

# S.LI.DES

## Smart strategies for sustainable tourism in Lively cultural DESTinations

2014 - 2020 Interreg V-A  
Italy - Croatia CBC Programme  
Priority Axis: Environment and cultural heritage  
Specific objective: 3.1 - Make natural and cultural heritage a leverage for sustainable  
and more balanced territorial development

### **Deliverable 3.4.1.**

### **Destination dashboard format**

<b>Work Package:</b>	<b>3 - The S.LI.DES Smart Destination Ecosystem</b>
<b>Activity:</b>	<b>4 - Designing the destination dashboard</b>
<b>Responsible Partner:</b>	<b>INSTITUTE FOR TOURISM</b>
<b>Partners involved:</b>	<p>LP – University of Cà Foscari (IT)</p> <p>PP1 - Ciset (IT)</p> <p>PP2 - Ecipa (IT)</p> <p>PP3 - SIPRO Ferrara (IT)</p> <p>PP4 - City of Bari (IT)</p> <p>PP5 - City of Venice (IT)</p> <p>PP6 –CAST-University of Bologna (IT)</p> <p>PP7 – Institute for Tourism</p> <p>PP8- Craft College- Institution for adult education Subsidiary Rijeka</p> <p>PP9- Development Agency of the City of Dubrovnik-Dura</p> <p>PP10-Sibenik Tourist board</p>

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## INTRODUCTION

As discussed in the Deliverable 3.1.1., the S.LI.DES project aims at supporting the creation of a “Smart Tourism Destination”, helping city managers and other stakeholders of Italian and Croatian cities involved to take informed decisions and to check/assess the results of their decisions.

In particular, the project wants to build an integrated knowledge system, supported by innovation technologies (i.e. the Smart Destination Ecosystem developed in WP3), which should help cities:

- to be aware of the mutual relationships between the development of tourism and of other urban functions as well as of other local activities and services, and then to assess the cities’ tourism and non-tourism performances from different urban perspectives (economic, social, environmental, cultural, accessibility and local mobility, etc.) and at different time scales (activity 3.1);
- to be aware of the main characteristics of visitor mobility within the urban environment, with a focus on pedestrian mobility, and monitor it over time and space, taking into account the location of Point of Interests (POIs: not only popular, but also less promoted tangible and intangible heritage), and the effects related to the organization of specific events (activity 3.2);
- within tangible and intangible heritage, to map craft activities and CCIs, which are an important expression of the local identity, and define a sort of “ranking” of these activities according to their tourism potential, in order to promote them as driver of local sustainable development and job creation (activity 3.3).

Core of the S.LI.DES Smart Destination Ecosystem is a multi-dimensional Destination Datahub (activity 3.1), which integrates in a unique repository a huge set of data on each partner city retrieved from different internal and external sources, from the analysis of mobility patterns and the mapping of craft activities, as well as by means of primary data collection. It works as a sort of business intelligent system that collect data and, through specific analytical tools, process and transform them into systematic information, trying also to identify meaningful relationships among data (KPIs).

The outputs of this system are accessible to city managers (and other stakeholders, whether agreed by local decision makers) through a Destination Dashboard (Activity 3.4.), a user-friendly panel accessible via Web, which displays the city performances related to different key areas of analysis using tabular and visual reports (tables, meters, graphics, dynamic maps).

Scope of Activity 3.4. is to design the format of the Dashboard, which includes the identification of a standard set of data, KPIs and of data correlations and simulations (content structure) to be displayed, and the definition of an effective Data Visualization approach, which means the design of an appropriate web-based optimized control panel layout where to display them, combining tabular and visual tools (tables, graphs, maps, etc.). The practical application of the identified standards to each destination, i.e. the creation of the five front-end dashboards, is the object of Activity 4.1. in WP4, where some visual features will be adapted according to the requirements of the city managers.

This Deliverable presents the general framework of the Dashboard and its contents (main sections, list of indicators and correlations to display the aspects analyzed in each section), focusing on Activity 3.1., i.e. the set of data collected by each city to populate the Datahub.

As for the data retrieved from Activities 3.2. (mobility models) and 3.3. (the mapping of tangible and intangible cultural heritage, with a focus on craft activities), some activities have been postponed because of the COVID outbreak and the lockdown imposed both in Italy and Croatia. But they have been carried out eventually, and their outputs have been uploaded on the Dashboard. The general structure and the tabular and visual tools chosen to display the mobility patterns of visitor flows and the mapping of craft activities according to their tourism potential, have been included in the “Accessibility and mobility” sections and in the “Culture and crafts” section of the Dashboard, respectively.

## **1. Destination Dashboard: the general structure**

Concerning the definition of the Dashboard structure, the process started from the six dimensions of the S.LI.DES Datahub, i.e. the key areas of analysis discussed in Deliverable 3.1.1.: Smart Economy, which also includes Tourism and Crafts; Smart Society; Smart Environment; Smart Accessibility and Mobility; Smart Living. Each of these key areas groups a list of raw data and related indicators on each partner cities, retrieved from internal and external sources (offline and online datasets).

The six Dashboard sections identified herewith derive from a revision of the smart key areas of the Datahub. They were re-designed having in mind three main aspects:

- enhance the role of the Dashboard as a user-friendly knowledge tool for city managers. This means to organize the data and information according to main topics and KPIs easily understandable by potential users;
- highlight the main topics of the project and of the Interreg Italy-Croatia Axis: tourism; culture-related aspects, including crafts; environment; sustainability;
- include the data retrieved from the mobility models (activity 3.2.) and the mapping of tangible and intangible cultural heritage, with a focus on craft activities (activity 3.3.).

In detail, the six sections identified are as follows:

- **City at a glance**
- **Tourism**
- **Culture and crafts**
- **Environment**
- **Accessibility and mobility**
- **City popularity & attractiveness**

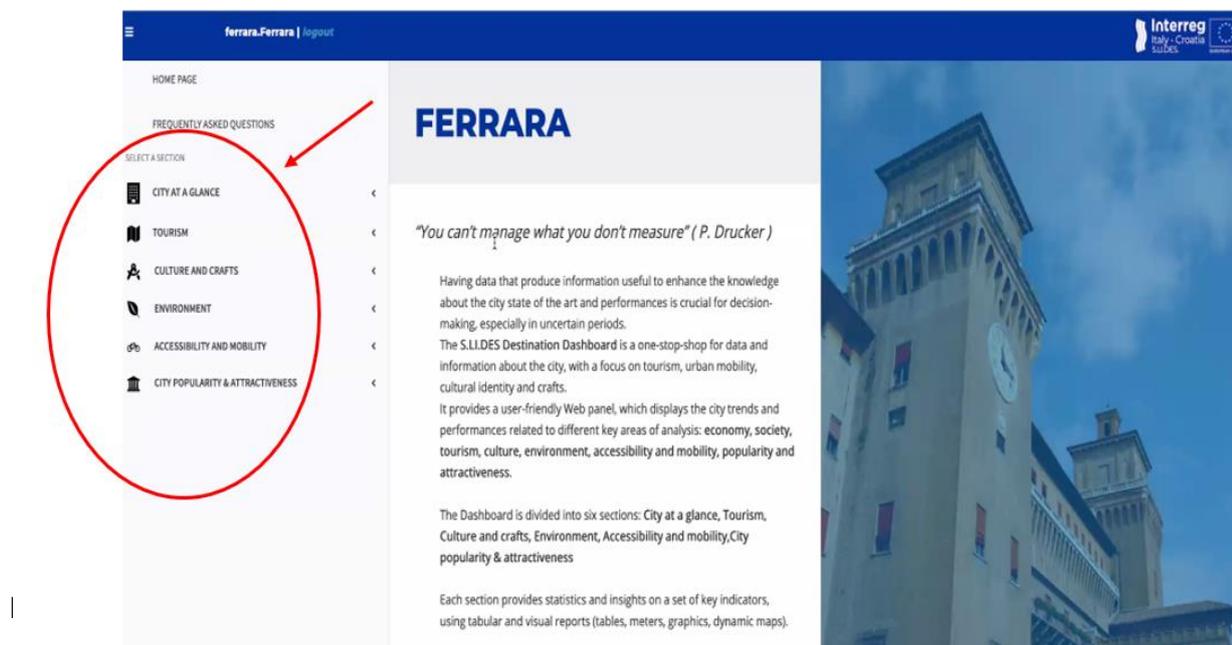


Figure 1. The six Dashboard sections

- The list of indicators that are considered appropriate to represent the phenomenon analyzed and the list of related raw data used to build them;
- The significant correlations identified among data;
- The cities for which these information tools are available.

In statistics, the term correlation identifies any statistical relationship, whether causal or not, between two random variables or bivariate data, and it is measured by a coefficient. The most common is the Pearson coefficient, which is sensitive only to linear correlations, whose values are in a range going from -1 (the variables are total uncorrelated) to +1 (the variables are total correlated).

Correlations are useful because they can indicate a predictive relationship that can be exploited in practice, for example between the searches on the city made by potential tourists on Google in a specific time period and the evolution of tourism arrivals in the same period. However, a correlation does not imply causation, i.e. it cannot be legitimately deduced a cause-and-effect relationship between two variables solely on the basis of an observed association between them. Other elements have to be taken into account to validate the results.

Considering the data visualization approach, the indicators to be displayed can have different formats. They can be unique numbers, time series, % share, ranking, deviation from a fixed value/threshold, frequency distribution, etc. Likely, the visual tools adopted to show them can be different: tables, graphs, charts (pie, bar, etc.), maps, etc.

But, as we have seen just above, a phenomenon can also be analysed through appropriate correlations, trying to compare the trends of two variables in order to determine if they move in the same direction or not. The scatter chart can be used to visualise this comparison.

Final users can also express specific requirements (analytical tasks) and the visualization approach can take them into account.

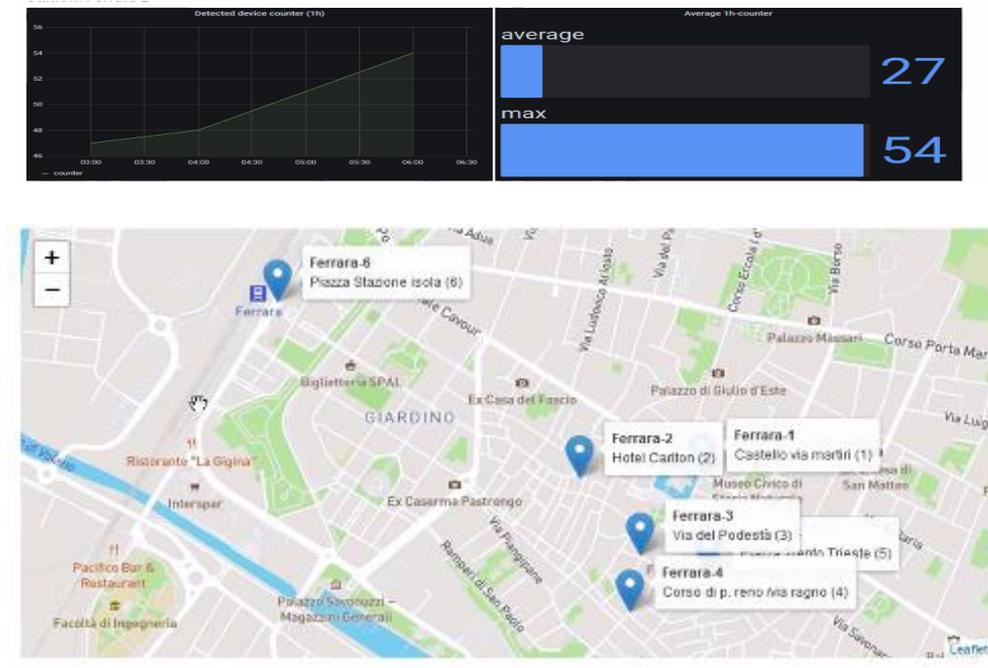


Figure 2. Examples of data visualization

According to what already discussed in Deliverable 3.1.1., the common purpose shared by the S.LI.DES partners is that, given the complexity of the collection process at municipality level, the population of the Datahub is an open and ongoing process, that will continue beyond the deadline for Activity 3.1., throughout the project. The effort has been focused on starting from a common set of data among those included in the final list, which are available for almost all cities (e.g., tourism data), and then enlarge them when other data are retrieved from different sources.

Consequently, also the contents displayed on the Dashboard will evolve as the Datahub will be enhanced and the data retrieved from Activities 3.2. and 3.3. uploaded.

A separate discussion deserves the upload of data provided by external online sources (Google Trends and TripAdvisor), which are available for all partner cities.

In this document the "ideal" framework of the Dashboard is presented, i.e. the indicators and the correlations that would be appropriate to best represent the city performance, according to different aspects, starting from the results of Activity 3.1. This framework has to take into account the data that can be objectively retrieved at municipality level.

The scope is to make city partners, local administrators and other stakeholders aware of the need to go on with the data collection, in order to build other indicators (as an ongoing project).

## **2. Destination Dashboard: the main contents**

### **2.1. Section 1. City at a glance**

The first section "City at a glance" shows a set of indicators and correlations providing a concise picture of the city, from a social and economic perspective, with a focus on the role of tourism and crafts in the local economy. It integrates information collected through the Smart Economy and the Smart society sections of the datahub.

In particular, the section firstly displays the volume and evolution of city population, focusing on its "vibrancy" (expressed by the % share of Millennials and Gen Z on total population) and its multiculturalism and "openness to the world" (expressed by the % share of population that is foreign born).

Then it provides a focus on the state and evolution of the local economy, in terms of GDP and employment, and of the contribution tourism and crafts activities give to it.

Finally, it allows city managers to monitor the vibrancy of the local business environment and the level of specialisation in tourism and craft activities.

The correlations analyse the relationships between: the evolution of population and tourism flows (arrivals and overnight stays) in the city, which is useful to understand the trends in tourism pressure; the evolution of tourism flows and of hotel and non hotel supply (in terms of bedplaces), to have indications about the effectiveness of accommodation investments in the city; the

evolution of tourism flows and of the tourism business environment (no. of tourism businesses and no. of people employed in tourism).

Herewith the list of indicators and correlations displayed.

<b>Indicators</b>	<b>Raw data</b>	<b>Cities for which data are available</b>
<b>Evolution of total population</b>	Total population 2010-18	All cities
<b>Vibrancy fo city population (% share of Millennials population on total population)</b>	Population by age on total population	Italian cities only
<b>Openness to the world (% share of population foreign born)</b>	Population foreign born on total population	Italian cities and Dubrovnik
<b>High level human capital (% share on total population)</b>	Population with a high level degree	Croatian cities only
<b>Economic wealth of the population</b>	Per capita personal income before taxes or per capita GDP	Italian cities. Croatian cities provide GDP at county level only
<b>Level of concentration/diversification of the local economy (% share of GDP in the first 3 sectors)</b>	City GDP by economic sector	Not available for Italian cities: for Croatian cities at county level
<b>Contribution of tourism to the local economy (% share on total GDP)</b>	Tourism GDP on total GDP	Not available
<b>Contribution of crafts and CClS to the local economy (% share on total GDP)</b>	Craft GDP on total GDP	Not available
<b>City employment or employment rate</b>	No. of people employed	All cities
<b>Direct employment in tourism (% share on total employment)</b>	No. of people employed in hospitality, catering and TO/TA on total employment	All cities
<b>Direct employment in crafts and CClS (% share on total employment)</b>	No. of people employed in crafts and CCI on total employment	Not available
<b>Level of innovation/specialization in high knowledge intensity sectors</b>	No. of people employed in high knowledge intensity sectors on total employment	All cities
<b>Level of tourism specialization of local entrepreneurship (% share on total businesses)</b>	No. of businesses in tourism on total businesses	All cities

<b>Level of craft specialization of local entrepreneurship (% share on total businesses)</b>	No. of craft businesses and CCI on total businesses	Not available
<b>International presence of local entrepreneurship (% weight of exports on total revenues)</b>	Value of business exports on total business revenues	Croatian cities only

Correlations	Raw data	Cities for which data are available
<b>Tourism vs. demographic development</b>	Comparison of time series related to arrivals and population	All cities
<b>Tourism market vs. hotel accommodation development</b>	Comparison of time series related to arrivals and hotel bedplaces	All cities
<b>Tourism market vs. non-hotel accommodation development</b>	Comparison of time series related to arrivals and non hotel bedplaces	All cities
<b>Tourism market vs. business development</b>	Comparison of time series related to arrivals and tourism businesses	All cities
<b>Tourism market vs. employment in tourism</b>	Comparison on time series related to arrivals and people employed in tourism	All cities

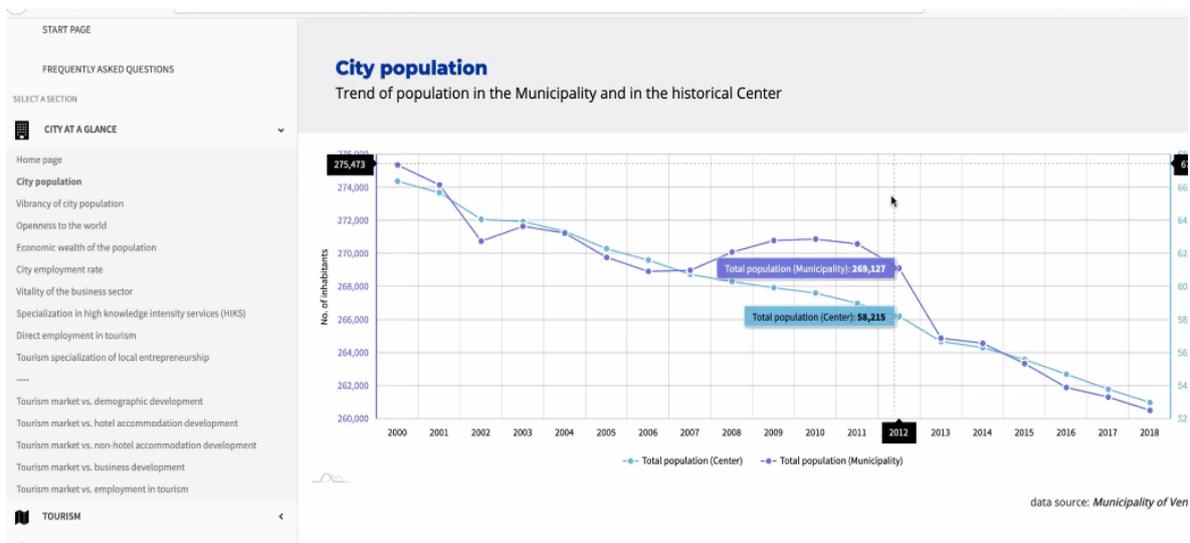


Figure 3. City at glance section

## 2.2. Section 2. Tourism

In this section a set of indicators and correlations showing the tourism attractiveness of the city and the structure/evolution of the tourism market and of accommodation supply are displayed. The section is divided into several sub-sections.

Regarding tourism demand, the updated figures on arrivals and overnights stays are displayed (latest year/month available), articulated by origin (international and domestic tourism). These figures are matched with the evolution of the same indicators over time (trends in arrivals and overnight stays).

Then some indicators look through the structure and the evolution of the international market (the level of internationalization total demand and of concentration/distribution of international clients by country of origin) and, for Italian partner cities, also of the domestic market (level of concentration/distribution of domestic demand by region).

Another important aspect when focusing on sustainable development is the seasonality of tourism flows and in particular the concentration in specific time periods. Two indicators monitor

- Level of de-seasonalisation of international demand (% arrivals in low-medium season on total arrivals from 2010 to 2018) or Seasonality of international demand
- Level of de-seasonalisation of domestic demand (% arrivals in low-medium season on total arrivals from 2010 to 2018) or Seasonality of domestic demand
- Tourist and visitor pressure: no. overnight tourists and same day visitors per inhabitant (annual and monthly data)

As for supply, the trends in official hotel and non- hotel supply are shown, both in terms of establishments and bed places.

Regarding the correlations, for cities where data are available, the relationship between tourism flows by month and the arrivals of passengers at the airport in the same time period is assessed, as well as the relationship between monthly tourism arrivals in the city and arrivals of cruise passengers in the same time period.

Herewith the indicators and correlations included.

<b>Indicators</b>	<b>Raw data</b>	<b>Cities for which data are available</b>
<b>How many are my tourists?</b>	The latest figures on no. of international and domestic arrivals and nights (annual data and/or latest monthly data)	All cities
<b>Trends in international tourism</b>	Evolution of international tourism arrivals and nights (or of arrivals and average length of stay)	All cities
<b>Trends in domestic tourism</b>	Evolution of domestic tourism arrivals and nights (or of arrivals and average length of stay)	All cities
<b>Internationalisation of tourism (% share)</b>	Evolution of international arrivals on total arrivals	All cities
<b>Who are my international clients? (level of concentration/diversification of international demand)</b>	Evolution of international arrivals from the first 3-5 countries of origins on total intl arrivals	All cities
<b>Who are my domestic clients?</b>	Evolution of domestic arrivals from the first 3-5 region of origins on total domestic arrivals	Italian cities only (Croatian cities do not record these data)
<b>Seasonality of international tourism (level of concentration/distribution of intl demand by month: % share)</b>	Evolution of intl arrivals in high season on total intl arrivals	All cities
<b>Seasonality of domestic tourism (level of concentration/distribution of domestic demand by month: % share)</b>	Evolution of domestic arrivals in high season on total domestic arrivals	All cities
<b>Cruise tourism</b>	Evolution of cruise passengers in a specific time period	Venice and Bari (annual data); Dubrovnik and Sibenik (monthly data)
<b>Tourist pressure (ratio index)</b>	Evolution of daily presences of tourists (measured by the average no. of daily nights spent) every 100 inhabitants	All cities
<b>Visitor pressure (ratio index)</b>	Evolution of daily same day visitors (measured by the average no. of same day visitors recorded) every 100 inhabitants	Not available
<b>Trends in official hotel supply</b>	The latest figures on no. of hotel and non hotel accommodation (establishments and bedplaces) (annual data )	All cities
<b>Trends in official non hotel supply</b>	The latest figures on no. of hotel and non hotel accommodation (establishments and bedplaces) (annual data )	4 cities (Dubrovnik only data on bedplaces from 2010 to 2015)

Correlations	Raw data	Cities for which data are available
<b>Tourism market vs. air accessibility</b>	Comparison of time series related to monthly tourism arrivals and monthly passengers arriving at the city airport	Bari, Dubrovnik
<b>Tourism market vs. cruise accessibility</b>	Comparison of time series relate to monthly tourism arrivals and monthly cruise passengers arriving at the city harbour	Sibenik, Dubrovnik

### 2.3. Section 2. Culture and Crafts

This section includes a set of indicators and correlations describing the cultural environment of the city and the role of craft activities and CCI in this context. It merges data and indicators from the Smart Society and the Smart Living dimensions of the Datahub and from Activity 3.3. (data from the Chamber of Commerce and those expected to be collected through the survey of artisans). More details regarding craft activities and CCI are available in Deliverable 3.3.1 Tangible and intangible heritage database, Deliverable 3.3.2 Dynamic map of craft activities, and Deliverable 3.3.3 Ranking of artisans and CCI activities.

Indicators	Raw data	Cities for which data are available
<b>Employment in culture, arts and entertainment activities (% share)</b>	No. of people employed in those sectors on total employed	Italian cities only
<b>Museum attendance (ratio index on total populaton)</b>	No. of visitors on total population	Ferrara and Sibenik
<b>Theatre attendance (ration index on total population)</b>	No. of audience on total population	Ferrara and Sibenik
<b>The entrepreneurial community of craft activities at city level</b>	Latest numbers and evolution of the no. of crafts, in total and by type of production, provided by the local chamber of commerce	To be identified (Act. 3.3.)
<b>The proper craft activities identified by the SLIDES project</b>	The no. of craft activities selected according to the criteria identified by Activity 3.3, in total and by type of production, distinguishing those to be promoted through the project	All cities (from Act. 3.3.)

<b>Traditional vs. contemporary crafts: the distribution of supply</b>	The no. of craft activities identified by the project, by production and typology (traditional and contemporary crafts): Abs.values and % share by category	All cities (from Act. 3.3.)
<b>Crafts open to the public</b>	The no. of craft activities identified by the project that are open to the public, in total and by seasonality: abs. values and % share by seasonality	All cities (from Act. 3.3.)
<b>Craft offering tourism experiences</b>	The no. of craft activities identified by the project and offering specific experiences to tourists, in total and by type of experience offered: abs. values and % share by type of experience	All cities (from Act. 3.3.)
<b>Crafts' Tourist targets</b>	The no. of craft activities identified by the project divide by tourist targets: abs values and % share by tourist targets	All cities (from Act. 3.3.)
<b>The territorial distribution of craft activities: the dynamic map</b>	A map that shows the distribution of craft activities identified by the project in the urban space, and allow users to visualize their characteristics and the services delivered, according to the information collected in the previous points	All cities (from Act. 3.3.)

<b>Correlations</b>	<b>Raw data</b>	<b>Cities for which data are available</b>
<b>Tourism vs. cultural market</b>	Comparison of time series related to the tourism arrivals and that of visitor to museums and galleries	Sibenik, Ferrara
<b>Tourism arrivals and no. of audience at theatres</b>	Comparison of time series related to tourism arrivals and that of audience at the theatres	Ferrara

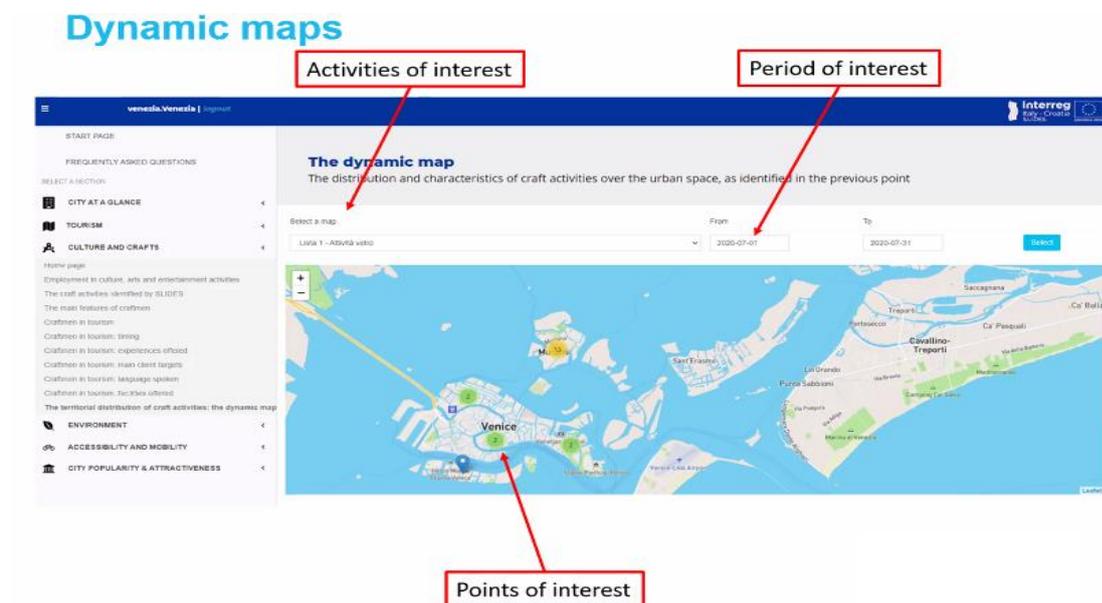


Figure 4. Culture and Crafts section

## 2.4. Section 4. Environment

Section 4 includes a set of indicators showing the city attention to environmental aspects and the impacts of tourism on waste production and consumption of local resources.

Indicators	Raw data	Cities for which data are available
<b>How greeny is my city? (% share)</b>	total green areas on total city area	Data heterogeneity- Venice (time series), Sibenik and Dubrovnik (single figure), Ferrara (2016-2017)
<b>Waste production</b>	Evolution of total production per year	All cities
<b>Contribution of tourism to waste production (CISSET estimate)</b>	Estimate of the waste production generated by tourists starting from total waste production, total population and total tourist overnight stays	All cities
<b>Water consumption</b>	Evolution of total consumption per year	Dubrovnik, Ferrara, Sibenik (single figure)

<b>Contribution of tourism to water consumption</b>	Estimate of the water consumption generated by tourists starting from total water consumption, total population and total tourist overnight stays	Currently not available
<b>Energy consumption</b>	Evolution of total consumption per year	Sibenik (single figure), Dubrovnik
<b>Contribution of tourism to energy consumption</b>	Estimate of the energy consumption generated by tourists starting from total energy consumption, total population and total tourist overnight stays	Currently not available
<b>Water pollution</b>	Level of pollution in sea water per 100 ml	Currently not available
<b>Air pollution</b>	Level of PM10 in the air, no. of days per month or per year PM10 exceeds threshold levels	High data heterogeneity - Venice, Ferrara, Sibenik
<b>Weather data</b>	Data on the evolution of temperatures, winds, etc. (annual/monthly data)	Dubrovnik
<b>Weather forecasts</b>	Maps and other tools showing the evolution of weather in the city	Not available

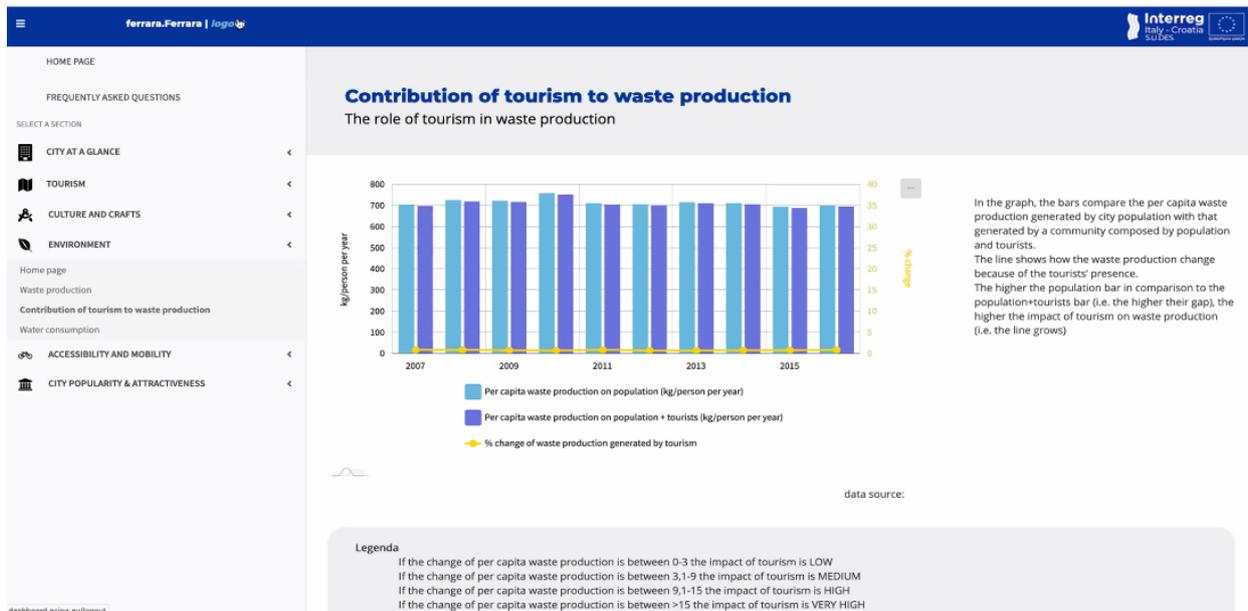


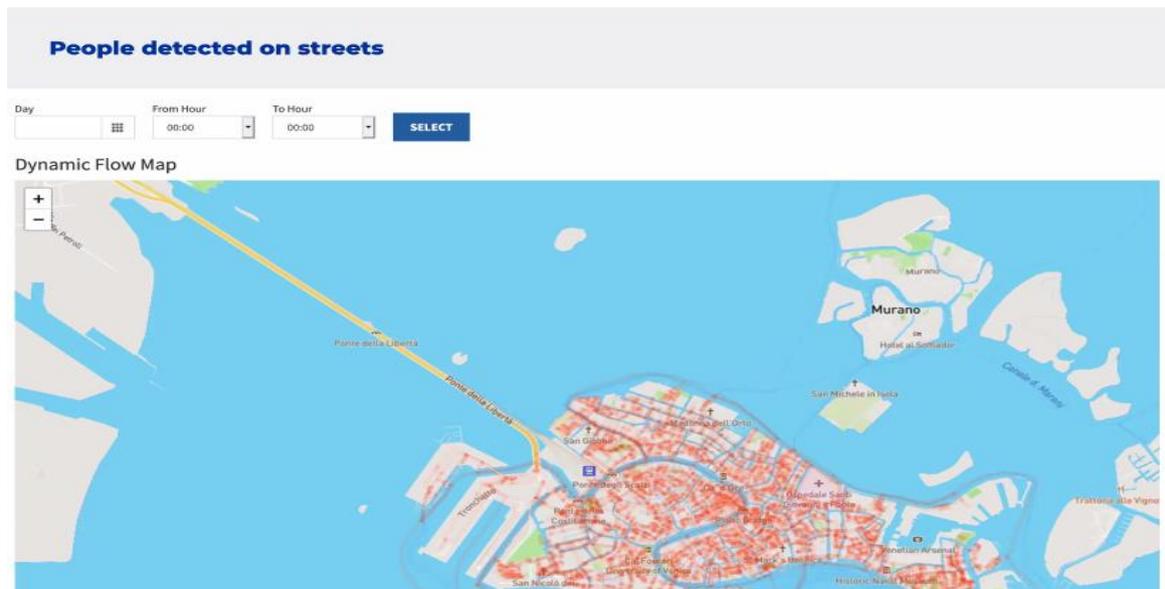
Figure 5. Visualization of environment data

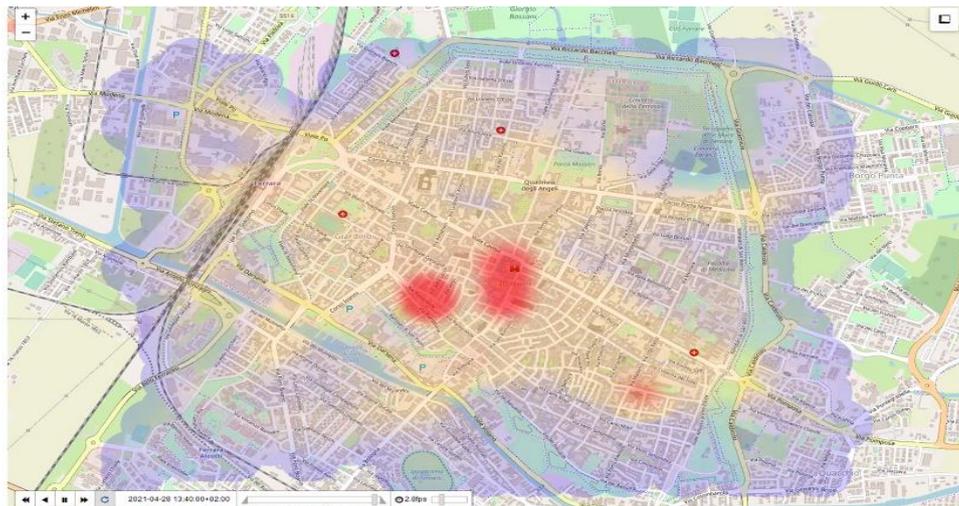
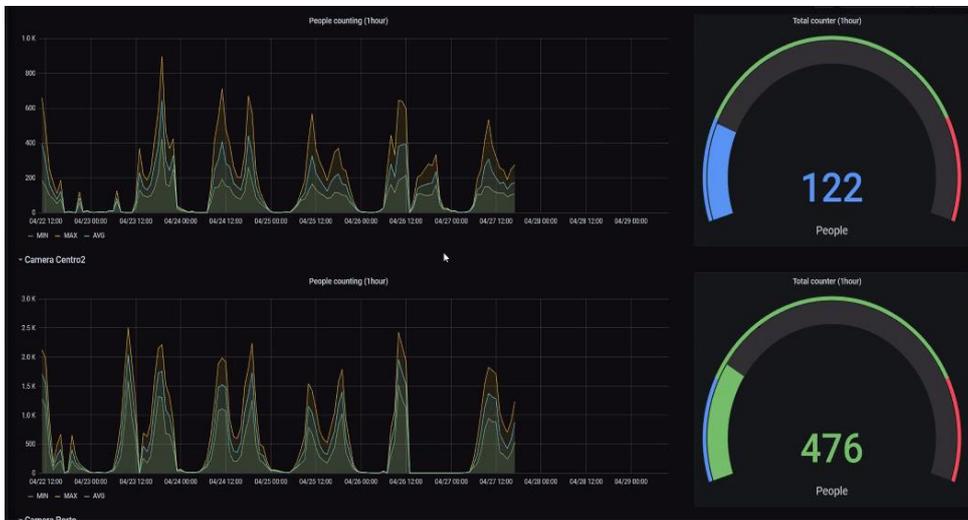
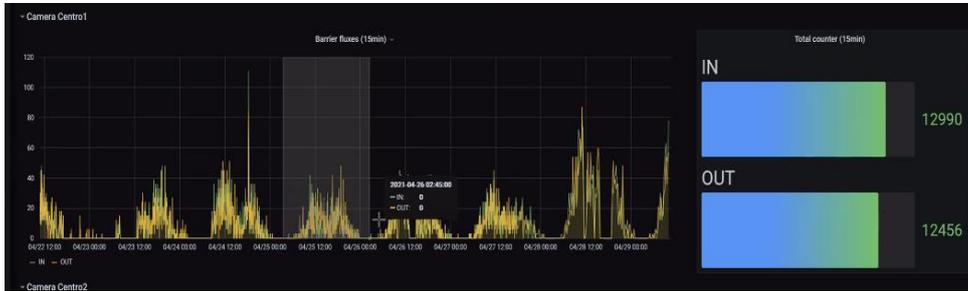
## 2.5. Section 5. Accessibility and mobility

This section provides indicators regarding the state of national/international and local mobility by mode of transport, and the current potential amount of traffic and pedestrian flows, merging data from the Accessibility and mobility section of the Datahub and the data collected by Activity 3.2. (nowcasting models, monitoring of visitor flows and mobility maps, simulations). As for the potential correlations with tourism data and craft data, they will be identified once mobility data will be collected and elaborated. More details on mobility models are available in Deliverable 3.2.1 Mobility database, Deliverable 3.2.2 Now-casting model, Deliverable 3.2.3 Dynamic mobility maps, Deliverable 3.2.4 Forecasting models of visitor's flows, and Deliverable 3.2.5 Simulation report.

Indicators	Raw data	Cities for which data are available
<b>Air accessibility and traffic</b>	Evolution of direct flights to the city airport from different cities/destinations by period	Bari, Dubrovnik, Venice (heterogeneous infos)
	Evolution of total passengers arriving to the city airport from different origins (national and international) by period	Bari, Dubrovnik
<b>Road accessibility and traffic</b>	Road density in the city land area (the total road network includes motorways, highways, and main or national roads, secondary or regional roads, and all other roads)	Sibenik
	Evolution of traffic flows (no. of vehicles, motorvehicles, etc.) in a specific time period	Sibenik
<b>Rail accessibility</b>	Average hourly no. of arrivals (between 06:00 and 20:00) of fast direct trains to the city, from other cities/greater cities	Italian cities only
<b>Boat accessibility</b>	Average no. of direct ferry connections per day, to partner cities from different cities/destinations	No data available
	No. of cruise calls by day and time slot (seasonal time schedules)	Sibenik
<b>Public transports</b>	No. of lines and seats offered	Sibenik, Dubrovnik
	No. of passengers carried	Bari
<b>Parking areas</b>	No. of parking areas and of parking spaces for cars and buses	Dubrovnik, Bari

<p><b>Pedestrian mobility</b></p>	<p>Map of the city mobility model; dynamic maps, heat maps and other graphical tools showing the current trends of pedestrian flows in the city in a given time period (day and time slot per day); projections displaying the evolution of visitor flows in specific time period</p>	<p>All cities (Activity 3.2.)</p>
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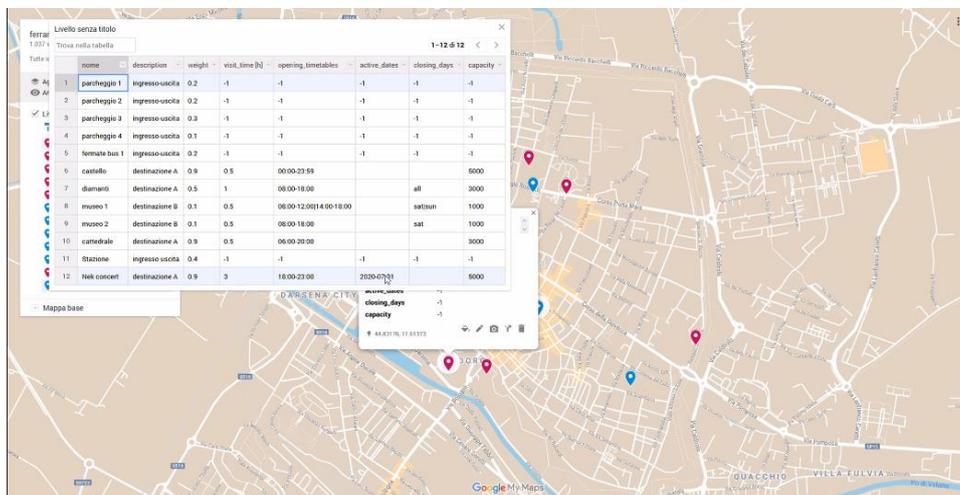


Figure 6. Visualizations of mobility data

## 2.6. Section 6. City attractiveness and popularity

The last section displays a set of indicators and correlations showing the popularity of the “city brand”, in general and from the tourism point of view, and the attractiveness of the city according to visitors’ perspective (what they consider worth visiting and suggest to other peers). All these information derive from the data retrieved from external online sources, in particular Google Trends and TripAdvisor.

In particular, Google searches on travel items related to each city and carried out all over the world and in the home country in a specific time period, are compared with the evolution of international and domestic arrivals in the same time period. The scope is to check if there is a relationship between “lookers” and “bookers”, i.e. whether and how the evolution of searches can be predictive of an evolution in tourism arrivals in the city.

Indicators	Raw data	Cities for which data are available
<b>Popularity of the city "brand" in the world (Google Trends)</b>	Trends of researches of the city on the item "travel" "flights" "hotels" all over the world vs. Trends of researches of the city on all items all over the world	All cities
<b>Popularity of the city "brand" in the home country (Google Trends)</b>	Trends of researches of the city on the item "travel" "flights" "hotels" in Italy/Croatia vs. Trends of researches of the city on all items in Italy/Croatia	All cities
<b>The city cultural attractions from the visitors' perspective (TripAdvisor)</b>	Total no. of cultural POIs (absolute values)	All cities
<b>Ranking of cultural attractions: what is my city "famous" for? (TripAdvisor)</b>	The Top10 cultural POIs, in total and by category, ranked according to the no. of reviews posted	All cities
<b>Cultural vibrancy of the city : how much visitors talk about the attractions (TripAdvisor)</b>	The average number of review posted per POI	All cities
<b>Cultural vibrancy of the city : how many attractions gain the attention of the visitors (TripAdvisor)</b>	No. of reviews related to the top 5 POIs/ total reviews (% share)	All cities
	No. of POIs with less than 20 reviews/total No. of POIs (% share)	All cities
	% share of reviews related to the top category of POI on those related to total POIs	All cities

Correlations	Raw data	Cities for which data are available
<b>Lookers vs. bookers in the international market</b>	Correlation between the trend of international travel searches on Google Trends and the trend of international tourism arrivals in the same time period (month)	All cities
<b>Lookers vs. bookers in the domestic market</b>	Correlation between the trend of domestic travel searches on Google Trends and the trend of domestic tourism arrivals in the same time period (month)	All cities

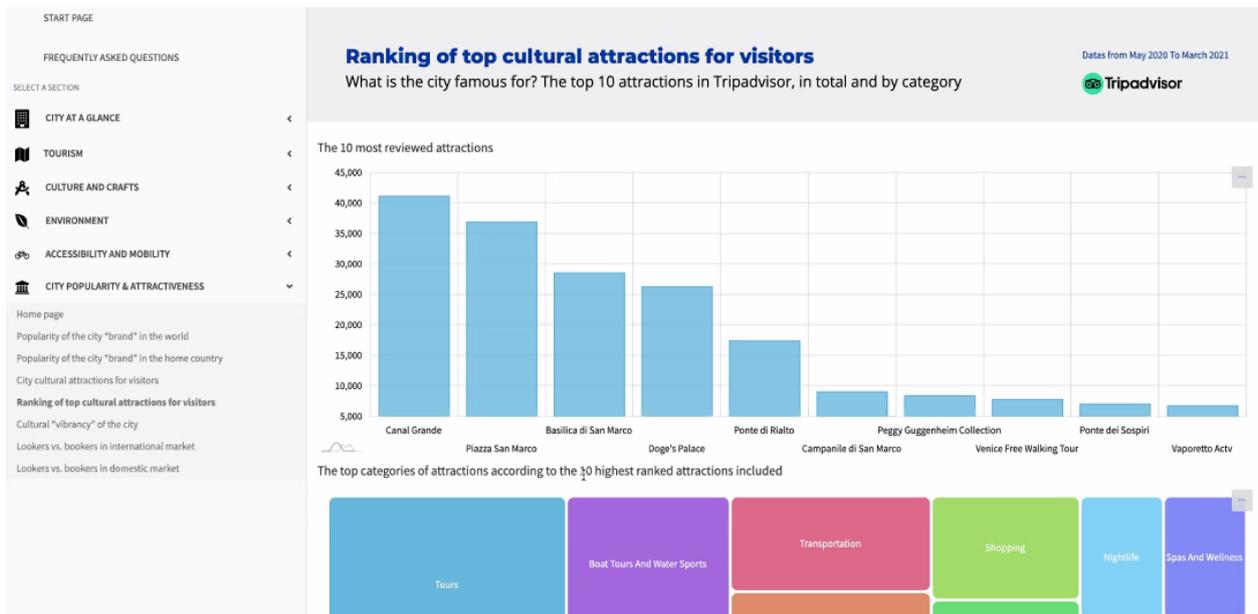


Figure 7. Visualizations of TripAdvisor data

### 3. Additional features

#### 3.1. Frequently asked questions

In order to help Dashboard users and provide them with additional information, a section with frequently asked questions was developed. At the moment, there can be found three questions- what data is updated in real time, who can access into the dashboard, and how can I download the charts. The section will be updated with new questions and information.

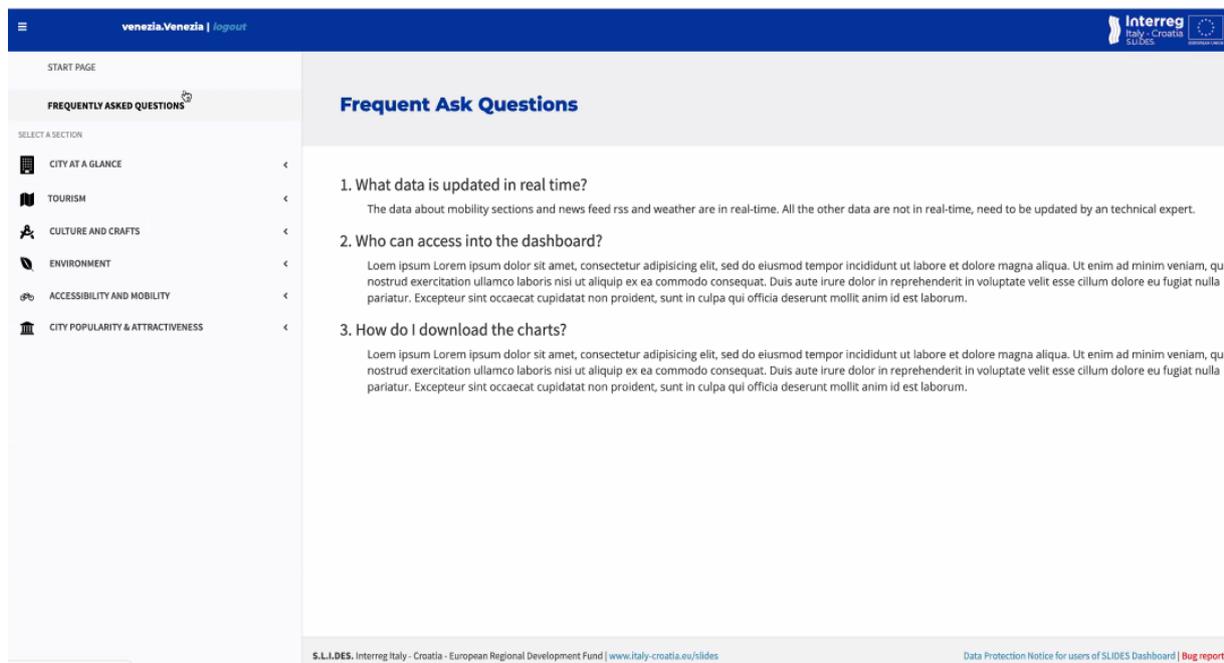
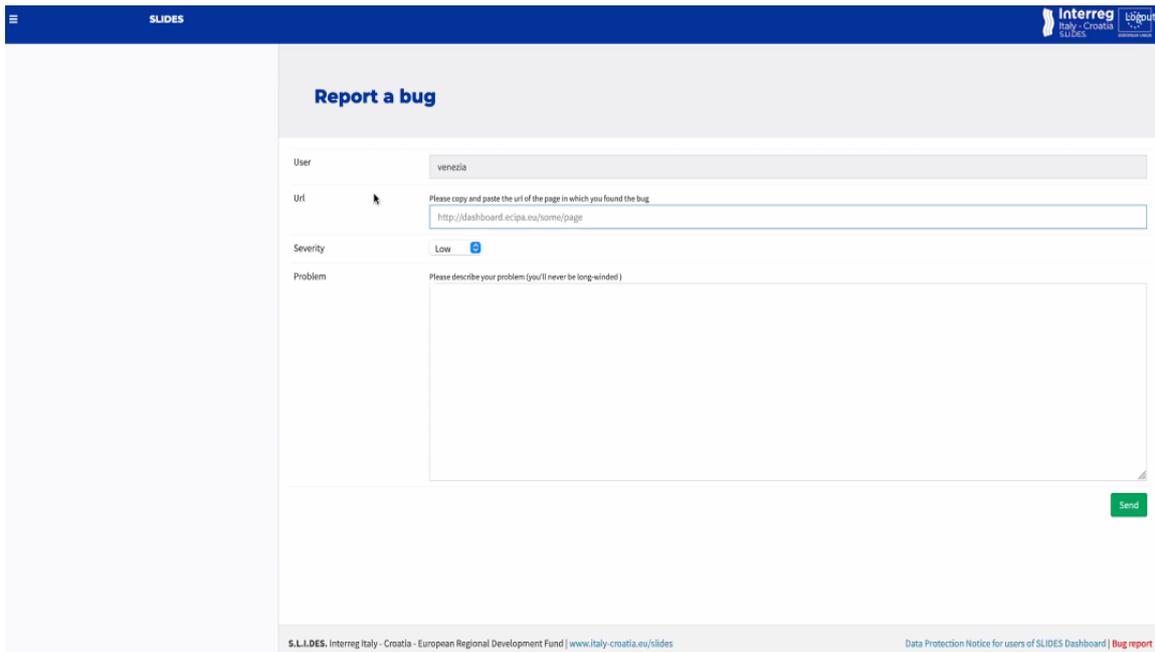


Figure 8. Frequently asked questions

#### 3.2. Report a bug

In addition, users have an option – Report a bug. This is very important, especially in the testing phase. Users can report, not just a disturbance, but also, their thoughts and comments on different

features. Each of the partner cities (Venezia, Bari, Ferrara, Dubrovnik, and Sibenik) has slightly different, custom made destination dashboard. They have different needs and require an individual approach for their problems. This tool allows them fast and efficient communication with technicians.



The screenshot shows a web interface for reporting a bug. The header is dark blue with the text 'SLIDES' on the left and the 'Interreg Italy - Croatia S.LI.DES.' logo and a 'Logout' button on the right. The main content area is titled 'Report a bug' and contains a form with the following fields:

- User:** A dropdown menu with 'venezia' selected.
- Url:** A text input field with the placeholder 'Please copy and paste the url of the page in which you found the bug' and the value 'http://dashboard.ecipa.eu/some/page'.
- Severity:** A dropdown menu with 'Low' selected and a plus icon to the right.
- Problem:** A large text area with the placeholder 'Please describe your problem (you'll never be long-winded)'.

A green 'Send' button is located at the bottom right of the form. At the bottom of the page, there is a footer with the text: 'S.LI.DES. Interreg Italy - Croatia - European Regional Development Fund | www.italy-croatia.eu/slides' and 'Data Protection Notice for users of SLIDES Dashboard | Bug report'.

Figure 9. Report a bug