necessary to revise the data obtained, especially the number of visits to cultural attractions.

### **4.2.5 Environmental indicators (EN)**

Environmental indicators aim to understand and evaluate the balance between environmental quality and cultural tourism development.

Mainly islands and rural or small urban destinations, which reflects a highest awareness on the necessity of management in this domain, have responded to the environmental indicators.

### **EN01: Rate of noise, light/air pollution or traffic complaints per 100 inhabitants**

#### LEVEL 4

- Pilots with full valid data: 2
- Pilots with some valid data: 11

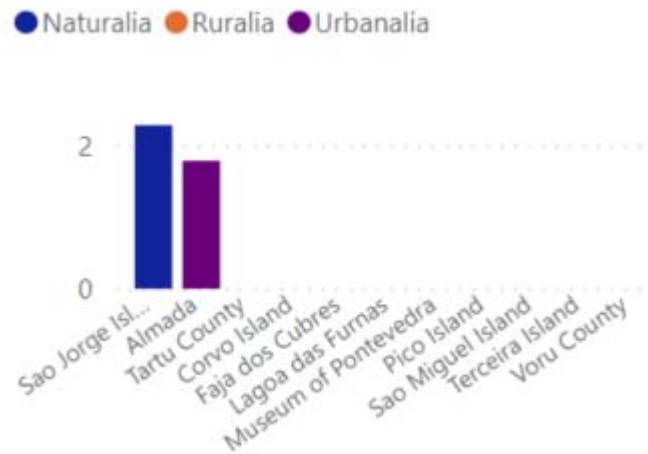


Figure 4.43 - Rate of noise, light/air pollution or traffic complaints per 100 inhabitants

This indicator needs to be further clarified. Different concepts (complaints, noise and pollution) are mixed within the indicator, making the comparison difficult. The pilots have responded in a distinct manner, reflecting the differences in the interpretation of the required information, and detecting two major examples: Sao Jorge in Naturalia and Almada in Urbanalia.

**EN02: Percentage of local enterprises in the tourism sector actively supporting conservation of local biodiversity and landscapes**

LEVEL 2

- Pilots with full valid data: 8
- Pilots with some valid data: 8

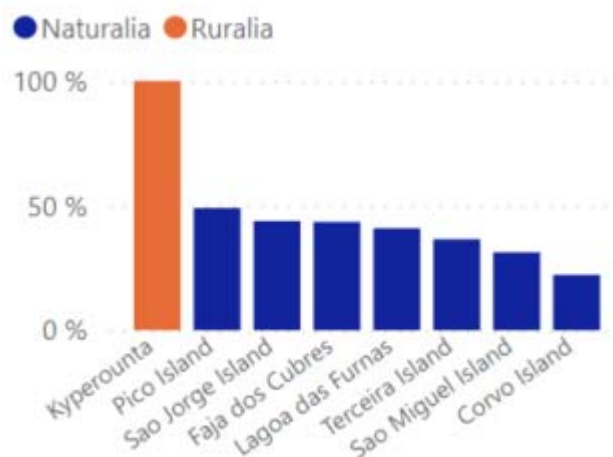


Figure 4.44 - Percentage of local enterprises in the tourism sector actively supporting conservation of local biodiversity and landscapes

The largest and quite homogeneous representation is from the islands of Azores, with no information available now from other pilots, except one pilot from Ruralia where all the local enterprises are actively involved in conservation, due the small size of the destination.

### EN03: Percentage of the tourism sector enterprises whose main focus is on the environmental awareness (museums, shops, etc.)

#### LEVEL 1

- Pilots with full valid data: 12
- Pilots with some valid data: 11

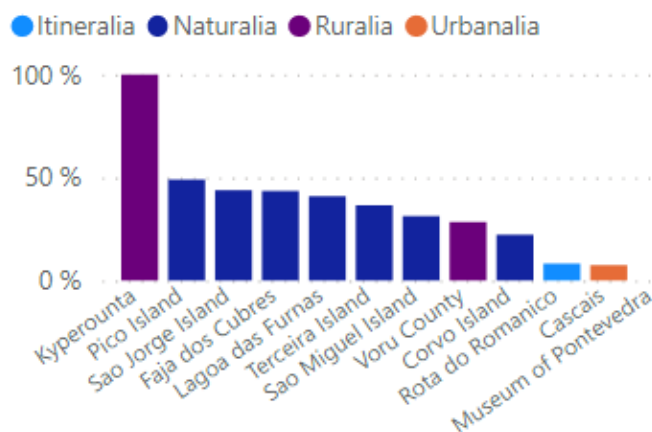


Figure 4.45 - – Percentage of the tourism sector enterprises whose main focus is on the environmental awareness (museums, shops, etc.)

The largest representation is from the islands of Azores, where it can be seen that the environmental awareness of tourism companies is important. Moreover, the environmental awareness is also representative in different ways in all the other lands (Itineralia, Ruralia and Urbanalia).

### EN04: Local products with any kind of local, national or international ecological label (ECO / BIO / KM0 labels, etc.)

#### LEVEL 2

- Pilots with full valid data: 10
- Pilots with some valid data: 16

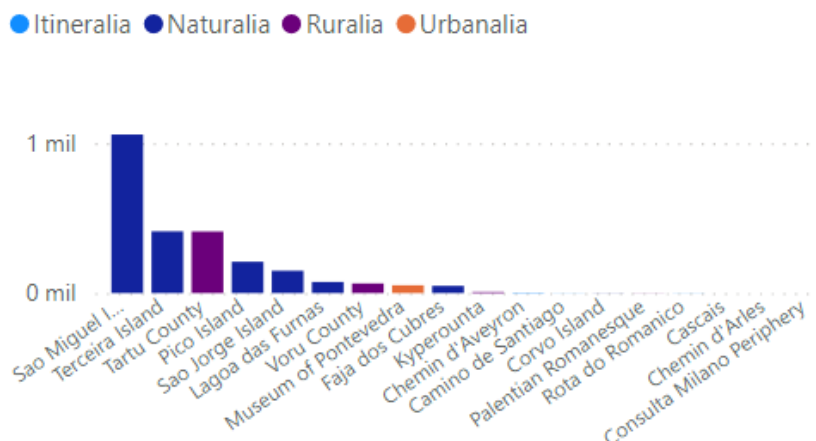


Figure 4.46 - Local products with any kind of local, national or international ecological label

The data analysed should be reviewed, as they appear to be inconsistent among the pilots who have provided the information. Some destinations report a few thousand eco-labels and others, perhaps larger ones, only a few tens, being the Naturalia examples the most representative group related with ecological label initiatives. Consultation have been made to clarify these issues.

#### EN05: Number of days per year where there are water supply shortages

##### LEVEL 1

- Pilots with full valid data: 23
- Pilots with some valid data: 23



Figure 4.47 - Number of days per year where there are water supply shortages

Most pilots did not report water supply problems.

#### EN06: Percentage of CT dispersed attractions connected by public transport

LEVEL 3

- Pilots with full valid data: 6
- Pilots with some valid data: 7

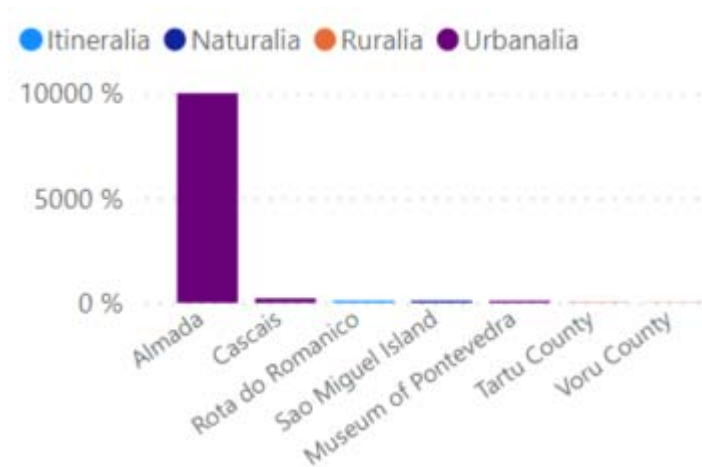


Figure 4.48 - Percentage of CT dispersed attractions connected by public transport before figures correction

EN06-Percentage of cultural touristic disperse attractions connected by public transport

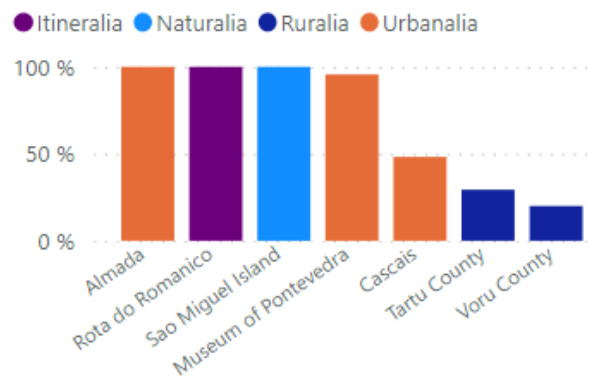


Figure 4.49 - Percentage of CT dispersed attractions connected by public transport. After correction of the figures

A first revision and correction of the information revision was needed to avoid errors because values yielded were incoherent. After the revision all values provided allowed the analysis.

This indicator reflects the different interpretations of the term "dispersed attraction". There is a need to further define or clarify this concept. In some cases, this concept may not be applicable, as for example in itineraries (cultural walking routes), because of the intrinsic nature of the pilot.

**EN07: Percentage of total CT attractions accessible by bike or scooters**

LEVEL 1

- Pilots with full valid data: 10
- Pilots with some valid data: 10

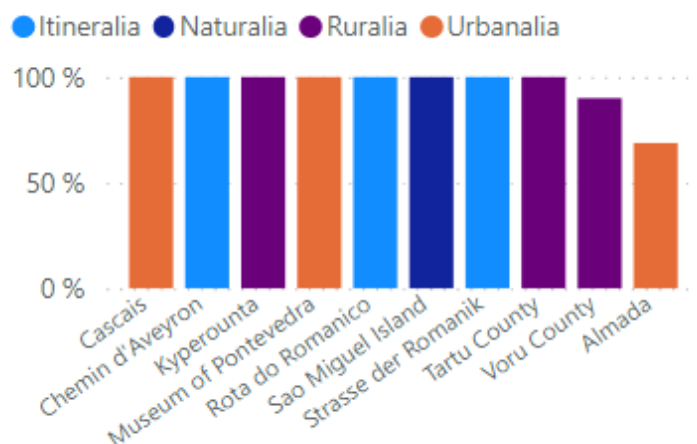


Figure 4.50 - Percentage of total CT attractions accessible by bike or scooters

Indicator with representation and consistency from all the domains.

#### 4.2.6 Resilience indicators (RS)

Resilience indicators aim to measure the readiness and ability of a site to absorb disruptions and efficiently respond to sudden (or long-term) changes in cultural tourism trends enabling to overcome those.

In general, resilience indicators have very little data for their development. It is justified by the hardness of gathering some data regarding the effects of pandemic due the pandemic itself.

#### RS01: Cultural Tourism income decrease in a year affected by an external event

LEVEL 3

- Pilots with full valid data: 10
- Pilots with some valid data: 11

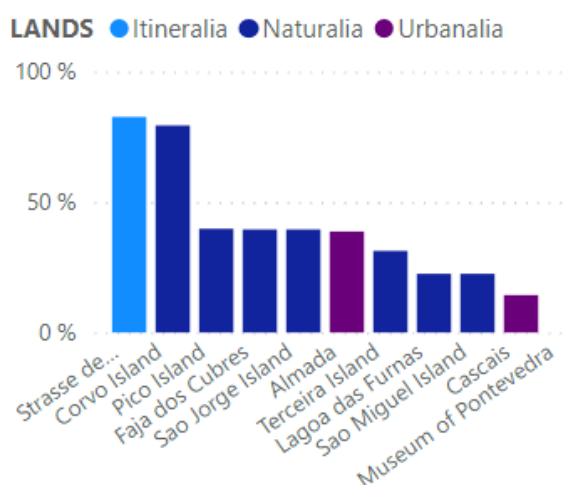


Figure 4.51 - Cultural Tourism income decrease in a year affected by an external event

There are not very much information to elaborate this indicator in the pilot destinations, and they are referred mainly to the COVID crisis. There is no information on other crises that can help establishing a pattern.

## RS02: Percentage of employments affected by emergencies/external factors in the Cultural Tourism sector

### LEVEL 1

- Pilots with full valid data: 10
- Pilots with some valid data: 11

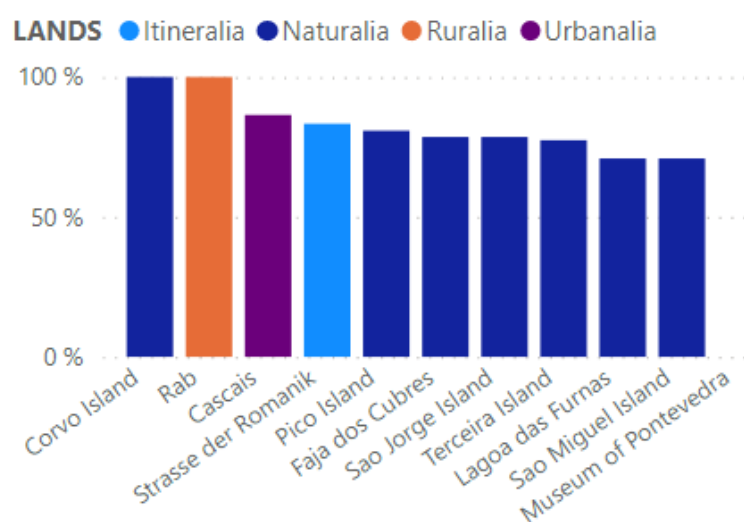


Figure 4.52 - Availability of free/discounted/educational access by locals to key sites

There is not so much variety of information in this indicator related to the number of jobs in CT in times of crisis. Most of the answers come from the islands group.

## RS03: Tourist infrastructure in vulnerable zones against climate change and/or environmental hazards

### LEVEL 3

- Pilots with full valid data: 3
- Pilots with some valid data: 11

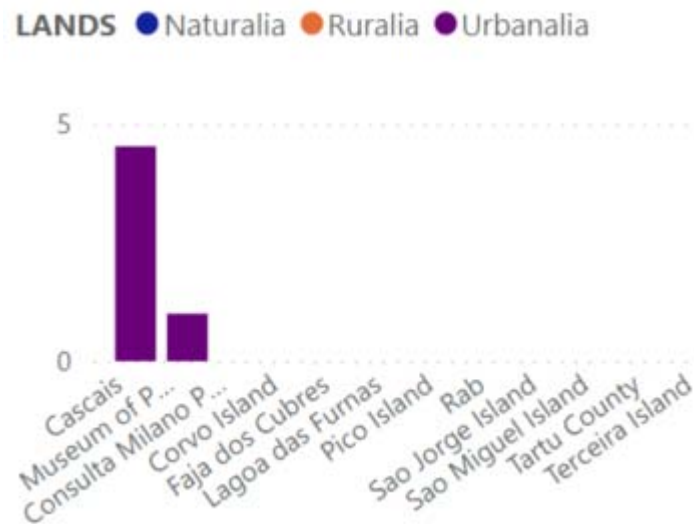


Figure 4.53 - Tourist infrastructure in vulnerable zones against climate change and/or environmental hazards

There are information regarding the vulnerable zones geolocated but less on the tourist infrastructure in vulnerable zones, making the analysis difficult to perform. A revision on the second part of the indicator should be needed to better complete it.

#### RS04: Public sectors' participation in financing the response to emergency/external factors

##### LEVEL 3

- Pilots with full valid data: 6
- Pilots with some valid data: 18



Figure 4.54 - Public sectors' participation in financing the response to emergency/external factors

Pilots have provided this information using different formats that makes difficult to compare data. Clarification have been asked and results will be presented after the second systematization phase.

## RS05: Existing contingency and/or recovery plans

### LEVEL 2

- Pilots with full valid data: 21
- Pilots with some valid data: 21

#### RS05 Contingency PLans. LOCAL LEVEL

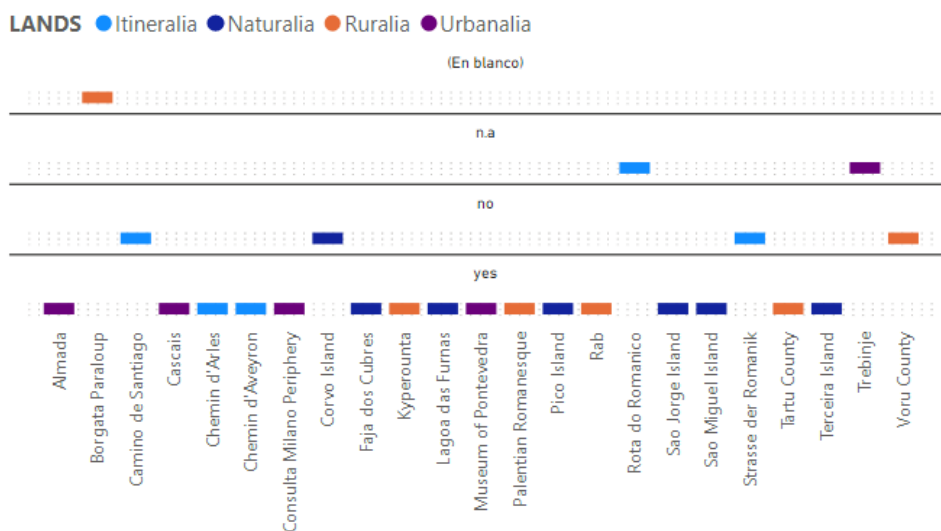


Figure 4.55 - Existing contingency and/or recovery plans

#### RS05 Contingency Plans. REGIONAL LEVEL

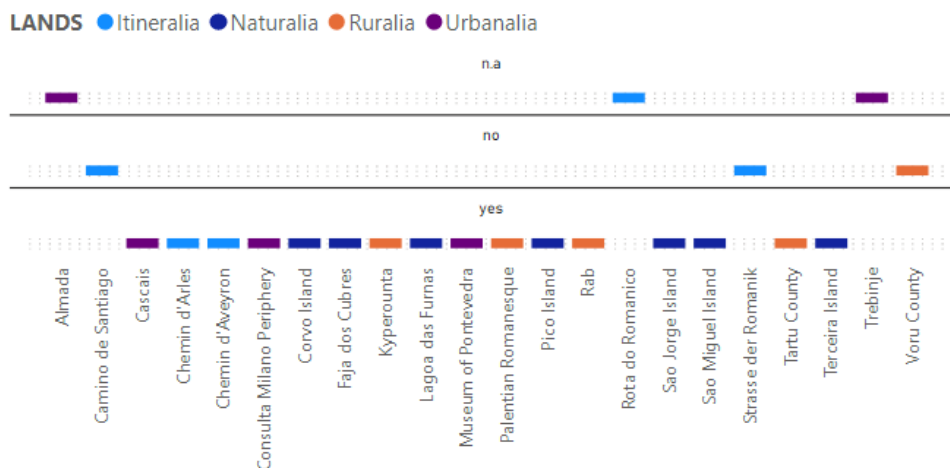


Figure 4.56 - Existing contingency and/or recovery plans

A comparative graph of the two values associated with its calculation allows the analysis of the information in a consistent way.

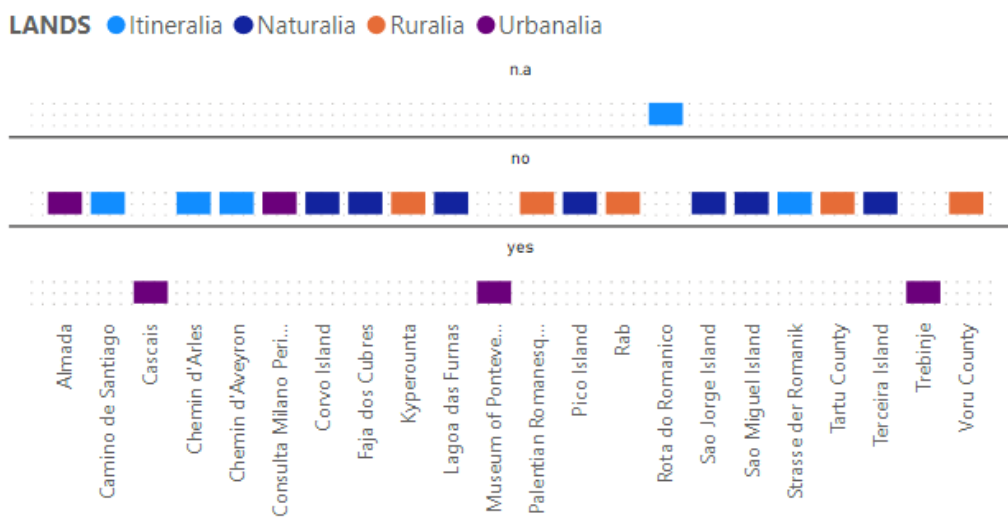
Most of the pilots have declared the existence of a contingency Plan and 3 from 5 of the itineraries have not. Pilots with several institutions interacting in their territory have additional challenges in their management.

## RS06: Diversification strategy/plans for tourists' masses or sudden tourism growth



- Pilots with full valid data: 21
- Pilots with some valid data: 21

RS07-Existence of tools for tourists' masses or sudden tourism growth monitoring/management. LOCAL LEVEL



RS07-Existence of tools for tourists' masses or sudden tourism growth monitoring/management. REGIONAL LEVEL

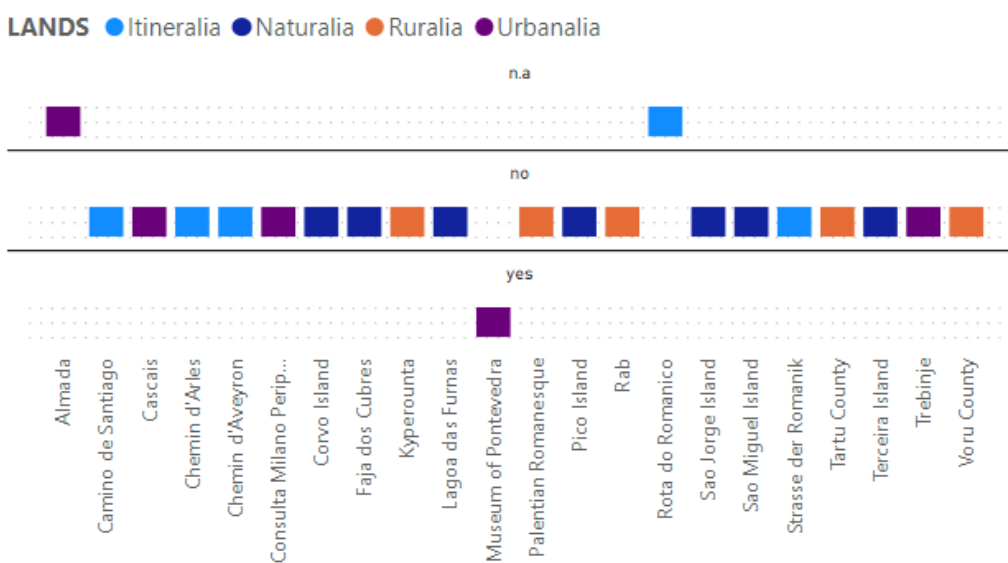


Figure 4.58 - Tools for tourists' masses or sudden tourism growth

There is a mostly unanimous answer expressing that there are no tools for monitoring sudden tourism growth, with the exception of Museum of Pontevedra.

RS08: Percentage of tourists per type of origin

LEVEL 2

- Pilots with full valid data: 6
- Pilots with some valid data: 7

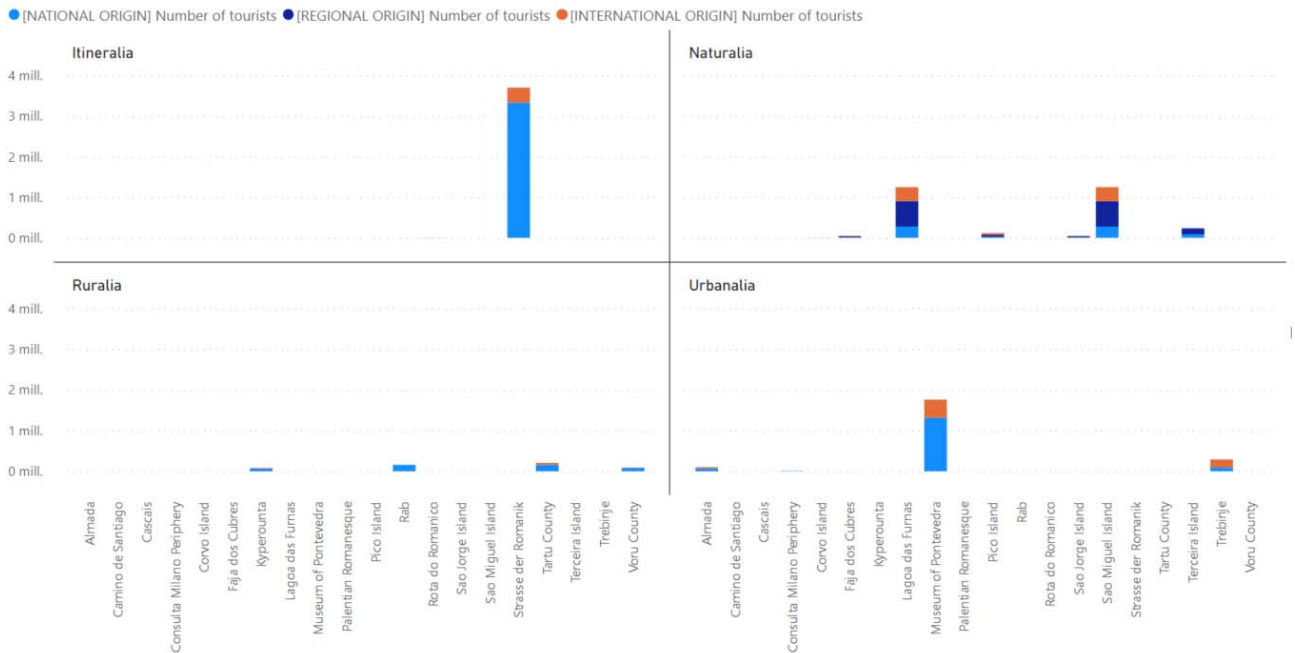


Figure 4.59 - Percentage of tourists per type of origin

This indicator is analyzed in a graph that allows the comparison of the partial values in relation to the total. The high values of some of the pilots make the analysis complex, since where there are smaller values, they are hardly visible in the graph.

## 5 Second systematisation of data. Data comparison

### 5.1 Introduction

In relation to the previous chapter, where all the data from baseline indicators have been analysed per domain, this section presents a more detailed discussion on the obtained knowledge. Therefore, it has been decided to compare most relevant data proceeding from different but related indicators, combining thus new viewpoints and understandings per domain.

### 5.2 Data and indicators' revision

In this second systematization of data, the response provided by the pilots has been considered when they have been asked to clarify or correct some of the provided data, after the first systematization phase. These clarifications have been elaborated through specific bilateral meetings with partners, who directly contacted the pilots in order to send the new information to be included into the analysis. The responses obtained to some of the indicators are the following, keeping the same naming code structure for indicators from the previous chapter:

#### **CH01: Population density**

In the case of itineraries, there has been a common agreement on the measures to include in the indicator that will be in square kilometres. New data has been provided to comply with this understanding.

#### **CH03: Number of listed tangible or intangible Cultural Heritage**

Tartu and Võru have refined their figures, but still there are significant differences with the rest of the pilots, showing different criteria among countries to declare protected assets.

#### **CH05: Number and type of cultural facilities, museums, theatres, monuments, etc.**

Strasse der Romanik has provided new figures, according to the conclusions obtained in the clarification meeting. In the beginning, the whole territory had been considered, while only the area affected by the route has been included in the analysis.

#### **CH07: Percentage of key sites operating all year**

Harmonization on the information provided has been made to make all data comparable.

#### **SC01: Number of tourists/visitors per 100 residents**

Chemin d'Aveyron has provided new figures according to the clarification meeting held. It also had considered all tourism and not specifically those from the route.

#### **SC02: Tourism pressure to residents**

Kyperounta has been asked for clarification, and they have provided new figures that helps the analysis. These figures will be included in the benchmarking report.

#### **SC05: Local availability of traditional skills**

Museum of Pontevedra has been asked for some clarification. Evidence of the figures submitted has been provided and it is clear the number is right. Many training programs from different institutions that support the figures provided have been declared.

### CL01: Buildings/ Sites degradation by usage/massification

Museum of Pontevedra has been asked for clarification. Corrections have been made according the answer received. This information will be presented in the Benchmarking Report

## 5.3 Analysis of data per domain

Following the aim of improving the understanding, analysis and elaboration of conclusions with the available information, in the present sections there are different data crossing and combinations per domain. Searching for a deeper visual connections and outputs from the data collection process, the Power BI tool helps to illustrate this analysis.

### 5.2.1 Characterisation domain

CHART 1. Features:

- Topic: Population and tourist distribution
- Type of graph: 2 axis + bubble
- Data included:
  - X axis: Total number of tourists
  - Y axis: Population density
  - Bubble Size: Total number of population

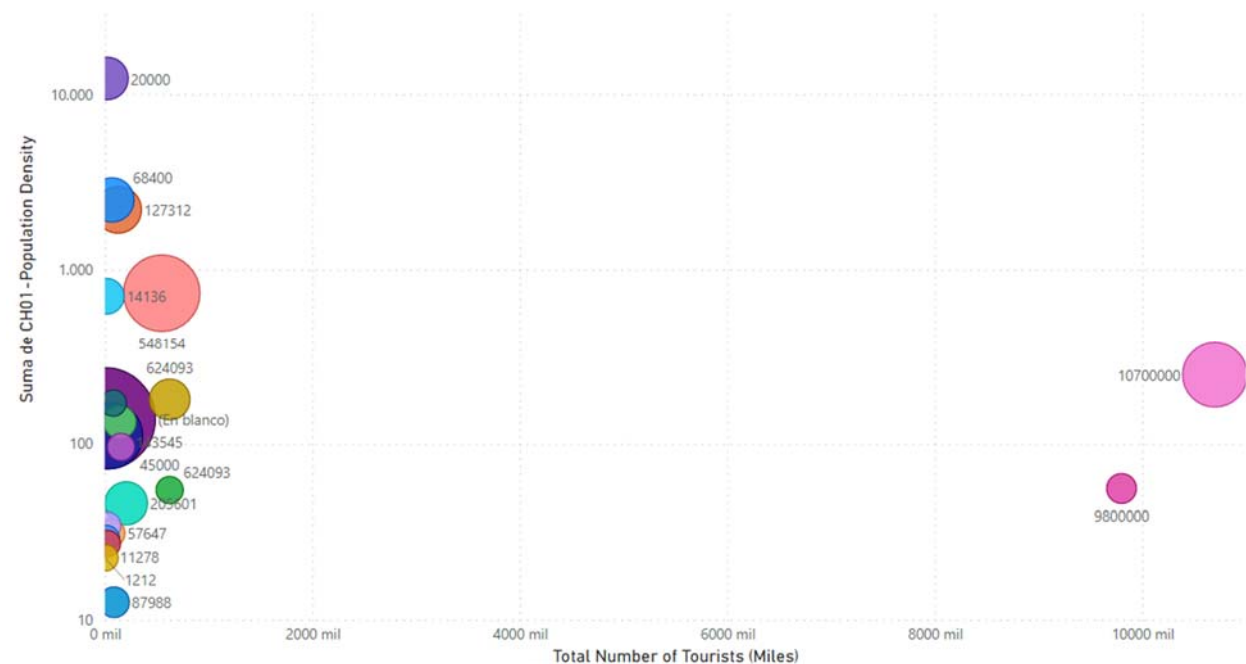


Figure 5.1 - Population and tourist distribution (All pilots' information)

In this first case, the aim is to reflect the level of use or exploitation of a pilot destination based on the number of people in the destination, both residents and tourists. In this case, the higher the figure on the X-axis and the lower the figure on the Y-axis, the higher the proportion or pressure of tourists over residents in the destination will be more noticeable. In this line, pilots such as Lagoa das Furnas (Naturalia) or Vöru County (Ruralia) follow this trend, while on the opposite side we find cases such as Periphery of Milano or Museum of Pontevedra.

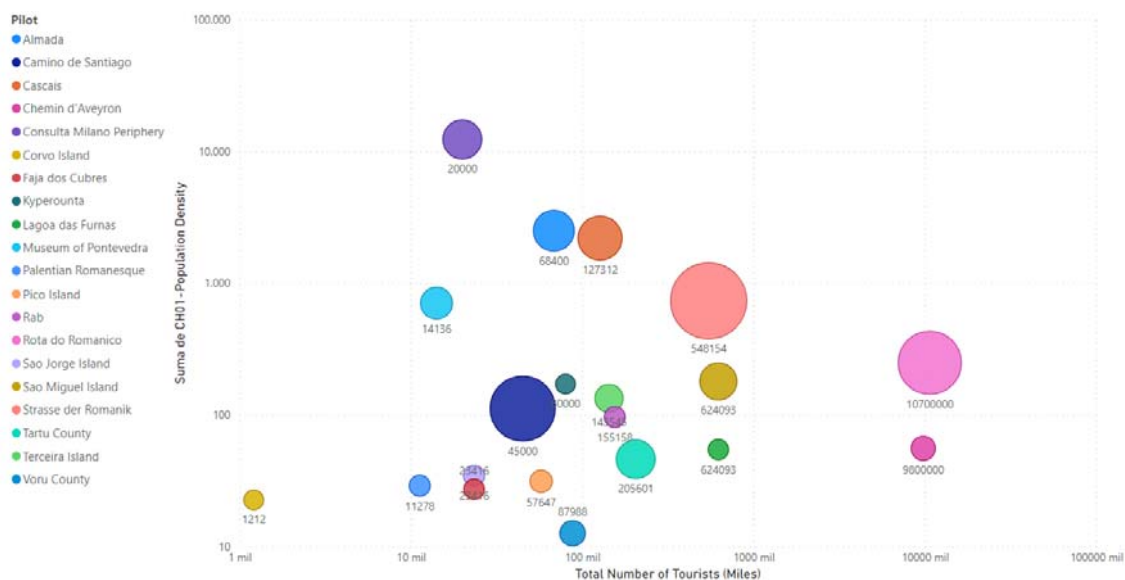


Figure 5.2 - Population and tourist distribution. (Highest values excluded)

In order to make a better reading of the graph, it is advisable not to include the pilot Chemin d'Arles (Figure 5.2), in order to achieve a better interpretation of the total population of the other destinations; although, in the same way, the other pilots of the Itineraria group (such as Camino de Santiago or Rota do Românico) also generate a small distortion in the graph, as they have a large population due to the large extension of the territory they work with. In any case, it can be concluded that, with the existing data, a greater pressure can be seen in relation to the resident population in the pilots of rural and natural destinations compared to the Urbanalia cases, a logical reading due to the characteristics of each type of land.

#### CHART 2. Features:

- Topic: Relation between residents/tourist/cultural tourist
- Type of graph: Bars chart (divided into 4 Lands sections)
- Data included:
  - Bar 1: Number of total population
  - Bar 2: Number of total tourists
  - Bar 3: Number of total cultural tourists
  - Sections divided per Land: Itineraria, Ruralia, Naturalia and Urbanalia



Figure 5.3 - Relation between residents/tourist/cultural tourist

Dividing the graph into four sections based on the type of Land allows having a more realistic view of the pilots involved, as the characteristics that represent them are different. Therefore, in this case, an individualized analysis in order to provide is described as following:

In the case of the Itineralia destinations, a significant discrepancy can be seen between Strasse der Romanik and Camino de Santiago compared to Rota do Românico and Chemin d'Aveyron. In the first two, the number of total and cultural tourists is practically the same and much lower than the number of residents, compared to the large number of visitors that the latter receive on the basis of their local population. However, in the Ruralia group, the dominant tendency is to have a higher number of tourists and visitors than local population, given the low number of residents in the territory, especially in cases such as Rab or Kyperounta; however, when it comes to cultural tourists, the reality varies with each of the pilots, being higher or lower than residents, or even equal to the number of total tourists.

When analyzing the Naturalia group, the first observation that emerges is a proportion based on the data and responses obtained, following the pattern shown by the larger and more populated island of São Miguel. In all of them, being natural destinations, cultural tourists represent a smaller number than total tourists; although, again, it is worth noting the case of Furnas, being a specific destination near Ponta Delgada on the island of São Miguel, its graph is different from those of the rest of the group in terms of the population/tourist ratio. Finally, as expected, in the Urbanalia group, the trend is different from the other three Lands, with the number of tourists always being lower than the resident population in the destination; and, in turn, with the number of cultural tourists being lower in relation to the total, given the great diversity of tourist options offered by urban destinations.

**CHART 3. Features:**

- Topic: Monument listed

- Type of graph: Bars chart (divided into 1 general and 4 Lands sections)
- Data included:
  - Bar 1: Tangible + Intangible Level 1 – UNESCO World Heritage
  - Bar 2: Tangible + Intangible Level 2 – National protection or Monument
  - Bar 3: Tangible + Intangible Level 3 – Regional or Local protection
  - Sections divided per Land: General (all Lands), Itineraria, Ruralia, Naturalia and Urbanalia

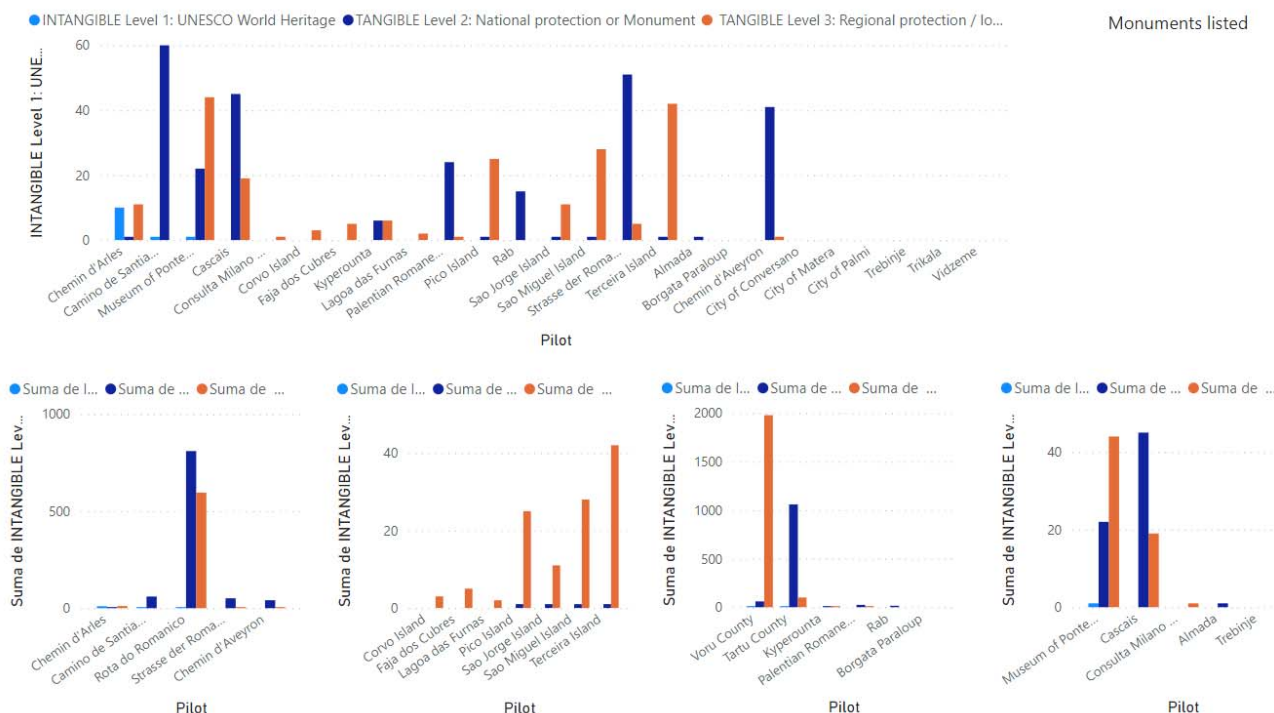


Figure 5.4 - Monument listed

In order to read the graph properly, it is necessary to exclude pilots such as Vöru County, Tartu County or Route of the Romanesque, due to the large number of properties that they have declared, both at national and regional level. Excluding these pilots, it can be seen that the proportion of declared properties for each of the destinations and types of Lands is diverse; however, it can be concluded that for the first level (UNESCO World Heritage), there are few cases of declared monuments except for Chemin d'Arles and Museum of Pontevedra.

For this reason, it was decided to complement the analysis by providing the same comparative analysis focused on each of the four types of Lands. In this way, some nuances can be pointed out, such as the fact that in the case of Kyperounta (Ruralia) the number of properties declared at both national and regional level is the same; or that in the Naturalia group, despite the fact that almost all the properties declared are at local level, the relevance of the pilots of each of the islands of the Azores shows a different pattern, i.e. the island of São Miguel is no longer the most important reference, but gives way to other cases such as Terceira Island or Pico Island.

## 5.2.2 Economic domain

### CHART 4. Features:

- Topic: Economic spent (tourist accommodation)

- Type of graph: 2 axis + colour code (graph 1) /VS/ 2 axis + colour code (graph 2)
- Data included:
  - GRAPH 1
    - X axis: Reference to the pilot
    - Y axis: Average nights spent at tourist accommodation establishments
    - Colour code: Type of land
  - GRAPH 2
    - X axis: Reference to the pilot
    - Y axis: Average daily spending per tourist/visitor
    - Colour code: Type of land

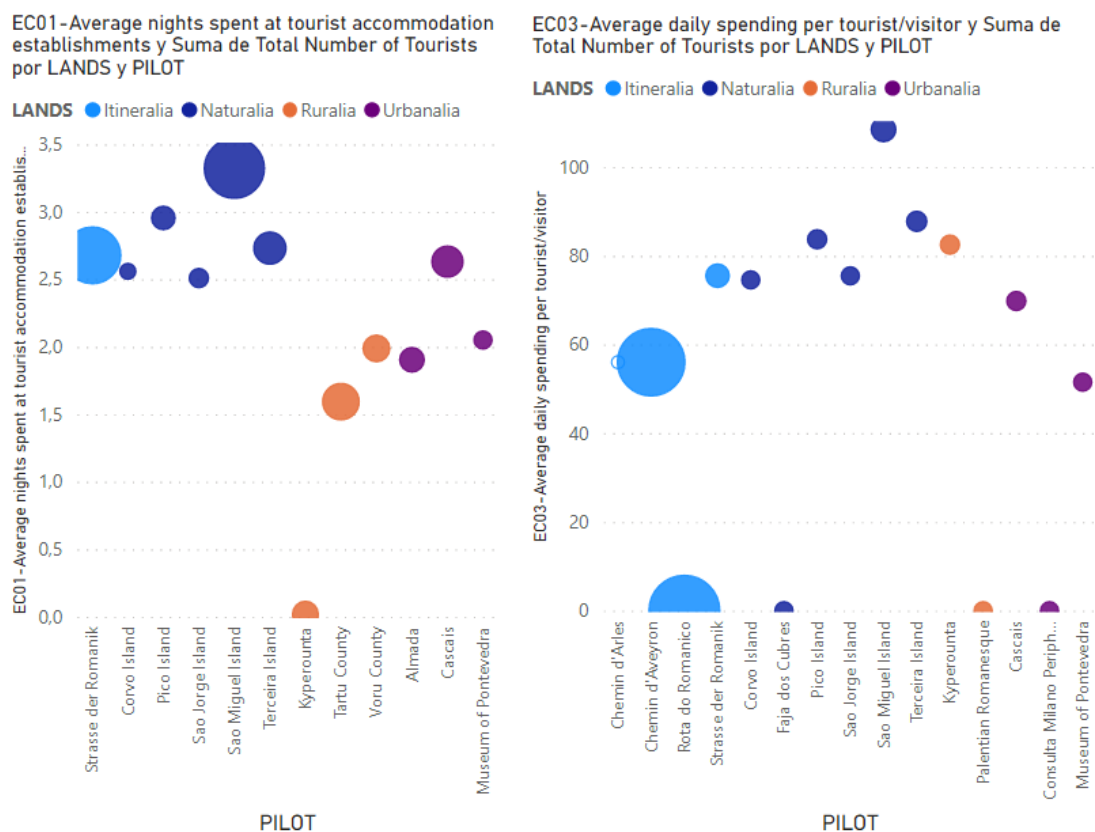


Figure 5.5 - Economic spent (tourist accommodation)

In order to offer a more in-depth analysis of the existing data, it has been decided to make a comparison between the two graphs, using as a common reference the pilots with available data and the type of Land to which they belong, by means of a colour code.

Focusing on the vertical reading, the correlation of tourist spending can be appreciated. In general, the higher the number of nights spent, the higher the average expenditure is generated; although specifications can be made according to the type of Land. For example, it can be seen that in the Itineralia group, the proportion of expenditure is lower than in the other three groups, most likely due to the nature of the tourists/pilgrims who frequent this type of pilot. On the other hand, the Naturalia group has a longer proportion of longer stays and higher expenditure, partly due to the characteristics of the pilots that conform this type of Land: islands that are quite distant from the mainland. Finally, the Ruralia group is the one showing the lowest number of stays and average expenditure per tourist.

### CHART 5. Features:

- Topic: Economic spent (sharing/collaborative accommodation)
- Type of graph: 2 axis + colour code (graph 1) /VS/ 2 axis + colour code (graph 2)
- Data included:
  - GRAPH 1
    - X axis: Reference to the pilot
    - Y axis: Average nights spent at sharing/collaborative economy accommodation establishments
    - Colour code: Type of land
  - GRAPH 2
    - X axis: Reference to the pilot
    - Y axis: Average daily spending per tourist/visitor
    - Colour code: Type of land

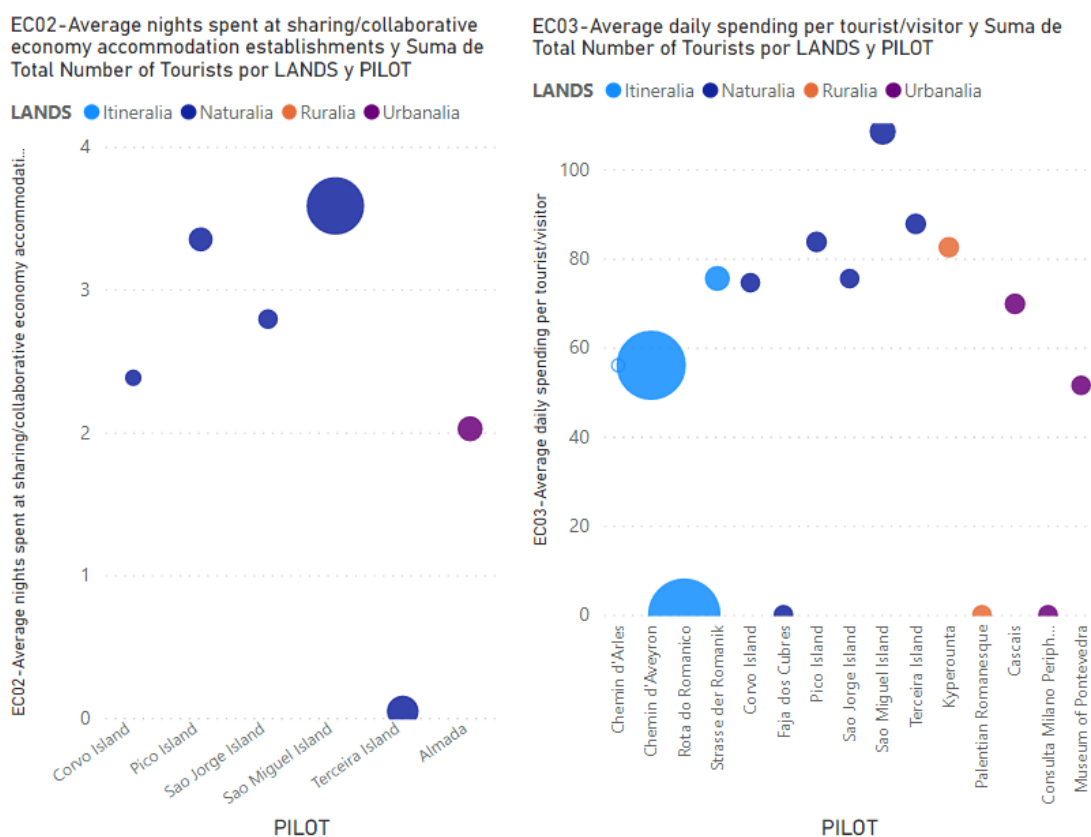


Figure 5.6 - Economic spent (sharing/collaborative accommodation)

In line with the previous section, the comparison of two graphs is maintained with a common factor in their design: the pilots with available data and the Land group to which they belong based on a colour code. The graph reading has to be made along the vertical Y-axis.

Compared to the previous case, the first note that can be detected is that the number of pilots with available data based on sharing/collaborative accommodation is much lower, with almost only the Naturalia group having such information. Once again, it can be seen that the average expenditure per tourist is related to the total number of nights, and again

the size of the islands according to the number of tourists received stands out, with São Miguel standing out above the rest for being the largest and hosting the capital of the Azores archipelago.

### 5.2.3 Social domain

#### CHART 6. Features:

- Topic: Accessibility and availability of attractions/sites
- Type of graph: Bars chart
- Data included:
  - Bar 1: Total of cultural tourism attractions/sites
  - Bar 2: Number of cultural tourism sites/attractions operate an Accessibility Plan which makes provision for visitors with physical or mental needs
  - Bar 3: Number of cultural tourism attractions/sites providing multilingual signage and interpretation and information for visually impaired visitors
  - Bar 4: Number of cultural tourism attractions with free/discounted access to locals (including educational visits for schools)

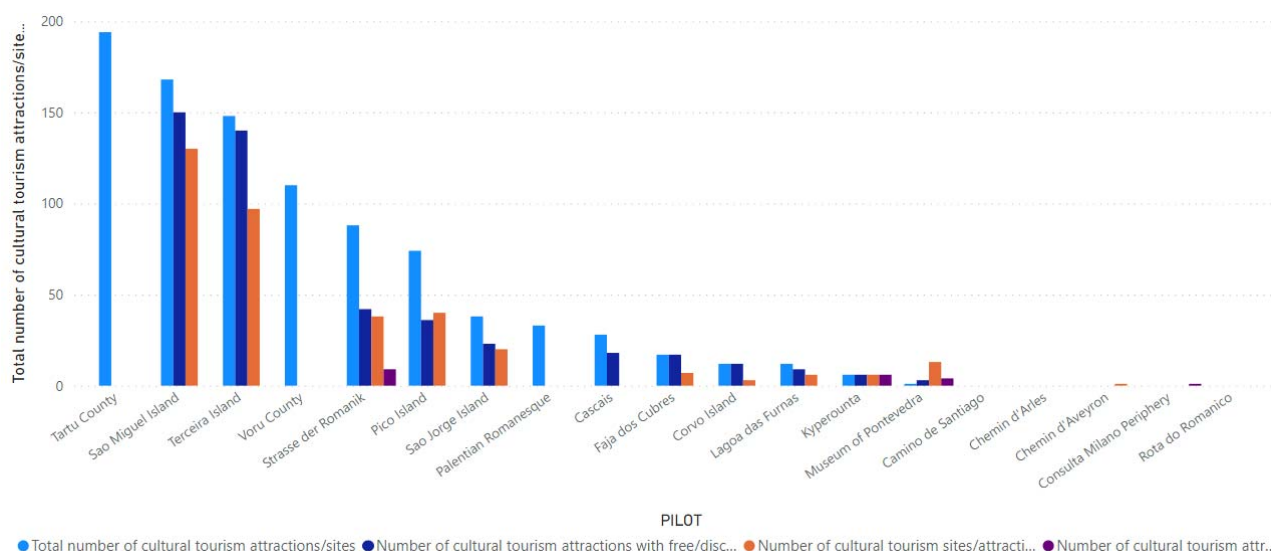


Figure 5.7 - Total of cultural tourism attractions/sites

In this graph, it was not necessary to exclude any of the pilots, as the proportion of declared attractions and sites and the type of accessibility they have is rather similar. It is worth noting the large presence of the islands from the Naturalia group, where all of them show the same proportion (considering only the three first bars per pilot) in correlation to their size, from São Miguel the largest to Corvo the smallest.

Furthermore, in cases like Strasser der Romanik with data in all the bars, it can be seen the proportion of accessibility and availability for Cultural Tourism sites and attractions at destination, being higher the Accessibility Plan for physical and mental needs, secondly the multilingual signage and visually impaired interpretation, and thirdly the free or discounted access for locals. It should be noted that in the case of the Kyperounta destination from Ruralia, all the values provided are the same, being therefore accessible at all levels (accessibility plan, multilingual resources, free or reduced access for locals) the attractions and tourist-cultural sites declared in the destination.

**CHART 7. Features:**

- Topic: Relation between residents/tourist/employees
- Type of graph: 2 axis + bubble
- Data included:
  - X Axis: Number of residents
  - Y Axis: Number of tourists/visitors
  - Bubble Size: Number of employees of cultural tourism sites /attractions

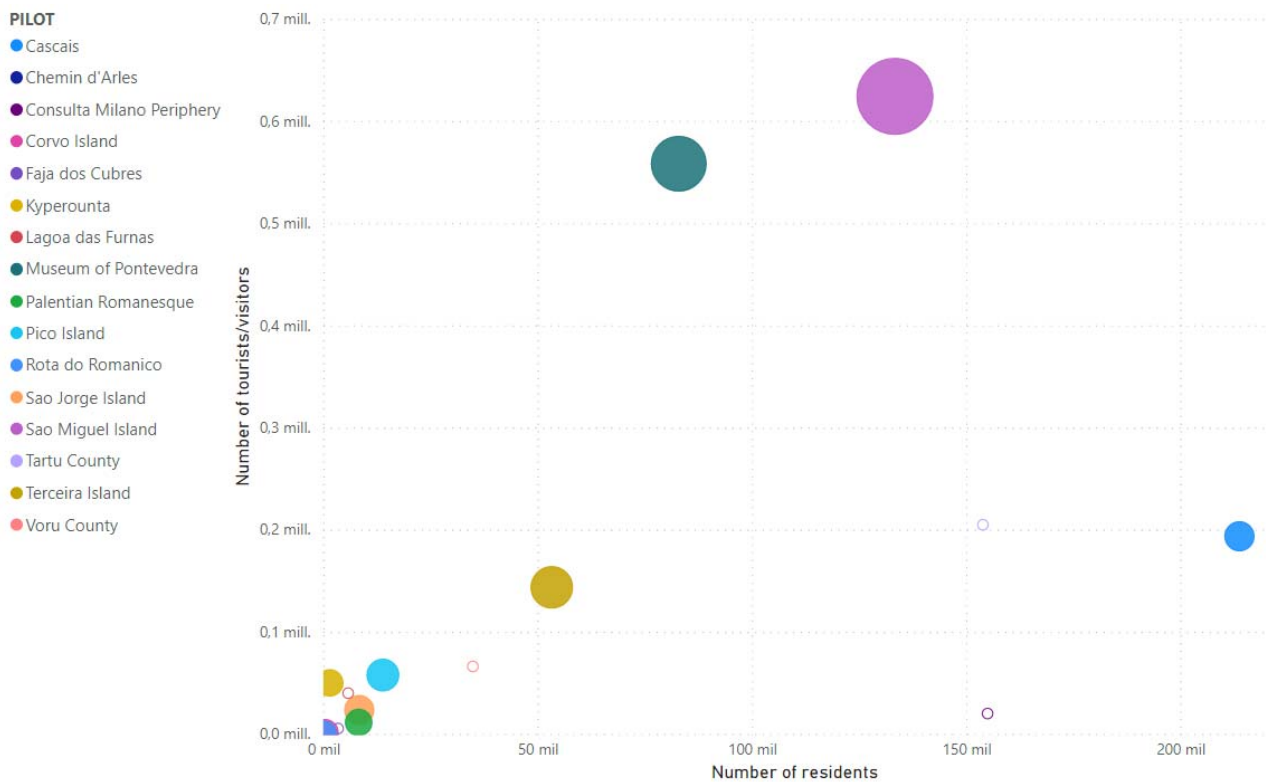


Figure 5.8 - Relation between residents/tourist/employees

In order to be able to read this graph more easily, it is necessary to exclude Strasse der Romanik from the group, due to the large number of tourists and visitors declared. For similar reason Chemin d'Aveyron was also not considered for the graph.

With the remaining examples, it is possible to appreciate the number of staff employed for Cultural Tourism in relation to the number of residents and tourists of a specific destination. For example, for the case of Periphery of Milano, it is possible to observe the large number of workers employed (commensurate with the number of inhabitants) but disproportionate to the number of visitors it receives. In another example, it seems that São Miguel Island and the Museum of Pontevedra present a similar reality, despite belonging to two different types of Lands (Naturalia and Urbanalia).

**5.2.4 Cultural domain**

**CHART 8. Features:**

- Topic: Funding and contributions for culture and heritage
- Type of graph: 2 axis + bubble
- Data included:

- X Axis: Total economic spent in improvement of the physical urban environment at destination
- Y Axis: Total economic spent on restoration of historical buildings/sites at destination
- Bubble Size Option A: Total economic contributions coming from CT
- Bubble Size Option B: Total economic funding from public/private entities

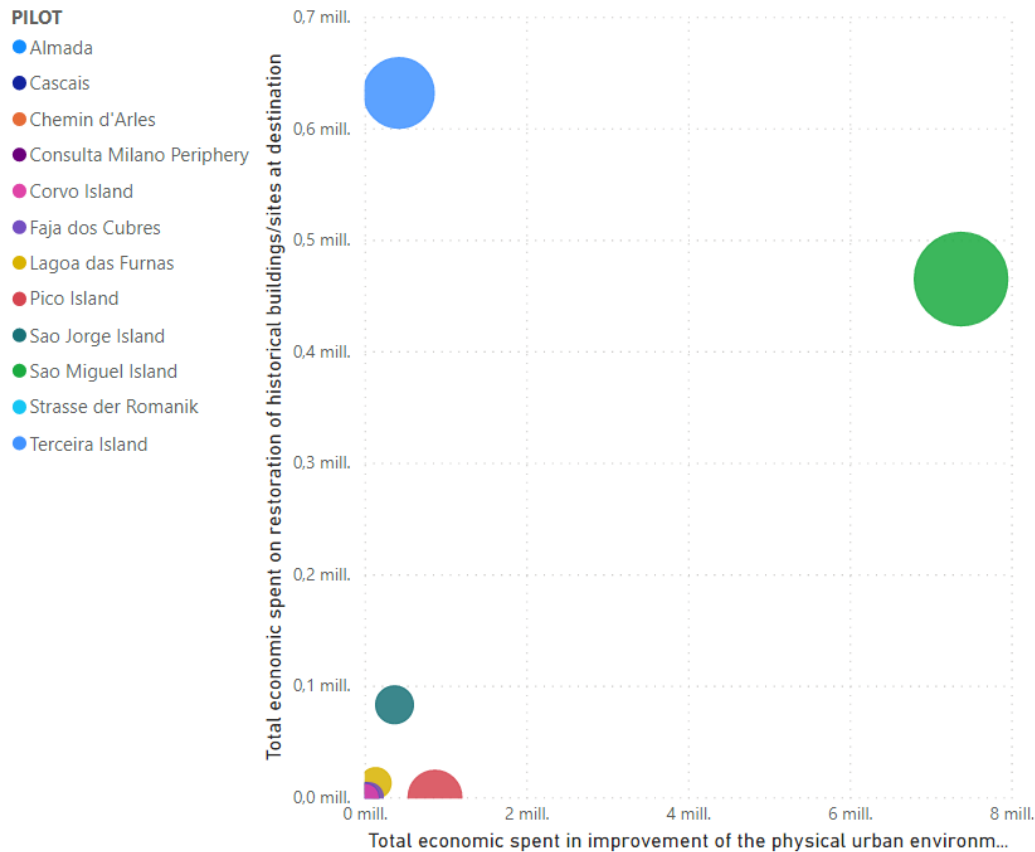


Figure 5.9 - Funding and contributions for culture and heritage

As can be seen in this graph, comparing the type of improvement in which the expenditure is applied in the destinations, the vast majority of the pilots invest it in the development of urban elements, except in the case of Terceira Island, which devotes more budget to the restoration and preservation of historic buildings.

In order to better read this graph, it was necessary to exclude the Museum of Pontevedra pilot from the graph, given its large difference in the contribution to the improvement of urban elements. Finally, the size of the circles indicates the contributions coming from Cultural Tourism, being much higher in proportion in the island destinations of Naturalia, than in the destinations belonging to other types of Lands.

**CHART 9. Features:**

- Topic: Preservation of degradation of monuments/sites
- Type of graph: Bars chart
- Data included:
  - Bar 1: Total number of historical buildings/sites at destination
  - Bar 2: Total number of historical buildings/sites damaged, degraded or in classified danger

- Bar 3: Total number of historical buildings/sites restored in one year

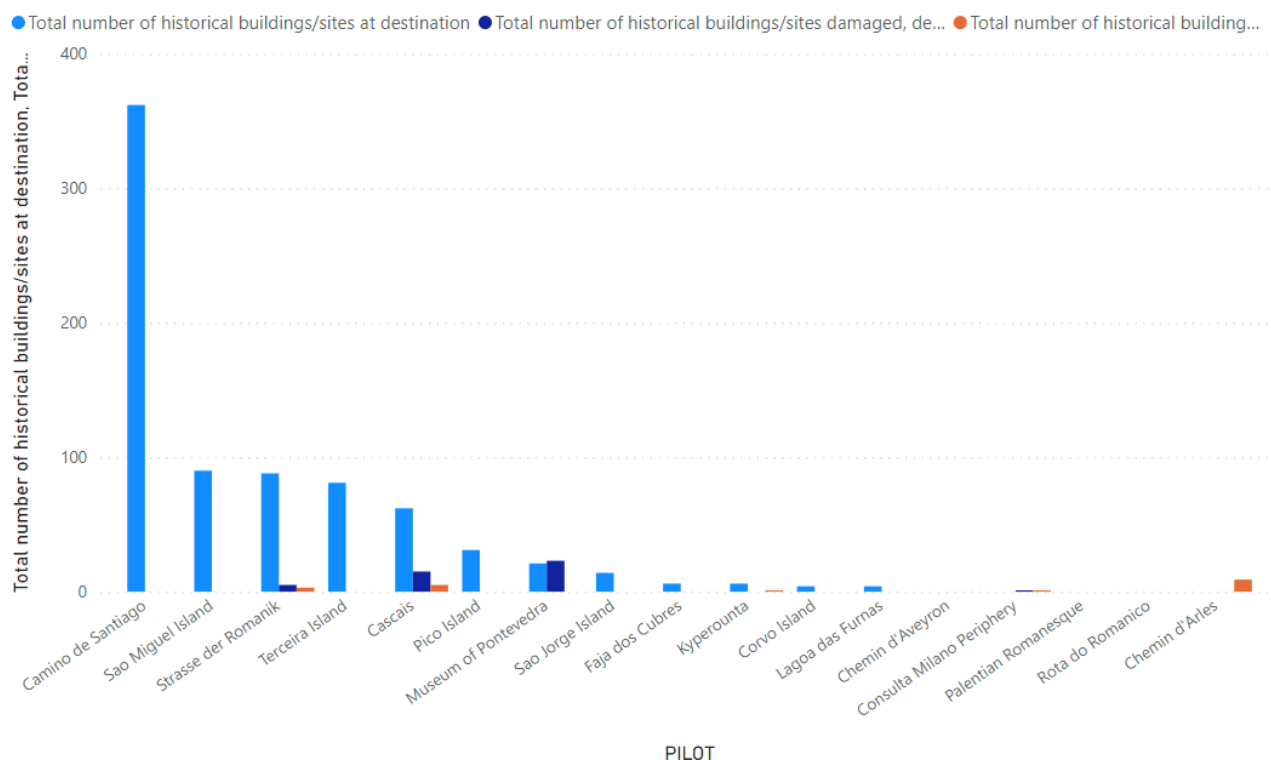


Figure 5.10 - Preservation of degradation of monuments/sites

In order to make a correct reading of this graph, it was necessary to exclude the Estonian pilots (Tartu and Vorü), due to the high number of buildings at destination declared as historical buildings, compared to the rest of the pilots, even though they show a logical relationship between listed buildings (degraded buildings and restored buildings). The same ratio in terms of building preservation is met by destinations such as Rota do Românico or Cascais, although with smaller numbers.

## 5.2.5 Environmental domain

**CHART 10.** Features:

- Topic: Enterprises sustainable engagement (distribution)
- Type of graph: Bars chart
- Data included:
  - Bar 1: Total number of enterprises in the tourism sector
  - Bar 2: Number of enterprises focusing on environmental awareness
  - Bar 3: Number of local enterprises in tourism sector which actively support conservation of local biodiversity and landscapes (meaning: funding conservation, investing in it, using a voluntary certification/labelling on sustainability, etc.)

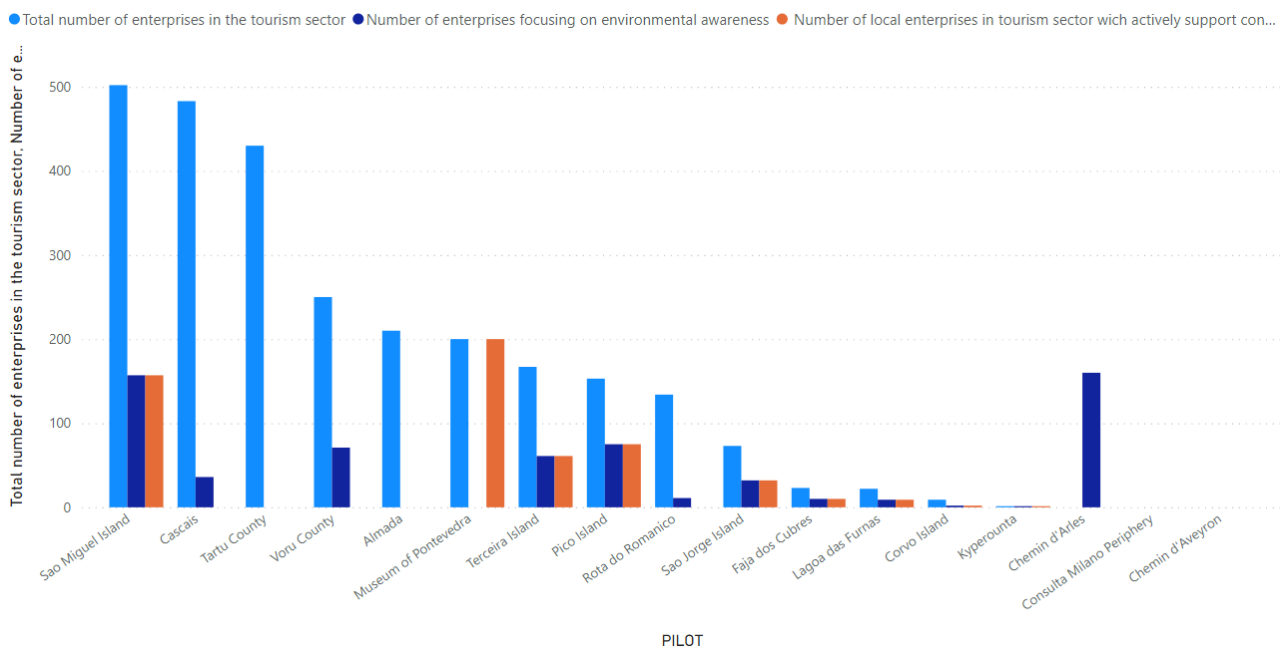


Figure 5.11 - Enterprises sustainable engagement (distribution)

For this case, it can be detected is that the majority of complete responses come from the island destinations of the Azores (Naturalia); and, again, the proportion of the figures is repeated based on the size of the islands, from São Miguel the largest to Corvo the smallest (since Lagoa das Furnas is a specific natural destination within the island of São Miguel itself, not far from its capital, Ponta Delgada).

#### CHART 11. Features:

- Topic: Enterprises sustainable engagement (economic contribution)
- Type of graph: 2 axis + bubble
- Data included:
  - X Axis: Number of enterprises focusing on environmental awareness
  - Y Axis: Number of local enterprises in tourism sector which actively support conservation of local biodiversity and landscapes (meaning: funding conservation, investing in it, using a voluntary certification/labelling on sustainability, etc.)
  - Bubble Size: Total economic contributions coming from Cultural Tourism

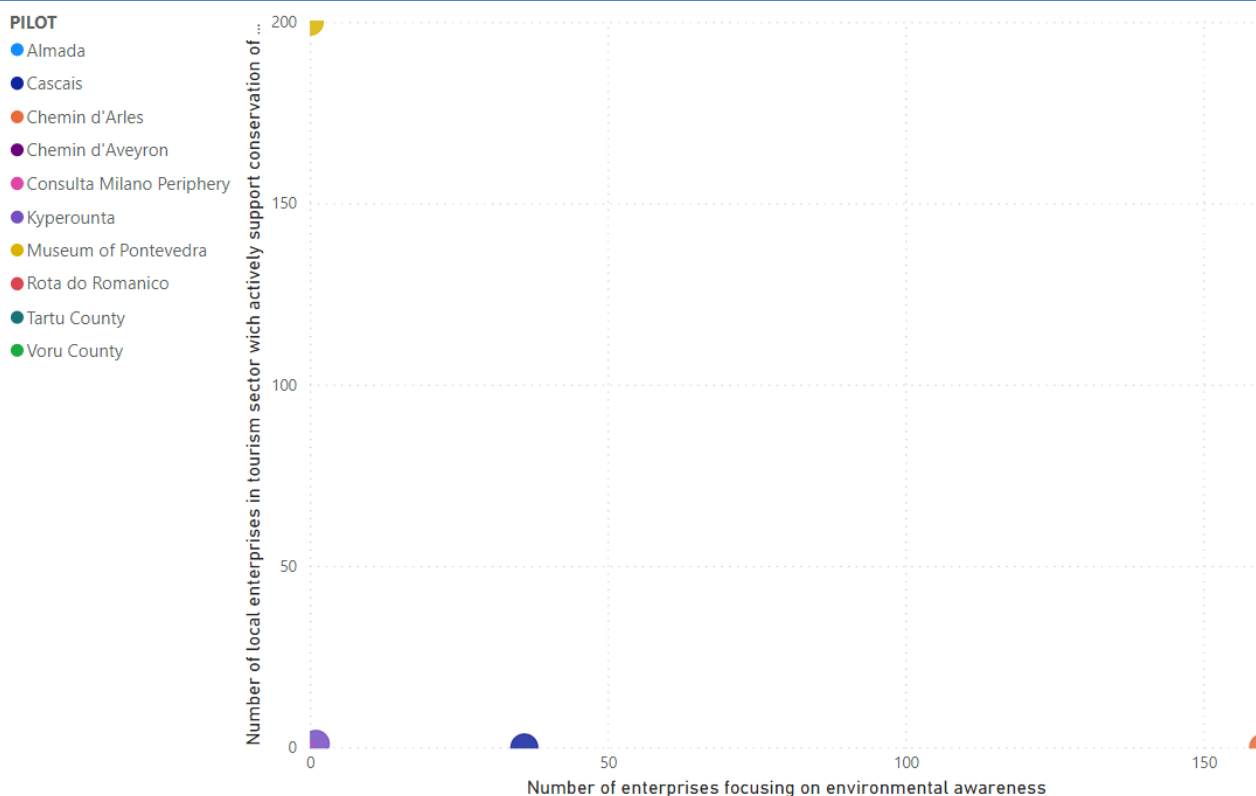


Figure 5.12 - Enterprises sustainable engagement (economic contribution)

The value of this graph is based on highlighting the need for greater involvement of the companies in the pilots to have a stronger focus on environmental or diversity conservation issues, also taking into account the fact that in several previous working sessions (Regional World Café in July 2021 and Global World Café in November 2021) these issues have appeared as relevant points to be taken into account for the preservation of the identity and authenticity of the destinations.

Among the pilots with available data, a greater tendency towards environmental concern is detected within the two available options, even despite the lack of contribution to it through Cultural Tourism. This is something that should certainly be understood as an opportunity and a challenge in future lines of work.

#### CHART 12. Features:

- Topic: Sustainable accessibility
- Type of graph: Bars chart
- Data included:
  - Bar 1 (Number A1): Total cultural tourist attractions
  - Bar 2 (Number A2): Number of those accessible by bike/scooter
  - Bar 3 (Number B1): Total disperse tourist attractions
  - Bar 4 (Number B2): Number of those accessible by public transport

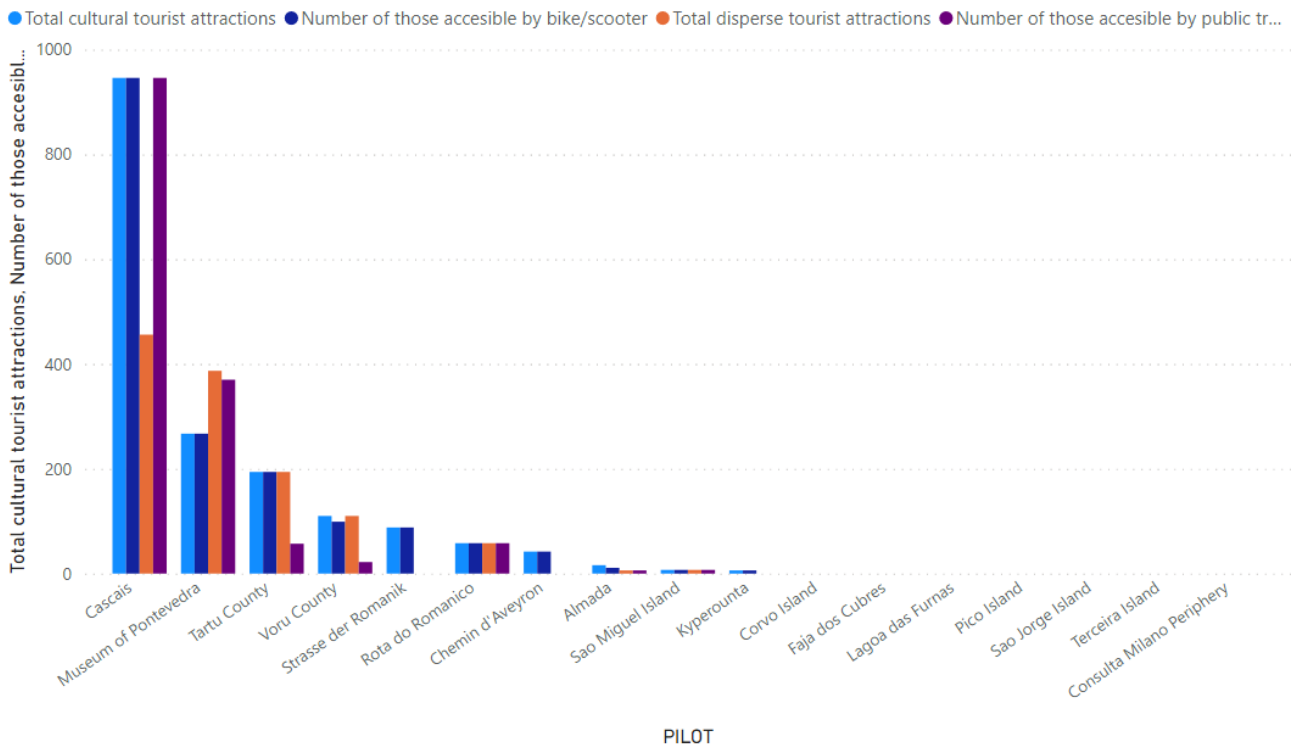


Figure 5.13 - Sustainable accessibility

The rural destination of Kyperounta stands out for having an equal and uniform response in all its values; Rota do Românico presents the same situation. For the rest of the cases, in general, it can be concluded that most of the destinations are practically accessible in a sustainable manner, approaching a value of 100% when we are in urban centres, historic centres or well consolidated areas.

## 6 Final conclusions

The current document gathers the analysis and systematisation of the data obtained through the Data Collection process, as established in the previous deliverable (D3.3 – Data collection methodology), within a continuous and active engagement. In order to obtain useful information for future deliverables, such as D2.3 (Benchmarking Report), or work packages, such as WP4 or WP6, it was considered all available data, available from the pilots involved, until (March 2022). In order to better understand the reality of the pilot destinations participating in the project, as well as to complete some data necessary for the work towards the key performance indicators and the future IMPACTOUR platform, the data collection activity remains active and oriented to complete the most necessary sections identified through the present deliverable.

Within the synthesis work carried out, it is possible to recognise the three main differentiated phases in which the data analysis is structured. In each of them, a specific methodology has been established which has brought to light conclusions as follows.

First of all, a general review was carried out after the data collection by the partners with associated pilot destinations. Thus, based on the available information, those partners provided a structured overview in the considered six main domains and a seventh section of reflection on the data collection process: characterisation, economic, social, cultural, environmental, resilience and challenges to complete the list of baseline indicators. In general terms, it was possible to observe the disparity of results obtained, even in the level of detail provided; Furthermore, the need to continue studying destinations through the classification of "Lands" can be perceived, as it is the most direct strategy to seek homogeneity and commonalities between them. In any case, the examples of some pilots with specific realities continue to stand out, such as Tartu County, which brings together characteristics of Urbanalia despite being in the Ruralia group; or the fact that in the case of Furnas, it works as an independent pilot in the analysis of the data within the Naturalia group, despite the fact that in reality it has a tourist activity closely linked to São Miguel Island (the largest pilot within this Land). With this analysis, and in order to continue obtaining quantitative information, it is possible to identify information that will help to complete the list of key performance indicators (WP4), once the following phases of data systematisation have been addressed.

Secondly, a first phase of systematisation of the data has been carried out, which was necessary in order to be able to carry out a joint analysis of the existing information. To this end, in this first filtering, the data provided by the pilots were reviewed one by one, seeking homogeneity and coherence in the responses obtained. For example, working with the same units, quantifying the data that were not described numerically, or looking for a way to represent the binary Yes/No responses. Despite being a fairly mechanical task, it was possible to early detect some discrepancies between the data provided, especially when looking at pilot destinations within the same group of Land (where the characteristics would be expected to reflect a more similar reality). For example, when it comes to establish the working area or the number of local people, it is easy to see that pilots in the Itineralia group have taken different frames of reference to delimit their paths. On the other hand, within the Ruralia group, it can be seen that the criteria for the classification and preservation of both, the declared Cultural Heritage and the surrounding tourist and cultural resources, are not the same in countries such as Estonia (Tartu County and Võru County pilots) or Spain (Palentian Romanesque). The need for a clearer criteria

and general frameworks in the data collection process has to be taken into account in the following steps of the data collection activity.

Finally, in a third step, a second phase of systematisation of the data was carried out, seeking to analyse the situation of each of the baseline indicators within the domain to which they belong. In this way, and using Power BI tool, it has been possible to carry out a parallel quantitative and graphic analysis of these indicators according to the six domains: characterisation, economic, social, cultural, environmental and resilience. In general terms, this process has brought to light some criteria where there is a greater lack of information and where further work is needed, such as in the cases of cultural and environmental domains. On the other hand, the characterisation and resilience domains have a better quality of the data provided; in the first one, because in many cases the statistical data is relatively easy to access, and in the second one, because is based on a more concrete Yes/No response. However, examples also come to light in which it is difficult to obtain the information to complete the baseline indicators proposed in D2.1 (List of criteria and indicators to carry out the comparative assessment), either due to the lack of some or all of the variables involved, as well as the disparity of the participating pilots in interpreting the data and understanding the process necessary to obtain them. As a result, some lines of improvement can be pursued in the following work with key performance indicators during WP4 (Task 4.2).

Nevertheless, in order to be able to improve the quality of the data obtained a final action was carried out to complement the second phase of data systematisation. Specifically, a review of this systematisation was carried out through meetings with partners whose associated pilots presented some anomalous results after the analysis. In this way, through a dialogue with some of the pilot destinations, several of the detected discrepancies have been solved or justified; something that will also be reflected in the next Benchmarking Report.

In addition, in line with the work carried out and in order to complete and analyse the results of the data collection in greater depth, a comparative analysis of the existing data was carried out. Despite not being able to complete all the information necessary to define the pre-established baseline indicators by domain, there was sufficient quantitative information to pool the results between all the pilots who participated in the process, even combining destinations belonging to different types of Lands. Therefore, common themes for comparative analysis have been established within the six main domains, such as "Economic spent by tourist accommodation" in the economic domain, "Relationship between residents / tourist / employees" in the social domain, "Preservation of degradation of monuments / sites" within the cultural domain, or "Enterprises sustainable engagement and distribution" in the environmental domain. This last step is of great interest and relevance to complete with quantitative information the benchmarking process that will be developed in the upcoming deliverable D2.3 (Benchmarking Report,) in which all the qualitative information that has already been obtained through other previous actions in IMPACTOUR will also be compiled.

## Annex A: List of Acronyms/Abbreviations

Acronym/ Abbreviation	Description
AMRAA	Associação de Municípios da Região Autónoma dos Açores
ACIR	Agence de coopération interrégionale. Réseau
CT	Cultural Tourism
CUT	Cyprus University of Technology
D	Deliverable
DK	Danemark
EC	European Commission
ENAT	European Network for Accessible Tourism
ETB	Estonian Tourist Board
EU	European Union
H2020	Horizon 2020
IBS	Institute of Baltic Studies
IMPACTOUR	IMproving Sustainable Development Policies and PrActices to assess, diversify and foster Cultural TOURism in European regions and areas
IT	Italy
M	Month
MTHUB	Matera HUB
NL	Netherland
PT	Portugal
SI	Slovenia
T	Task
UNESCO	United Nations Educational, Scientific and Cultural Organization
WP	Work Package

## Annex B: References

- [1] R. Baggio and J. Klobas, *Quantitative Methods in Tourism*, a handbook, Bristol: Channel View Publications, 2011.
- [2] M. S. Brown, "Big Data, Mining and Analytics," Auerbach Publications, 2014.
- [3] S. L. Nelson, "Stephen L.," in *Excel data analysis for dummies.*, Wiley, 2014.
- [4] S. Wu, *A review on coarse warranty data and analysis*, Reliability Engineering & System Safety, 2013.
- [5] S. Davis, J. B. Pettengill, Y. Luo, J. Payne, A. Shpuntoff, H. Rand and E. Strain, *CFSAN SNP Pipeline: an automated method for constructing SNP matrices from next-generation sequence data*, PeerJ Computer Science 1:e20, 2015.
- [6] R. Schutt and C. O'Neill, *Doing Data Science.*, O'Reilly Media, 2013.
- [7] A. Shollo, "Using Business Intelligence in IT Governance Decision Making," in *Governance and Sustainability in Information Systems. Managing the Transfer and Diffusion of IT - IFIP WG 8.6 International Working Conference, Hamburg, Germany, September 22-24, 2011. Proceedings*, 2011.
- [8] J. A. O'Brien and G. Marakas, *Management Information Systems*, McGraw-Hill Higher Education, 2011.
- [9] K. Schlegel, R. Sallam, D. Yuen and J. Tapadinhas, *Gartner Magic Quadrant for Business Intelligence and Analytics Platforms*, 2013.