D.5.1.2 Report on Surveys

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Introduction

The Moses report "D.5.1.2 Report on Surveys" summarize all the qualitative data collected thanks to the surveys to passengers and Moses services users conducted during the different pilot actions activities. The qualitative data related to the flows among Italy and Croatia were produced by Friuli-Venezia-Giulia Region in collaboration with Istrian Region and Primorje-Gorski Kotar County and they are here presented in a common way. No data are available for the Molise Region.

The **paragraph 1** presents the main results of the survey analysis showing all the details of the qualitative information collected during the Moses project. In the **paragraph 2**, starting from the collected data, some conclusions and recommendations are done in order to improve the replicability of the Moses pilot in others contexts. Finally, in the **Annexes**, it is possible to see the surveys format used for the qualitative data collection.

1. Qualitative data on Moses pilots

1.1 Analysis of touristic flows among Italy and Croatia

The pilot project set up by Friuli-Venezia-Giulia Region was intended to increase the range of cross-border maritime passenger services, linking for the first time three regions: Friuli-Venezia-Giulia, Region of Istria and Primorje-Gorski Kotar County. That was possible including in the

weekly schedule of the seasonal historical line, connecting Trieste to Istria (with stops both in Slovenia and in Croatia), a new line for two days a week (on Fridays and on Mondays) which connected Trieste to Mali Lošinj via Rovinj (on Fridays) and Pula (on Mondays).

The data of the overall maritime line and the data of that particular pilot line are showed in the tables below.

Total Passengers Numbers among Trieste and Mali Losinji (2018)		
2018	**TOT. Embarked passengers**	**TOT. Disembarked passengers**
Trieste	**5.034**	**5.079**
Piran	**1.849**	**1.736**
Poreč	**963**	**856**
Rovinj	**1.994**	**2.185**
Pula	**152**	**153**
Mali Lošinj	**535**	**518**
TOTAL	**10.527**	**10.527**

FIGURE 1. TOTAL HYDROFOIL PASSENGERS NUMBERS AMONG TRIESTE AND MALI LOSINJ IN 2018

MOSES LINE (2018)		
2018	**TOT. Embarked passengers**	**TOT. Disembarked passengers**
Trieste	**1.247**	**1.134**
Rovinj	**447**	**576**
Pula	**152**	**153**
Mali Lošinj	**535**	**518**
TOTAL	**2.381**	**2.381**

FIGURE 2. HYDROFOIL PASSENGERS ON THE MOSES LINE IN 2018

In terms of the nationality of the overall Triste to Croatia service users, the main results are summarized in the table below.

Number of passengers according to nationality	
Nationality	**Total passengers**
Afghanistan	**5**
Antigua And Barbuda	**4**
Argentina	**47**
Australia	**101**
Austria	**636**
Belarus	**8**
Belgio	**64**
Belize	**6**
Bosnia-Herzegovina	**12**
Brazil	**19**
Canada	**34**
China	**46**
Colombia	**10**
Croatia	**65**
Cuba	**2**
Czech Republic	**82**
Denmark	**14**
Dominican Republic	**2**
Estonia	**6**
Finland	**16**
Finlandia	**1**
France	**168**
Georgia	**6**
Germany	**659**

Greece	**4**
Hong Kong	**3**
Hungary	**258**
India	**6**
Ireland	**31**
Israel	**2**
Italy	**6.539**
Japan	**31**
Jordan	**1**
Lebanon	**2**
Macedonia	**5**
Marocco	**2**
Mexico	**6**
Mongolia	2
Montenegro	**2**
Netherlands	**76**
New Zealand	**9**
Norway	**36**
Poland	**73**
Portugal	**12**
Romania	**46**
Russia	**107**
Serbia	**49**
Slovakia	**48**
Slovenia	**259**
South Africa	**15**
South Korea	**7**
Spain	**117**
Sweden	**65**

Switzerland	**94**
Taiwan	**2**
Tunisia	**8**
Turkey	**10**
Ukraine	**52**
United Kingdom	**313**
United States	**220**
Zambia	**4**
Various	**160**
Total 2018	**10.527**

FIGURE 3. HYDROFOIL SERVICE AMONG TRISTE AND MALI LOSINJI IN 2018. NUMBER OF PASSENGERS ACCORDING TO NATIONALITY

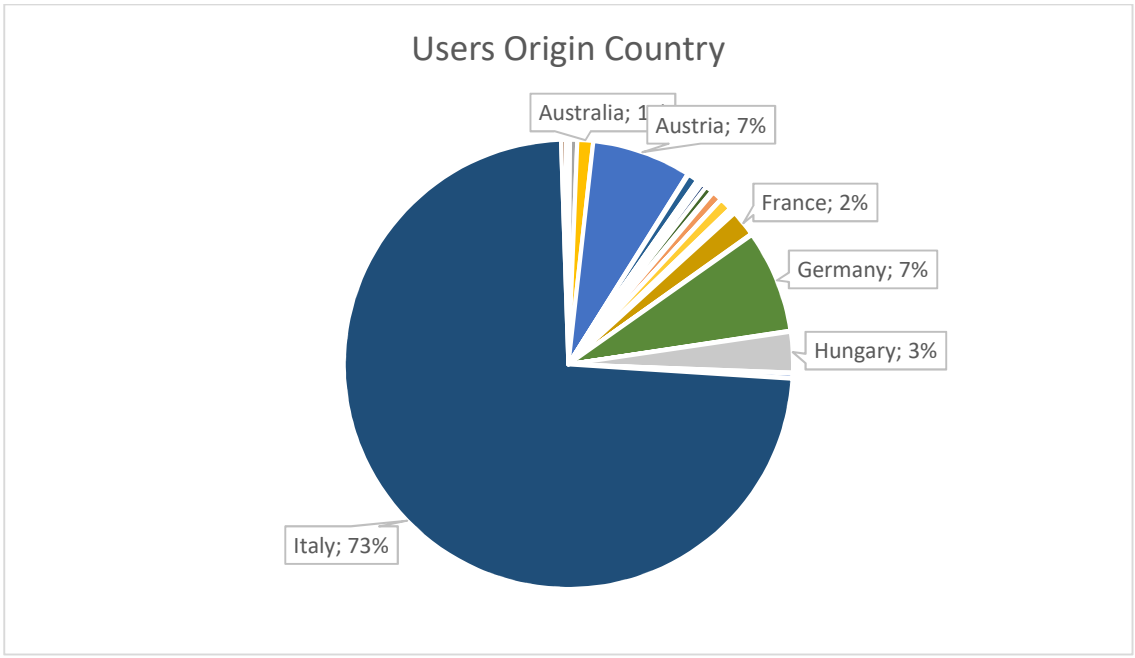


FIGURE 4. HYDROFOIL SERVICE AMONG TRIESTE AND MALI LOSINJI IN 2018. USERS ORGIN COUNTRY

In relation to the users' age, the table below shows the main details collected.

Number of passengers according to age	
Age	**Total passenger**
0	**7**
1	**19**
2	**29**
3	**32**
4	**64**
5	**66**
6	**41**
7	**33**
8	**90**
9	**60**
10	**103**
11	**93**
12	**134**
13	**117**
14	**73**
15	**57**
16	**68**
17	**50**
18	**79**
19	**88**
20	**95**
21	**135**
22	**116**
23	**134**
24	**104**

25	137
26	135
27	155
28	105
29	93
30	149
31	148
32	161
33	117
34	106
35	147
36	80
37	165
38	177
39	112
40	139
41	155
42	176
43	236
44	238
45	217
46	197
47	189
48	203
49	167
50	215
51	235
52	260
53	185

54	**212**
55	**207**
56	**234**
57	**265**
58	**215**
59	**245**
60	**214**
61	**179**
62	**189**
63	**157**
64	**198**
65	**158**
66	**120**
67	**174**
68	**137**
69	**129**
70	**109**
71	**105**
72	**114**
73	**55**
74	**80**
75	**63**
76	**55**
77	**45**
78	**109**
79	**54**
80	**35**
81	**32**
82	**30**

83	**14**
84	**13**
85	**7**
87	**22**
88	**8**
91	**7**
93	**6**
Total 2018	**10.527**

FIGURE 5. HYDROFOIL SERVICE AMONG TRIESTE AND MALI LOSINJI IN 2018. NUMBER OF PASSENGERS ACCORDING TO AGE

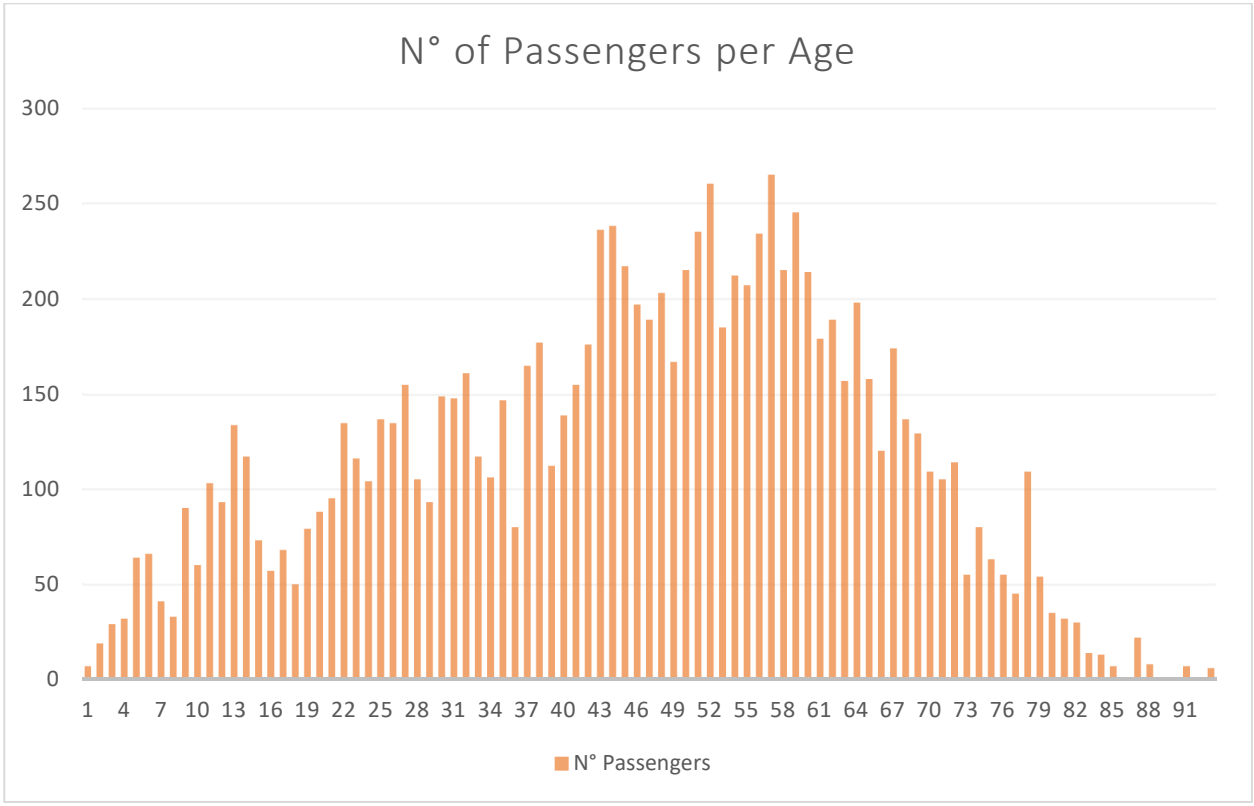


FIGURE 6. HYDROFOIL SERVICE AMONG TRIESTE AND MALI LOSINJI IN 2018. NUMBER OF PASSENGERS PER AGE

The introduction that new passenger maritime connection made it also possible to collect some interesting qualitative data on cross-border mobility throughout a survey carried out with a dedicated questionnaire (see Annex 2), in cooperation with Central European Initiative – CEI, as partner of the project INTER-CONNECT (Adrion Programme), to which FVG Region is an associated partner too. The main results of the interviews performed and the questionnaire collected are the following:

1) The service was rated attractive and satisfactory, with particular reference to touristic purpose;
2) In Trieste, the Passengers terminal (Molo IV) guarantee great potential in terms of intermodal trips, having its strength in its strategic location close to the railway station and the interurban bus station, with a stop of a local public transport bus line just outside the terminal. Nevertheless, some criticalities were pointed out by some passengers such as the information on the service, the ticket office, the pedestrian connection to the railway station;
3) For occasional users the perception of limited criticalities does not jeopardize the chance of making the choice of using the service and the overall assessment of a single trip for touristic reasons mainly (more that 2/3 of the passengers interviewed were using the service for the first time);
4) An increase on the side of the information to users could be improved, especially to enlarge the use of the service from people who live outside the cross-border area interested (foreign users too), considering that more that 1/3 of the interviewed live in Trieste area;

With reference to the usage of the intermodality options chosen by the line passengers to reach the Passengers terminal, the data collected were the following:

- **35%** used the car;
- **23%** used the bus;
- **21%** used the train;
- **11%** went on foot;
- **4%** used the bicycle;
- **3%** used the taxi;
- **6%** used other means of transport.

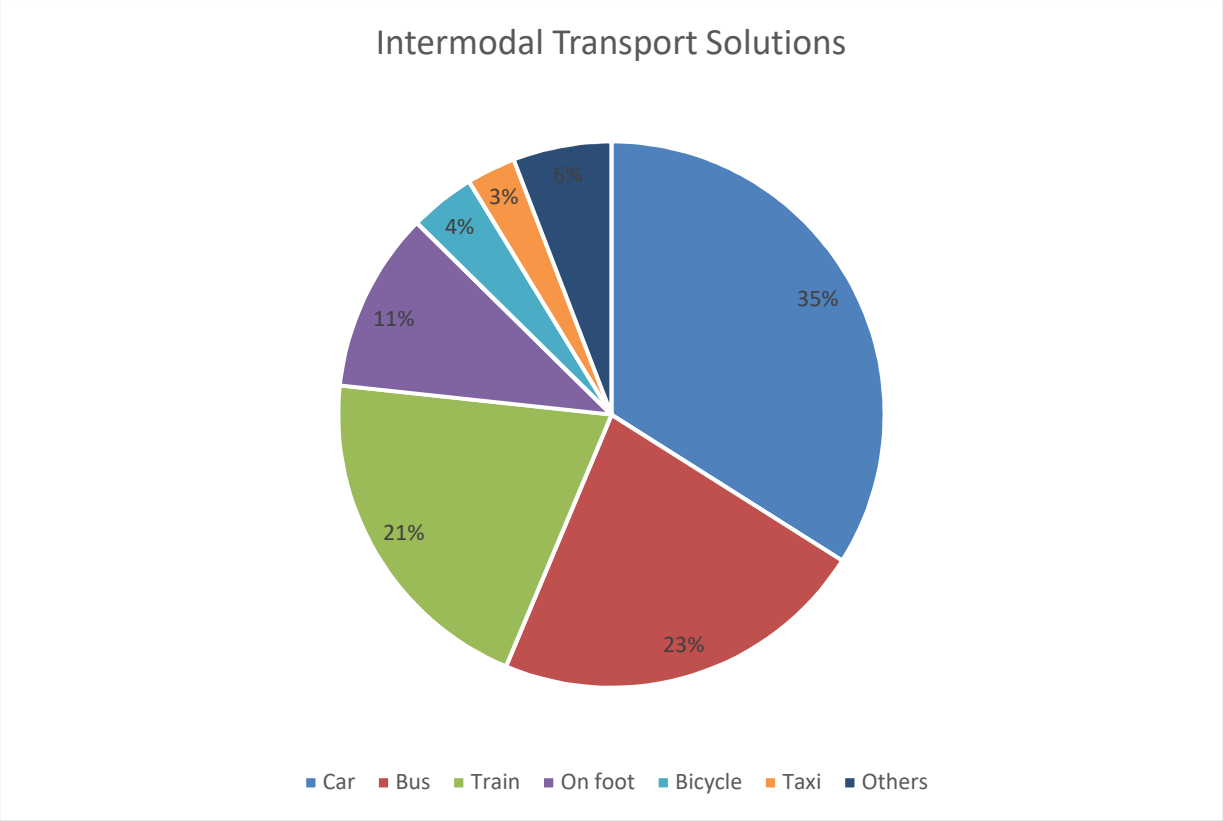


FIGURE 7. HYDROFOIL MOSES PILOT. INTERMODAL TRANSPORT SOLUTIONS ADOPTED TO REACH THE PORTS

The above figures show that if mobility options, alternative to car, are available, passengers are keen to use them and trips based on intermodality are indeed a choice they make.

Complimentary and synergic with the pilot maritime line were also the activities performed by the project partners Primorje-Gorski Kotar County and Region of Istria.

1.2 Analysis of surveys collected during the Ravenna pilot

During the Moses pilot testing activities in Ravenna**, 28 uses** were registered and documented with the compilation of a dedicated survey (see Annex 1 for more detail on the text of the survey) and the GPS monitoring. In relation to these 28 uses, **5 persons** were **crew members**, the others were **independent passengers**.

Country	N°
Canada	15
USA	4
Australia	2
Italy	2
Philippines	2
Scotland	1
Unknown	2
Total	28

FIGURE 8. MOSES PILOT IN RAVENNA. SURVEYS COLLECTED PER COUNTRY

As evidenced in the table above, most of the Moses electric bikes sharing service' users in Ravenna were **foreigners**, mainly coming from Canada.

In relation to the users' age, it is possible to see as the average age was quite high. This was an expected result as others survey campaigns conducted in the past years shown as the average age of the cruisers tourists arriving in Ravenna is quite high.

	Age
Average users' age	**48**
Maximum users' age	**78**
Minimum users' age	**25**

FIGURE 9. MOSES PILOT IN RAVENNA. DATA ON MOSES ELECTRIC BIKES USERS' AGE

These data confirmed one the Moses pilot objective in Ravenna related to the use of the electric bike as an attractive, reliable and sustainable solution for aged tourists arriving in port areas. As demonstrated by these data, electric bikes could be a valuable solution for aged people and with reduced mobility not able to use traditional bikes, also in long distance.

For many of the Moses electric bikes sharing service users, it was the first time they use an electric bike. This is a very interesting data as it confirm the role of these sharing services in promoting electric mobility among people. In fact, as evidenced in the scientific literature on these topics, often the electric vehicles (cars and bikes) have an high price and this is one of the biggest barrier in electric mobility large penetration in the market.

First time using an electric bike	
Yes	20
No	8

FIGURE 10. MOSES PILOT IN RAVENNA. DATA ON ELECTRIC BIKES PREVIOUS EXPERIENCES.

This data, even if not representative from a statistic point of view, confirmed the importance of these sharing services in disseminate a new electric mobility awareness and culture.

Very few replies were collected in relation to the willingness to pay for such a sharing service with electric bikes. During the Moses test activities in Ravenna in summer-autumn 2018, all the electric bikes were provided for free. Starting from the limited number of replies collected, it is possible to notice as in general people are available to pay among **15€ and 20€** for a daily rent of an electric bike.

Starting from the opinions collected thanks to the survey (see Annex 1), it was possible to collect information on the satisfaction level of the sharing service and of the provided electric bikes.

The **100%** of the Moses sharing service users declared to be very satisfied of the service provided by the Moses project. The same for the perceived quality of the electric bikes provided. The **100%** of users declared the quality of the electric bikes is very high. During the conduction of the testing activity no problems occurred in using your electric bikes. There were only 2 mechanical problems related to tyres deflated.

The survey allowed also to collect data on the destinations reached by the Moses electric bikes sharing service. As evidenced in table below, the largest part of the users used the electric bikes for cover short distances. The largest part of the users reach the Ravenna beaches, pine forests and two piers which are close to the Ravenna Cruise Terminal. The most interesting data for the scope of the Moses project are the 8 persons who reached the Ravenna city centre using the Moses electric bikes.

Destinations	N°
Ravenna beaches	23
Pine forests	22
Historical city centre	8
Ravenna Piers	8

FIGURE 11. MOSES PILOT IN RAVENNA. DESTINATIONS DECLARED BY USERS IN THE SURVEY (MORE THAN ONE ANSWER IS POSSIBLE).

Interesting data were also collected in relation to the use of intermodal transport solutions. As evidenced in the table below, during the use of the electric bikes 9 persons use the public transport (bus) and 8 persons used the ferry that allow to cross the sea channels (Canale Candiano) separating the Ravenna cruise terminal from the southern beaches and villages.

Intermodality solutions	N°
Public transport (Bus)	9
Ferry	8
Shuttle service	7

FIGURE 12. MOSES PILOT IN RAVENNA. INTERMODAL SOLUTIONS ADOPTED DURING THE USE OF THE MOSES ELECTRIC BIKES (MORE THAN ONE ANSWER IS POSSIBLE).

In relation to the bike infrastructures quality in the study area, all the users ranked 10 on 10 the quality of the cycle infrastructures outside the Ravenna Cruise Terminal (cycle paths, cycle crossing, road signage, etc.). All the users declared to had found in the Ravenna Cruise Terminal

all the needed information to organize the electric bikes trips with the rented electric bike. In relation to this topic it is important to underline as needed to evidence that during all the Moses pilot activities there where in the cruise terminal a dedicated person in charge of providing all the required touristic information to the cruisers. Finally, the large part of the respondents declared that the Ravenna Cruise Terminal's sustainable transport offer was better compared to the others visited ports during the cruise.

2. Conclusions and lessons learnt

The collected qualitative data are very helpful in providing some policy recommendations for the development of innovative and efficient sustainable and intermodal transport solutions in Italy-Croatia ports areas.

With reference to the Friuli-Venezia-Giulia pilot, the qualitative data collected shows that there is room for increasing the offer of multimodal trips which have in the maritime cross-border section its main focus. People are keen to use different combination of transport modes, especially if there are tourists. People should anyway get free and easy access to all the needed information to be able to opt for a multimodal trip. At the end of the day, the range of services at each transport node and in between should be carefully planned to avoid making a multimodal trip seen as a bad experience.

With reference to the Ravenna pilot, these are the main lessons learnt by the implementation and analysis of the Moses pilot:

- Light electric vehicles are a reliable solution for increase in a sustainable way (environmental and economic) public transport offer in small port areas;

- E-bikes are a reliable and efficient transport solution for the promotion of sustainable and intermodal transport solutions in seaside touristic areas;
- E-bikes are a valid solution in delivery a reliable and efficient transport solution on medium/long distances;
- The Mobile Depot is a valuable solution for supporting transport sharing services in areas with an high variability in touristic flows;
- Cycle paths are fundamental in supporting the growing of innovative and sustainable new transport solutions;
- E-bike is a valid solutions for the promotion of a sustainable mobility solutions among old people;
- In the promotion of sustainable transport behavior, it is of crucial importance to provide intermodal transport information to final users in an easy and integrated way.

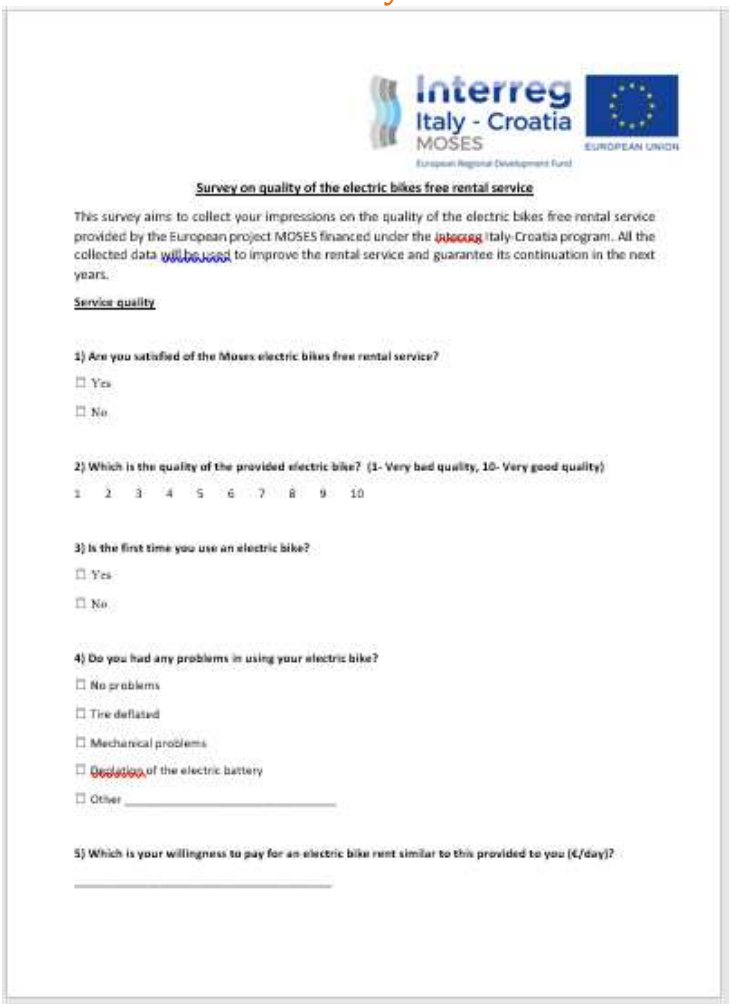
It is possible to identify the 3 pillars for successful, sustainable and reliable transport connections in small touristic ports and low demand peripheral areas: Public transport solutions (in our case the e-bike), provision of reliable intermodal transport information to tourists (in our case an Info Board app allowing to provide transport information by smartphone directly to final users) and infrastructures (in our case cycle paths connecting the cruise terminal with the city center).

FIGURE 13. THE 3 PILLARS FOR THE DEVELOPMENT OF A SUCCESSFUL PILOT DEVELOPMENT IN SMALL TOURISTIC PORTS AND LOW DEMAND PERIPHERAL AREAS.

Annexes

This Annex contains the two survey used for the data collection in the different pilot developed during the Moses project.

Annex 1. Ravenna survey



Survey on quality of the electric bikes free rental service

This survey aims to collect your impressions on the quality of the electric bikes free rental service provided by the European project MOSES financed under the Interreg Italy-Croatia program. All the collected data will be used to improve the rental service and guarantee its continuation in the next years.

Service quality

1) Are you satisfied of the Moses electric bikes free rental service?

☐ Yes

☐ No

2) Which is the quality of the provided electric bike? (1- Very bad quality, 10- Very good quality)

1 2 3 4 5 6 7 8 9 10

3) Is the first time you use an electric bike?

☐ Yes

☐ No

4) Do you had any problems in using your electric bike?

☐ No problems

☐ Tire deflated

☐ Mechanical problems

☐ Deviation of the electric battery

☐ Other _____

5) Which is your willingness to pay for an electric bike rent similar to this provided to you (€/day)?

_____

Touristic experience in Ravenna with the electric bike

6) Which destination have you reached during your electric bike tour in Ravenna?

☐ Ravenna beaches

☐ Pine forests

☐ Ravenna historical city center

☐ Other _____

7) Which is your opinion on cycle infrastructures outside the Ravenna Cruise Terminal (cycle paths, cycle crossing, road signage)? (1 Very Bad -10 Very Good).

1 2 3 4 5 6 7 8 9 10

8) Did you found in the Ravenna Cruise Terminal fund all the information to organize your trips with the rented electric bike?

☐ Yes

☐ No

9) Did you use public transport in your touristic trip in Ravenna?

☐ No public transport

☐ Ferry-boat

☐ Bus

☐ Train

☐ Other _____

10) How do you view the Ravenna Cruise Terminal's sustainable transport offer compared to the others ports you visited? (1 Very worst compared to others ports - 10 Very better compared to others ports)

1 2 3 4 5 6 7 8 9 10

11) Which kind of sustainable transport service you would like to find in a cruise port in the future?

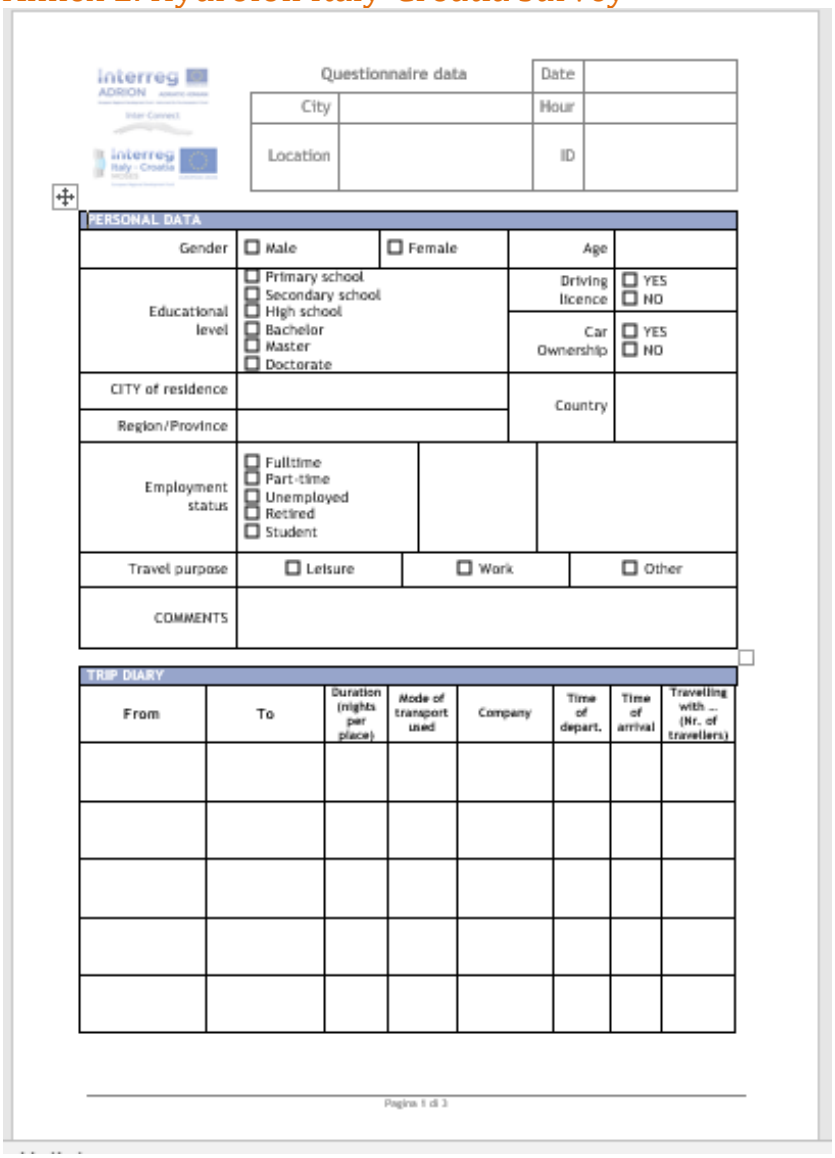
☐ Electric cars

☐ Electric motorcycles

☐ Segway

☐ Other_____

Annex 2. Hydrofoil Italy-Croatia survey



Questionnaire data		Date	
City		Hour	
Location		ID	

PERSONAL DATA

Gender	☐ Male ☐ Female	Age	
Educational level	☐ Primary school ☐ Secondary school ☐ High school ☐ Bachelor ☐ Master ☐ Doctorate	Driving licence	☐ YES ☐ NO
		Car Ownership	☐ YES ☐ NO
CITY of residence		Country	
Region/Province			
Employment status	☐ Fulltime ☐ Part-time ☐ Unemployed ☐ Retired ☐ Student		
Travel purpose	☐ Leisure	☐ Work	☐ Other
COMMENTS			

TRIP DIARY

From	To	Duration (nights per place)	Mode of transport used	Company	Time of depart.	Time of arrival	Travelling with ... (Nr. of travellers)

SATISFACTION - Current mode		
Main mode of transport used for the transnational trip (from origin country to destination country):	☐ Car ☐ Bus ☐ _____ ☐ Rail ☒ Ferry	
Level of satisfaction from the transport mode stated above	☐ Very satisfied ☐ Little satisfied ☐ Satisfied ☐ Unsatisfied	

Please rate the following criteria for the above mode you used for the transnational part of the trip) according to the following criteria:
SATISFACTION - from 1 "not at all satisfied" to **5** "very satisfied"
SIGNIFICANCE - from 1 "not very significant reason for choosing the transport mode" to **5** "very crucial parameter for choosing the current mode for my transnational trip"

	SATISFACTION					SIGNIFICANCE				
Cost	1	2	3	4	5	1	2	3	4	5
Trip Duration	1	2	3	4	5	1	2	3	4	5
Reliability	1	2	3	4	5	1	2	3	4	5
Frequency	1	2	3	4	5	1	2	3	4	5
Safety	1	2	3	4	5	1	2	3	4	5
Nr. of intermediate stops / transfers	1	2	3	4	5	1	2	3	4	5
Easiness of travelling	1	2	3	4	5	1	2	3	4	5
Comfort	1	2	3	4	5	1	2	3	4	5
Accessibility	1	2	3	4	5	1	2	3	4	5
Other: please state _____	1	2	3	4	5	1	2	3	4	5
COMMENTS										

CUSTOMIZED questions for local pilot										
Already used this service?	☐ YES / ☐ NO		Used other maritime regional services ("Delfino Verde")?	☐ YES / ☐ NO	...				
Would you be interested in an additional stop in Koper?				☐ YES / ☐ NO					
How would you rate information provision/availability on										
Maritime service	1	2	3	4	5	6	7	8	9	10
Terminal accessibility by Public Transport	1	2	3	4	5	6	7	8	9	10
Options for reaching relevant Points of Interest and landmarks in Trieste and surrounding areas	1	2	3	4	5	6	7	8	9	10
Which is the importance of the following attributes in order to improve the usage and appeal of Public Transport for land-side accessibility from/to the Maritime Terminal (~~Molo~~ IV)?										
Frequency of Local Public Transport	1	2	3	4	5	6	7	8	9	10
(On Board) Travel time to the destination	1	2	3	4	5	6	7	8	9	10
Cost of Local Public Transport tickets	1	2	3	4	5	6	7	8	9	10
Information provision to the users	1	2	3	4	5	6	7	8	9	10
Pedestrian path to the train station	1	2	3	4	5	6	7	8	9	10
Others (please state) _____	1	2	3	4	5	6	7	8	9	10
COMMENTS										

OTHER MAIN COMMENTS

STATED PREFERENCES SURVEY - See annexes