

OUTPUT 4.1 Strategies to ease the transfer of experience

WP4 "Intermodal Seamless Solutions"

PP03 - VIU
PPS involved: LP – ITL; PP03 - VIU

PP. 05 - KIP Date: May 2020



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Output summary

0.4.1 - ICARUS

WP4 "Intermodal seamless solutions" is composed of 4 different interlinked activities whose common main goal is testing intermodal seamless solutions for passenger essential to provide the knowledge and the background required by the other work packages.

Output 4.1 include strategies to ease the transfer of experience: it collects all the methodologies, templates, KPIs, guidelines and rules of the WP in order to develop smooth pilots. It is a methodological result of the project which set the basis for the correct implementation of delicate processes in the WP4.

It's a "methodological package" supporting the 10 project partners in implementing 8 pilot actions to improve intermodal connections in the ICARUS regions. The methodological package is made up of three parts:

- Deliverable D.4.1.1. "Methodology for the implementation of the pilot actions" aims to standardize the reports thanks to specific guidelines and a structure that PPs will follow to develop the report of their local pilot activities
- Deliverable D.4.1.2. "Monitoring and assessment methodology" aims at standardize (1) the state of actions carried out in different Countries involved; (2) to homogenize the collection of data and information, (3) to verify the consistency between what has been achieved during the Pilot Actions development and what was planned in the original Application Form.
- Deliverable D.4.1.3. "ICARUS Change of behaviour strategy" explains how the goal of increasing
 the awareness of solutions put into place will be achieved by targeting eleven target groups:
 general public; public authorities; regional development agencies; enterprises; transport
 operators; infrastructure providers; transport associations; regional innovation agencies; NGO's;
 education and training organisations; and universities and research institutes to change their
 perception of public transport.

Expected impact and benefits of the output

The main impact and benefit of the output is to support the Project Partners in sharing a common and transnational approach in the development of their local activities, under different levels:

• for *accountability purposes*, in order to report towards the European Commission how the funding has been used and which are the results achieved at locally level.



- for *narrative and documentary purposes*, as it will be able to describe what happens during the project implementation in the 8 Partners involved by Pilot Actions.
- to *formative purposes*, because it aims to provide recommendations and appropriate adjustments in order to improve the quality of the whole project.
- to assessment purposes, because it aims to verify strengths and weaknesses of the Pilot Actions
 and whether its objectives and expected results have been achieved in terms of objective's
 fulfilment, effectiveness, sustainability and impact.

The set of strategies have also the main objective to be re-used in other activities, within and outside of the project. For example, the set of methodologies can be used immediately by the ETP members in case the decide to proceed with the implementation of the action plans.

Reference to deliverables and activities

This output is made of 3 documents:

- Deliverable D.4.1.1. "Methodology for the implementation of the pilot actions"
- Deliverable D.4.1.2. "Monitoring and assessment methodology"
- Deliverable D.4.1.3. "ICARUS Change of behaviour strategy"



D.4.1.1 ICARUS Methodology for the implementation of the pilot actions

WP4 Intermodal Seamless Solutions

A.4.1 ICARUS strategies for seamless intermodal mobility solutions

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Table of Contents

1.	Introduction			
2.	2. Scope of this deliverable			
3.	. Structure			
4.	Wha	at to include in each chapter?	6	
4	.1	Background: the regional context	6	
4	.2	Scope and description of the pilot action	6	
4	.3	Resources and externalization needs	6	
4	.4	Implementation of the pilot action	6	
4	.5	Monitoring and assessment of the pilot action	7	
4	.6	Stakeholder involvement and peer review meetings results	7	
4	.7	Lessons learnt	7	
4	.8	Conclusions	7	
4	.9	References	8	
4	.10	Annexes	8	



1.Introduction

ICARUS project aims to improve the passenger intermodal connections to ease access to the coast for the hinterland population by activating behavioural change in mobility by using the Mobility as a Service, a concept which moves passenger needs from the transport means to the mobility service. More specifically, 8 pilot projects and a case study will be implemented focusing on timetable harmonisation, car/bike sharing within transport nodes, ICT solutions for seamless flow of information, integrated intelligent multimodal payment systems, dynamic travel planning and cross-border intermodal services. The planned activities will be tested in the regions of Emilia-Romagna, Abruzzo, Veneto, Friuli Venezia Giulia, Primorsko-Goranska, Istrian Region and throughout the Croatian railway area.

WP4 "Intermodal Seamless Solutions" is made of different interlinked activities which have the main aim to test intermodal seamless solutions for passengers. It focuses on the development and implementation of the pilot actions and ensures the smooth, and lays the methodology behind it, as well as involvement of stakeholders for behavioural change and the enlargerd transfer programme of ICARUS.

ICARUS' pilots will prove the possibility to better integrate intermodal passenger transport system through harmonization of different types of soft/hard interventions, which are listed below:

- 1. Infrastructural accessibility in Friuli Venezia Giulia region (FVG);
- 2. Seamless crossborder multimodal transport solutions in Friuli Venezia Giulia region (FVG);
- 3. Integration of ICT tools for travel planning, smart card & payment in Emilia Romagna region (RER);
- 4. Sustainable intermodal solutions between coast and hinterland area in Istria with the main focus on bike and train (IDA);
- 5. Upgrading existing web/mobile application (ISPRO) (HZPP);
- 6. Common tariffs and harmonized timetables in Rijeka (RDA Rijeka);
- 7. Promotion of alternative to car intermodal transport solution via web application in (KIP);
- 8. Infomobility with real time check in and tracking for passengers in (ARAP).

Moreover, there will be a study performed by VIU on Bike+train+ferry transnational corridor in north Adriatic axis.



2. Scope of this deliverable

Deliverable D.4.1.1. "Methodology for the implementation of the pilot actions" aims to standardize the reports thanks to specific guidelines and a structure that PPs will follow to develop the following deliverables:

- D.4.2.1 Intermodality bike-train development from hinterland to the coast in FVG
- D.4.2.2 Cross-border intermodal services put in place
- D.4.2.3 Bike+train+ferry transnational corridor in north Adriatic axis¹
- D.4.2.4 Integrated ticketing system in HR (Upgrading existing ticketing system in bike + train category)
- D.4.2.5 Boosting intermodal solutions through ICT
- D.4.2.6 Dynamic travel planner for seamless intermodal solutions
- D.4.2.7. Sustainable intermodal solutions between coast and hinterland area in Istria with main focus on bike and train
- D.4.2.8 Fostering bike-bus-train-ferry intermodality in coastal areas and related hinterland
- D.4.2.9 ICT Systems to better connect coast and hinterland

¹ This activity is a pilot action, but for the purpose of this deliverable, i twill be treated as pilot action



3. Structure

Reports D.2.1-D.2.9 are among the most important documents that will be produced by the ICARUS project. They will report on the implementation of the pilot actions and will provide the basis for the transferring activities envisaged in A.4.4. Enlarged Transfer Programme as well as as the policy plans recommendations.

All reports are expected to follow this table of contents. There is no maximum length, we consider 30 pages the minimum to ensure a document that covers all aspects.

- 1) Background: the regional context
- 2) Scope and description of the pilot action
- 3) Implementation of the pilot action
- 4) Monitoring and assessment of the pilot action
- 5) Peer review meeting and stakeholders involvement
- 6) Lessons learnt
- 7) Conclusions
- 8) References
- 9) Annexes



4. What to include in each chapter?

4.1 Background: the regional context

In this chapter (not more than a couple of pages), the main outcomes of corresponding report D.3.2.2-D.3.2.8 will be summarized. Specifically, the main challenges, needs, gaps found in each Region should be highlighted, as well as the results from the surveys (D.3.2.2 Survey to users to identify mobility gaps).

4.2 Scope and description of the pilot action

Describe explicitly and in detail the scope of the action and its general context.

This section should present a detailed description of the envisaged pilot action, including:

- Purpose of the pilot action, including its contribution and how it fosters multimodality in the Programme Area;
- Cross-border value.
- History of the pilot action, and if there is planning plans foreseeing this action.
- Technical requirements;
- SWOT and risk analysis describing any factors affecting the pilot action;
- Adaptation to the local context: how does the action take into consideration the needs of the local context?

4.3 Resources and externalization needs

- Describe the human and financial resources needed for the pilot action
- Describe the framework for the procurement of external services/ experts that would apply in your case for the scope of the pilot action
- Describe the organization chart and responsibilities of the staff involved, in relation to the procured services and the implementation of the pilot action.

4.4 Implementation of the pilot action

This section focuses on the implementation of the pilot action. Include:

- Timeframe of the pilot action (foreseen and actual), if there was any deviation, please specify why it occurred and how you overcame the issues.
- List of the phases of the pilot action;



- Description of the implementation of each phase of the pilot action;
- List of stakeholders involved in what phase
- Photos (before and after)

4.5 Monitoring and assessment of the pilot action

This section should follow the methodology set out in D.4.1.2 Monitoring and assessment methodology.

4.6 Stakeholder involvement and peer review meetings results

In this section, the outcome of the peer review meetings and stakeholder involvement should be taken into consideration. It should not be a description of each meeting, but rather the general lessons and outcomes that came out from those activities, and how they contributed to shape the pilot action.

From this chapter, it should be clear how the peer review meetings and the inputs from the stakeholders contributed to the development of the pilot.

4.7 Lessons learnt

This section should be dedicated to describe the lessons learnt by implementing the pilot.

Some questions to help you reflect on your pilot:

- If you could re-do you pilot action differently, what would you do?
- If you could give advice to another city implementing your pilot action, what would it be?
- How did you use this experience to intermodality in your city?
- Were your expectation realistic?
- What problems did you face and how did you overcome them?

4.8 Conclusions

Last but not least, each testing partner should draw conclusions on the activities related to the pilot action. These should include:

- What were your expectations at the beginning of the pilot action? Did the pilot meet your expectations?
- What was the impact of the pilot action?
- What is the legacy of the pilot action? How will it live on?
- Reflections on the implementation of the pilot activity



4.9 References

Relevant references should be included.

4.10 Annexes

Relevant annexes should be included.



D.4.1.2

Monitoring and assessment methodology

WP4 Intermodal Seamless solutions

A.4.1 ICARUS strategies for seamless intermodal mobility solutions

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Table of Contents

Τa	Table of Contents2				
	. Introduction				
		The ICARUS project			
		About this deliverable			
2	M	onitoring activities	5		
3	Ev	aluation activities	6		
	3.1	The evaluation of R.O.M. dimensions (Annex II)	7		
	3.2	The final assessment of the project results (Annex III)	9		
4	М	& E program	10		





1 Introduction

1.1 The ICARUS project

The goal of the Interreg Italy- Croatia ICARUS project is to create new intermodal solutions taking into consideration passengers' mobility needs and allowing the maximum level of flexibility for users. This goal will be achieved thanks to:

- Improvement of passengers' intermodal connections in and between the territories of the Programme area;
- Foster of behavioural change of transport users and increasing the use of intermodal low carbon transport solutions;
- Creation of seamless multimodal and environmentally friendly intermodal transport solutions
- Easing the sustainable transport integration of the coastal and hinterland areas
- Boost of existing or new maritime connections among the Italian and Croatian coasts by raising the level of service of ports land side.

To improve passenger intermodal connections and ease access to the coast for the hinterland population, mobility behavioural change the involved area will be promoted using the Mobility as a Service (MaaS), a concept which moves passenger needs from the transport means to the mobility service. MaaS and ICT are among ICARUS' three pillars, which also include Intermodal Mobility and behavioural change.

Thanks to ICARUS, partners will carry out and implement 8 pilot projects and a case study focusing on timetable harmonisation, car/bike sharing within transport nodes, ICT solutions for seamless flow of information, integrated intelligent multimodal payment systems, dynamic travel planning and cross-border intermodal services.

The planned activities will be tested in the regions of Emilia-Romagna, Abruzzo, Veneto, Friuli Venezia Giulia, Primorsko-Goranska, Istrian Region and throughout the Croatian railway area.





1.2 About this deliverable

Deliverable D.4.1.2. "Monitoring and assessment methodology" is part of the overall "Methodology for the implementation of the pilot actions" (D.4.1.1). The methodology described in the following paragraphs has been defined considering the overall profile of the 8 Pilot Actions developed at local level under WP T3 of the ICARUS project and the need to provide partners of a homogeneous system to gather data and information about the activities locally implemented and the results achieved. The Monitoring & Evaluation (M & E) Plan aims to answer:

- to accountability purposes, in order to report towards the European Commission how the funding has been used and which are the results achieved at locally level;
- to *narrative and documentary purposes*, as it will be able to describe what happens during the project implementation in the 8 Partners involved by Pilot Actions;
- to *formative purposes*, because it aims to provide recommendations and appropriate adjustments in order to improve the quality of the whole project.
- to assessment purposes, because it aims to verify strengths and weaknesses of the Pilot Actions
 and whether its objectives and expected results have been achieved in terms of objective's
 fulfilment, effectiveness, sustainability and impact.

On the methodological level, the achievement of these goals will be pursued through the implementation of monitoring (to see chapter 2) and evaluation activities (to see chapter 3) that will involve mainly the responsible Organization / Partner of the pilot implementation along with some contribution also of the involved stakeholders. This activity is strictly linked to the D.4.3.1 Peer review sessions, that will the physical meeting in which discuss and validate the results of the monitoring and evaluation activities. The final program is defined in chapter 4, which includes the scheduling of the sessions, the relevant tools to be used and the project workshops concluding the two activities.





2 Monitoring activities

In very general terms, monitoring is defined in many manuals and guidelines on Project Management, as:

the description of the progress made by a project, through the methodical collection of data and information about the actions developed and the results achieved. Monitoring is therefore identified as an activity of project management support because it provides a compliance assessment about what planned in the original Application and supports the reconstruction and the capitalization of what has effectively happened during the project implementation, highlighting innovations and changes.

In the framework of the local Pilot Actions, the monitoring activities aims:

- to reconstruct the state of actions carried out in different Countries involved;
- to homogenize the collection of data and information, that otherwise may be collected unevenly or might be lost, also for having a proper comparison among the different local processes
- to *verify the consistency* between what has been achieved during the Pilot Actions development and what was planned in the original Application Form.

Considering the duration of the Pilot Actions (formally started in July 2019, but operationally to be started yet at the moment of completion of this deliverable December 2019) and their current state of progress, we suggest to schedule two monitoring sessions: one in March 2020, covering the start-up phase of the pilots (interim monitoring session) and the second one in December 2020, covering the period From February 2020 to December 2020 (final session).

From an operational point of view, monitoring activities could be implemented at local level through the use of a monitoring device (to see Annex 1) that allows the homogeneous collection of information about the most relevant items for the implementation of the Pilot Actions, i.e.:

- activities carried out during the reporting period;
- any deviations from the initial project design;
- the functioning of the partnership involved and connection with the other stakeholders at local level;
- the problems encountered during the implementation and solutions adopted or to be taken;
- Elements/contextual factors relevant for the implementation of the Pilot Action;
- Main results achieved / obtained during the reporting period;
- Remarks on the progress/contribution of the WP in relation to the aims of the project.





The way it is structured, the Monitoring Plan identifies a single tool and a common workflow for the 8 Pilot Actions (although the form could be customized in some parts).

The monitoring form will be compiled by the Pilot Action responsible (for two times during the Pilot Actions life). After compilation, an overall and aggregate analysis of the monitoring forms will be the core content of the two peer session workshops, to be held within the already scheduled Consortium meeting of ICARUS (*D4.3.1*, *Peer review sessions*). The peer session workshops have indeed the role of discussing the advancement of the pilot and to validate the monitoring data received.

3 Evaluation activities

The Evaluation activities aim to engage the actors locally involved in the Pilot Actions (as project partner or other local stakeholder) in a critical assessment about the effectiveness of the actions carried out and the achievement of the project's objectives, through the use of methodologies able to exploit the participatory, dialogic and reflective potential of evaluation.

In particular, the evaluation activities aim to:

- to *establish recommendations and lessons learned* in order to improve the quality of the local Pilot Actions;
- to suggest, wherever necessary and within an effective timeframe, appropriate adjustments to the Pilot Actions coordinators;
- to *verify the strengths and weaknesses* of the project and if its objectives and expected results have been achieved in terms of objective's fulfilment, effectiveness, sustainability and impact.
- to provide an argumentative assessment at the end of the Pilot Actions life about the achievement of their results and objectives.

The Evaluation methodology provides both formative evaluation activities (evaluation activities carried out in-progress, during the project) that will be developed using evaluative tool borrowed by Results Oriented Monitoring approach and summative evaluation activities, designed to make an argumentative assessment at the end of the Pilot Actions life about the achievement of its results and objectives.

The evaluation of the Pilot Actions will be carried out with the same devices in order to homogenise the data and the information collected. The tools that will be adopted at local level could be the following:





- the evaluation of ROM dimensions questionnaire ((Annex II)
- a final evaluation questionnaire (Annex III)

3.1 The evaluation of R.O.M. dimensions (Annex II)

Results-Oriented-Monitoring (ROM) is a structured methodology of review of interventions funded under some EU Programme¹. In monitoring context, it provides a brief snapshot on the implementation of an intervention at a given moment, considering five dimensions:

- 1. The relevance and quality of project design: the appropriateness of project's objectives to the real problems, needs and priorities of its target groups/beneficiaries and the quality of the design through which these objectives are to be reached;
- 2. The efficiency of implementation: how well means/inputs and activities were converted into results;
- 3. The effectiveness of the actions carried out: the contribution made by the project's results to the achievement of the project purpose;
- 4. The project impact: the project's contribution to the project's Overall Objective;
- 5. The project sustainability: the likelihood of a continuation in the stream of benefits produced by the project after the period of external support has ended.

Also, for an appraisal purpose, considering ROM criteria (obviously revised within an evaluation paradigm) could be useful to provide an overview assessment of the performance of a project. The dimensions considered, cover indeed the main aspects of the project development and their evaluation allow to express a simple appreciation of the project's quality, highlighting the strengths and the shortfalls of the activities developed.

Starting from these considerations, we propose to support the project evaluation with the use of an evaluative device borrowed by ROM approach. This form would contain indeed the five ROM dimensions, each of them declined in operating indicators (to see Annex II).

The ROM evaluative form could be submitted to the partner's representatives once during the project life, in correspondence with the conclusions of the pilot actions: June 2021.

¹ https://ec.europa.eu/europeaid/results-oriented-monitoring en





As for the monitoring, the ROM data along with the final assessment of the pilots (see the following par.) will be the content of the third (and last) peer review workshop to be held within the scheduled Consortium meeting.

In these evaluative sessions, partners representatives engaged in the Pilot Action at local level will be invited to provide a personal self-evaluation to each indicator included in the matrix, using a scale from 1 (strongly negative opinion) to 5 (strongly positive) and explaining the reason of their choice (in terms of strengths and weaknesses) for the overall dimension.

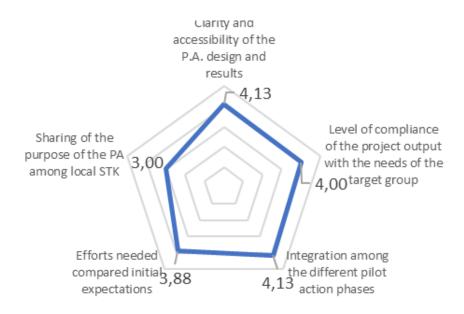


Fig. 1: Example of the filled-in Results-Oriented-Monitoring (ROM)





3.2 The final assessment of the project results (Annex III)

The assessment of the Pilot Action impact and the most significant changes generated in each local context will be assessed using an evaluation device that will be submitted to the Pilot Action partners in June 2021, at the end of the Pilot Action life. The key-issues that could be faced by the questionnaire will be related to:

- the level of achievement of the general and specific objectives of the Pilot Action, starting to the stakeholder's perspectives;
- the most significant changes observed in the local context of intervention;
- the future perspectives at local level (in terms of project sustainability);
- the lessons learned that stakeholders bring home by the participation to the Pilot Action.

The evidences that will emerge by the aggregate analysis of the evaluative forms filled-in by stakeholders will be gathered and deepened during the final evaluative workshop that will be held in June 2021.





4 M & E program

Activities	Device (D.4.1.2)	ICARUS Session (D.4.3.1)	
MONITORING	(a) Monitoring tool – survey questionnaire (Annex I) 1st round	Peer review workshop (M15) March 2020	
MONITORING	(a) Monitoring tool – survey questionnaire (Annex I) 2nd round	Peer review workshop (M24) December 2020	
ASSESSEMENT	(b) ROM tool (Annex II) + (c) Evaluation questionnaire (Annex III) Peer review - Final Evaluation workshop (M30) June 2021		



D.4.1.3. ICARUS Change of behaviour strategy

WP4 Intermodal seamless solutions

A.4.1 ICARUS strategies for seamless intermodal mobility solutions

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1 Table of Contents

1	T	able	of Contents	2
2	In	ntrod	luction	3
3	Т	rans	sport, health and environment	4
4	S	cope	e & Objectives	8
	4.1		Definition of travel behaviour	9
5	С	han	ge of behaviour	11
	5.1	C	Conditions for behavioural change	11
	6.	Tar	get groups	13
	6.	.1.	General public	14
	6.	.2.	Education and training organizations, universities and research institutes	14
	6.	.3.	Public authorities	15
	6.	.4.	Regional development agencies	15
	6.	.5.	NGO's	15
	_	.6. egior	Enterprises, transport operators, infrastructure providers, transport associations nal innovation agencies	
7.	Α	ctivi	ties to promote transport behaviour change	17
	7.1.		Activities which provide the information on sustainable transport	19
	7.2.		Activities to change attitude and behaviour	22
	7.3.		Change of behaviour plan	25
8.	С	onc	lusions	27
9.	R	efer	ence	28
Ar	nex	(1: (Change of behaviour plan	29



2 Introduction

WP4 "Intermodal seamless solutions" is composed of 4 different interlinked activities whose common main goal is testing intermodal seamless solutions for passenger essential to provide the knowledge and the background required by the other work packages. WP4 is the backbone of the project, as its outputs will determine which of the tested solutions will be put into further use. Firstly, the methodologies, templates and approaches will be developed in order to create a set of strategies to be shared between partners. All 10 project partners will be working together in implementing 8 pilot actions to improve intermodal connections in the ICARUS regions.

The Change of behaviour strategy is developed within the activity 4.1, and is a reflection of the outcomes from the desk work and it plans a number of activities with the aim of raising awareness and promoting intermodal solutions developed by ICARUS. It takes into account ICARUS D. 3.1.2. Desk work on behavioural change. Most important solutions adopted to convince users and operators to make a radical change and co-create the solutions to be adopted.

This document, titled "ICARUS Change of behaviour strategy" explains how the goal of increasing the awareness of solutions put into place as well as increasing potential sustainable transport capabilities will be achieved. The key aspects of this document and the main goal of the project activities is to inform and influence the following eleven target groups: general public; public authorities; regional development agencies; enterprises; transport operators; infrastructure providers; transport associations; regional innovation agencies; NGO's; education and training organisations; and universities and research institutes - to change their perception of public transport, and start using it more.



3 Transport, health and environment

Sustainable transportation can be described as commuting by any means other than a single occupancy vehicle, which is most commonly a personal motorised vehicle (Mundorf, Redding, Paiva, 2018). Reducing reliance on personal motorised transport and increasing use of more physically active modes of transport, such as bicycle riding, in combination with public transport are excellent ways to both address physical inactivity and increase the usage of greener means of transport. Engagement in alternative, more active travel behaviours, such as cycling for the entire journey or only parts of it could assist individuals in achieving activity level guidelines (set by the World Health Organization) as this mode of transport brings with it both health and social benefits. Higher levels of walking and cycling are associated with positive physical activity levels and better health outcomes. From an environmental perspective, reducing private vehicle use, and increasing usage of active forms of transport as well as public transport, decreases traffic congestion which simultaneously decreases multiple forms of pollution. Citizens are very much aware of the noise, pollution, poor infrastructure and lack of parking spaces. However, many of them don't see what they as an individual can do to, and how they can contribute to reducing the noise and pollution. This unawareness influences significant increase of the amount of registered road motor vehicles in the three Croatian partner regions, as well as the four Italian partner regions in 2017 compared to the amount of registered road motor vehicles in 1998.



Table 1. Comparison of the amount of registered road motor vehicles in Croatian & Italian partner regions in 1998 and 2017

Country / Region	Registered road	Registered road	Registered	Registered
	motor vehicles in	motor vehicles in	passenger cars	passenger cars
	1998	2017	in 1998	in 2017
CROATIA	523.162	821.055	440.756	666.930
Zagreb county	330.603	517.795	277.974	427.363
(Incl. city of				
Zagreb)				
Primorje-Gorski	105.993	164.714	90.552	132.115
Kotar				
Istria	86.566	138.546	72.230	107.452
ITALY	6.961.977	8.688.903	6.243.360	7.614.392
Veneto	2.791.189	3.529.673	2.504.637	3.104.735
Friuli-Venezia	760.352	889.744	695.139	792.485
Giulia				
Emilia-Romagna	2.667.133	3.269.452	2.379.250	2.846.524
Abruzzo	743.303	1.000.034	664.334	870.648
TOTAL (ITALY + CROATIA)	7.485.139	9.509.958	6.684.116	8.281.322

Source: dzs.hr (for Croatian regions); Eurostat.ec.europa.eu (for Italian regions)

Substantial increase of 56,94% (or 297.893 vehicles) in the total number of registered road motor vehicles in Croatian partner regions, and 24,81% (or 1.726.926) for the Italian partner regions has increased congestion, especially in town and city centres, and has increased the total carbon footprint of the general public, especially those using passenger cars which have increased the most – from 440.756 passenger cars in 1998 to 666.930 in 2017 in the Croatian regions, and from 6.243.360 passenger cars in 1998 to 7.614.392 in 2017 (dzs.hr &

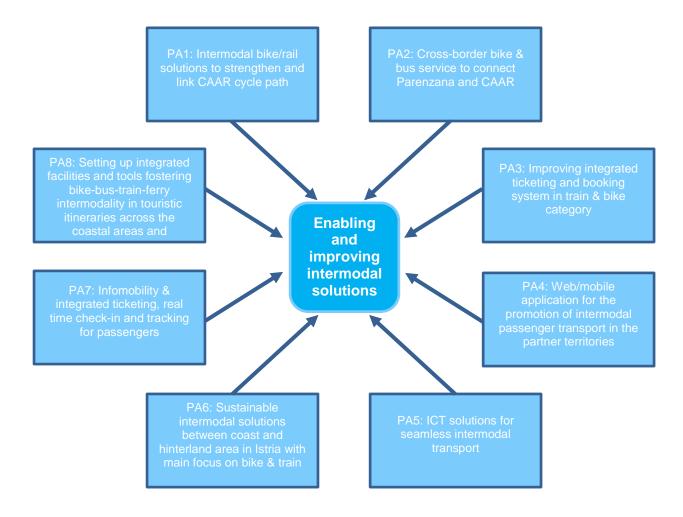


Eurostat.ec.europa.eu). This shows that many citizens still believe that the car, since it is the most common and convenient transport option, is the only option for personal transport they have, which couldn't be more wrong. The goal is to reach out to those people, inform them and motivate them to try different modes of transport. During the ICARUS project 8 pilot actions will be implemented in order to improve passenger intermodal transport connections between the coast and its hinterland and between Italy and Croatia.

ICARUS will boost change of behaviour among users by promoting public transport use and decreasing the number of people using private passenger cars. This ambitious goal of decreasing the use of cars and better integration of public transport, in particular green transport means, has been undertaken in order to minimize the impact of transport on the environment. ICARUS therefore, won't have negative impacts on integrity and the goals of preservation of the natural habitat. ICARUS will also support authorities on options to convince citizens on efficient & beneficial proposed solutions. The project can only achieve its results with successful behaviour change actions, that is why behavioural change activities will be promoted and implemented. ICARUS will also move towards complete integration of public transport service, which will be done through offering infomobility, ICT solutions, integrated ticketing, a web/mobile application and new routes / offers. The ultimate goal of this strategy, and of the entire WP is to test intermodal solutions to enhance public transport and make transport sustainable.



Picture 1: Joint goal of the 8 pilot actions within ICARUS





4 Scope & Objectives

With the growing amount of both freight and passenger transport, the risk of pollution and congestion is increasing, and it is no longer feasible to resolve these issues through further road building and technical solutions alone. Therefore, it is important to try to change the general public's behaviour and make them move away from single occupancy motorized vehicles, in favor of more sustainable, energy-efficient and environmentally friendly modes of transport. There are many factors that determine which transport mode will the individual use. These factors include: public transport and car journey time; access to public transport stop; frequency of service; type of service and comfort; public transport fares; parking charges; parking space availability (Kolyvas – InnovaSUMP Interreg Europe, 2018). Passenger cars have the advantages of speed, comfort, flexibility, radius of action and carrying capacity over other transport modes as well as the possibility of self-expression through the choice of car and the way the individual uses it. These advantages encourage car use to become a habit, and their user's lifestyles becomes tuned towards using the car. Public transport on the other hand moves towards accomplishing collective goals such as reducing congestion and reducing the collective carbon footprint.

Today's transport users can therefore be divided into several groups according to the means of transport they choose to use (Pardo, 2006). One group that uses automobiles and sees no other option may be the largest and will therefore be specially tackled by this strategy and behaviour change activities. Members of this group have no awareness of sustainable transport, and they see the automobile as their primary means of transport. They do not understand the idea behind sustainable transport, and see no reason for active or green modes of transport. In this group the needs of the individual outweigh the collective interests by far. This group is not aware, and does not act accordingly regarding sustainable transport. There is also a group of people who are aware of other options, but still use an automobile as the primary transport option. This group understands the arguments behind sustainable transport but still does not act accordingly. However, this group is still closer to a change than the first group. The third group



includes individuals that have tried using sustainable transport a few times but have not been completely convinced to make the change completely. The fourth group includes those that have begun using sustainable transport as a daily mode of transport, they might still use an automobile but realize that it is not necessary for every occasion. The last group is consisted of those that use sustainable transport on a permanent basis. This group has the knowledge of the benefits of sustainable transport and are constantly using it (Pardo, 2006). The first important step in changing the current general transport habits is defining the travel behaviours of our target groups.

4.1 Definition of travel behaviour

Travel behaviour can be defined through: consultation processes where transport users express their needs, ideas and problems related to transport and mobility; public surveys – where users can express their travel habits and preferences on trip modes, routes, number of daily trips, distance travelled etc; IT applications – which include Travel Patterns, Service demand, Traffic characteristics / parameters (Kolyvas – InnovaSUMP Interreg Europe, 2018).

For ICARUS project a survey on mobility gaps and needs in public transport (Activity 3.2.2.) will be used in the 3 partner regions in Croatia (Primorje-Gorski Kotar County, Istrian County and the city of Zagreb) and the 4 partner regions in Italy (Friuli-Venezia Giulia Region, Veneto Region, Emilia-Romagna Region and Abruzzi Region). The main objective of this survey is to identify mobility gaps in the entire ICARUS area and to support the creation of new links and solutions to boost the usage of public transport in order to minimize the impact of transport to environment. Two different questionnaires are available and they target specific groups: general public and transport experts. Responsible project partner will choose which target group to include in the survey according to the specifics of their region and will use the questionnaire created for this group. Project partners may choose to combine both target groups in their surveys if they find it important and necessary for their deliverables. General public refers to all public transport users or even the groups of people which do not use public transport in order to



acquire as much as possible feedback on the mobility gaps in each of the covered project regions and areas. Transport experts are all major experts in the public transportation field such as public institutions, policy makers, scientific and research institutions etc. which will be defined by the responsible project partner. Therefore, partners which decide to include this target group in the survey will draw a list of experts to be reached before starting the collection of their opinions. This list may vary among regions.

Every responsible partner should be able to define the necessary number of responses to be collected based on the characteristics of their target group, in order to be able to draw meaningful conclusions. Questionnaires shall be distributed to the users of public transport and/or to the public transport experts in their region in the following manner: by face-to-face survey, via e-mail, Skype or telephone communication, by organizing project workshops and/or online via Google Form in order to collect as much feedback as possible.



5 Change of behaviour

Successful public transport is essential for any transport sector emissions reduction strategy. To turn public transport into an everyday transport mode choice for the general public it is important to ensure that the service is fast, frequent, comfortable, affordable, safe, reliable and offers routes for which there is a demand (C40 Cities Climate Leadership Group, 2019). Only when the mentioned criteria are met, and when the advantages and benefits of sustainable transport outweigh the disadvantages of using a personal passenger car, can the potential users be motivated to using public transport rather than passenger cars on a daily basis. The same remains true for existing passengers - providing a high quality service will ensure they use public transport more often, and increasing the quality of public transport services should be done prior to attempting to acquire new passengers. As ICARUS aims at improving public transport connections and easing coast-hinterland sustainable accessibility, promoting carindependent lifestyles, the change of behaviour can be achieved by increasing people's knowledge, heightening their awareness and modifying views / attitudes towards both public transport and active modes of transport, as well as using a combination of those two. Testing new solutions such as timetable harmonisation, car/bike sharing, ICT solutions for seamless information flow, intelligent and integrated multimodal payment systems, dynamic travel planning and cross-border intermodal services will call for behavioural change and the application of new concepts, such as "Mobility as a Service".

5.1 Conditions for behavioural change

In order to reduce passenger car use and encourage the general public to opt for more sustainable modes of transport, certain necessary conditions need to be fulfilled (Steg, Tertoolen, 1999):



- 1) The general public needs to be informed about the collective costs and risks that arise from the excessive usage of cars this should include a clear view of the problem and the possible consequences of neglecting those problems. This includes both environmental and social problems;
- 2) The general public needs to understand that these issues are an overall responsibility of each individual and that their contribution is significant;
- 3) The general public needs to be informed that feasible alternative modes of transport exist and that there are many benefits to using them;
- 4) People need to balance the individual benefits against the collective disadvantages of passenger car use and they need to be convinced that the problems are worth solving.

There is also a wide range of personal, social, and environmental factors that influence behaviour.

Most can be assigned to three levels (Di Vito, 2019):

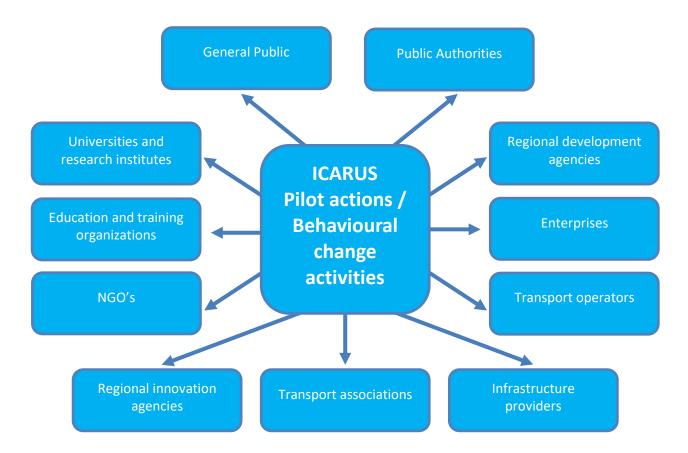
- Personal or individual: beliefs, knowledge, attitudes, skills, genetics
- Social: interaction with other people including friends, family and the community
- Environmental: the area in which an individual lives, e.g. school, work place, local shops and facilities, and wider factors including the economy (such as prices) and technology.



6. Target groups

The actions of the ICARUS project aim to change the behaviour of the wider public and users, which includes the following target groups: general public; public authorities; regional development agencies; enterprises; transport operators; infrastructure providers; transport associations; regional innovation agencies; NGO's; education and training organisations; and universities and research institutes.

Picture 2: Target groups for behavioural change activities within ICARUS





6.1. General public

Members of the general public will be asked to fill a mobility gaps and needs survey on public transport. The survey asks the individual questions about their travel habits and preferences and will be used to get an estimate on how much the general public uses public transport and to get a general idea on which aspect of public transport could be improved in order to get more people to use it. Therefore, it is easy to see that the main goal is to inform, motivate and make it possible for them to use public transport, especially in combination with active travel behaviours, i.e. walking or cycling. Enabling the usage of combined bicycle and train / bus transport opens the door to turning a purely recreational activity (bicycle riding) into a realistic way of getting to work. The 8 pilot actions are all mainly directed at the general public with the aim of enabling and improving intermodal solutions in the project areas. These improvements include: light infrastructure – wheeling ramps for bicycles in 11 railway stations; Cross-border bike & bus solutions; integrated ticketing and booking systems; website for promotion of intermodal passenger transport; ICT solutions for seamless Intermodal transport; bike-train route through Istria; fostering bike-bus-train-ferry intermodality in touristic itineraries.; and infomobility & integrated ticketing.

6.2. Education and training organizations, universities and research institutes

Students are a subgroup of general public, but are listed separately because they will receive additional activities in the form of workshops and lectures / presentations which are designed to show the advantages and benefits of combined transport to future transport experts, some of which might even work as public authority figures in the future. The most important universities of the programme area will have a big impact on the behavioural change of students. Behavioural change meetings which specifically target university students will be organized with having a technical character and are different from the promotional activities in WP2.



6.3. Public authorities

ICARUS partners will try to cooperate with public authorities for implementing and promoting their pilot actions. They will inform local authorities about their activities and will work with public authorities to help them nudge their citizens into adopting new sustainable behaviours and the new set of services as more efficient and beneficial for all through the activity called the Enlarged Transfer Program (ETP). During the program 5 non-partner organizations will benefit from the project results and will also be able to participate in the project's final conference. The ETP member organizations will have a specific training path and will develop an action plan to improve the intermodal passenger solutions in their territories. Territories not covered by the ICARUS partnership will have priority. The way to achieve this goal is to raise the commitment of at least five public Authorities by allowing them to define their objectives and policy challenges for each of their regions.

6.4. Regional development agencies

ICARUS partners will cooperate with regional development agencies in order to support regional development and assist with regional development strategies. With the assistance from regional development agencies, a wider audience for behavioural change activities can be reached and more people can be motivated to try sustainable modes of transport for the first time or to try out new offer and new routes set up by the ICARUS project. Istrian development agency is working on Pilot action 6 which incorporates all of the mentioned factors by offering a new route which includes the usage of sustainable transport – train and bike, and promotes connecting the hinterland with the coast.

6.5. NGO's

ICARUS will target the most important NGO's at regional, national and international level with activities for behavioural change, as NGO's are mostly non-profit, and their goals include



projects aimed at the improvement of society. In the example of ICARUS, that improvement is moving from the usage of private passenger cars to using sustainable modes of transport, which include public transport and active modes of transport. With the assistance of NGO's, a wider audience can be reached by the project, and therefore, more of the general public can be informed about the project, its pilot actions and what new offers the project brings that benefits them. This way they can be motivated to try out sustainable modes of transport and possibly move towards the desired change of behaviour.

6.6. Enterprises, transport operators, infrastructure providers, transport associations & regional innovation agencies

The remaining groups will be approached by the ICARUS project's behavioural change activities similarly so they have been grouped together. Transport operators from both Italy and Croatia, as well as infrastructure providers are involved actively in the project in order to define new measures and solutions. Behavioural change events to these groups aim to ease the change to an intermodal seamless mobility option. ICARUS will use these events to improve awareness of private transport operators in order to foster behavioural change and create conditions for a mobility concept change. Transport associations have been noted as especially relevant for the project activities which pay attention to sustainable transport and modal shift. ICARUS partners will also cooperate with regional innovation agencies, such as the Science parks in Trieste and Rijeka.



7. Activities to promote transport behaviour change

Along with aforementioned conditions, people also need to be motivated to use sustainable modes of transport. The behavioural change from using passenger cars to sustainable modes of transport is accomplished through multiple activities which include informing the public about the advantages of sustainable transport; motivating the general public to try using public transport and other means of sustainable transport; and specific activities which promote public transport and active modes of transport through their usage. The change of behaviour is a process, not an event, therefore it is completed over a longer period of time through steps or stages. The stages of behaviour change for the individual are - receiving and processing the new information; understanding why the behaviour change needs to happen; accepting that the new behaviour would benefit them personally; taking action / starting the new behaviour; maintaining the new behaviour and terminating previous unhealthy behaviours (LaMorte, 2019). As behaviour change is a difficult process affecting the lifestyle of an individual, the change should be achieved by offering the individual something that they personally desire. For example, presenting the usage of bicycles in combination with public transport as way to look and feel good as well as an opportunity to become healthier, an opportunity to be more socially connected and as an active way to get to school / university / work which is less impacted by congestion or even completely congestion free. Another issue which requires attention is reducing people's fears and doubts considering cycling and public transport, especially in those who haven't tried it yet. Creating new cyclepaths, building wheeling ramps for bicycles and offering special routes which combine cycling and using public transport to get to them should all help lessen the fears concerning safety and injuries. Another example of reducing these worries is offering an up-to-date web / mobile application with information about public transport providers, information on routes and timetables which helps lessen the fear of getting lost. All of these actions need to be followed up with invitations to try out the combination of active modes of transport and public transport and present these modes of transport in a manner that makes using them seem both easy and convenient. All the behavioural change activities should place

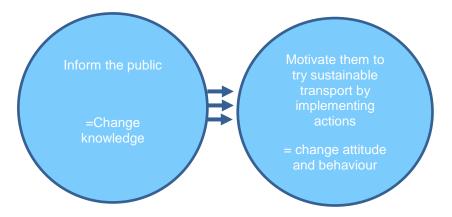


the user / passenger at the very centre of transport services and make the services seem user-tailored. All of this should make sure to generate positive experiences as well as create a feeling of satisfaction for the user. If the user continues to feel satisfied with the public transport services and the availability of using a bicycle to reach their destination, then the chances of changing to new behaviour and sustaining that behaviour in the future are higher. In order for the individual to move towards a change, the change needs to be relevant and beneficial for them. Behaviour change is therefore very complex and often idiographic in terms of time, place and population targeted.

In order to change the behaviour of a certain group or individual, first they must be informed about the benefits, which in turn makes them change their knowledge, and makes them aware. The next step is motivation which can be accomplished by sending more messages on the benefits they are missing out on. This can help the individual or group change their attitude towards the subject. Lastly, through more activities and constant actions it is possible to change the individual's behaviour.



Picture 3: Activities to promote behavioural change



ICARUS project will use behaviour change activities in order to promote sustainable transport modes and pilot actions by implementing both groups of activities: providing information and motivating people to try new services which will be implemented within ICARUS. These change of behaviour activities will engage all target groups specified in the previous section.

7.1. Activities which provide the information on sustainable transport

The informative type of activity will be used for all target groups, targeting primarily the general public and students. These activities will offer clear facts to the target audience such as: public transport, bicycles and walking are the most sustainable form of transport; public transport reduces air pollution and traffic congestion while at the same time saving money; actions that make transport more sustainable improve the quality of life; public transport encourages living a healthier lifestyle etc. Spreading of such information has the goal of: making citizens aware of the environmental, social and economic problems of urban transport; explaining and relating the causes and effects of transport problems and what individuals can do to address the known problems. Within the ICARUS project, partners that decide to use these informative behaviour change actions may choose among several different activities, as shown in the table 2.



Table 2: Informative actions within ICARUS

Actions	Target Groups	
Promotional material for the change of	All target groups	
behaviour. Design and standard templates for		
wayfinding and to push the change of		
behaviour		
Promotional material at ticket sale locations	General public, students	
Promotional material inside buses and trains	General public, students	
Published articles on transport provider's	All target groups	
website & other related sites incl. social		
media		
Local media campaigns (radio, local	All target groups	
newspaper, magazines & newsletters)		
Conferences / presentations	All target groups	
Behavioural change events to ease the	General public, regional development	
behavioural change to an intermodal	agencies, enterprises, transport operators	
seamless mobility. Meetings, workshops and	including operators of multimodal logistics,	
lectures/presentations towards the modal	infrastructure providers, transport	
shift.	associations, regional innovation agencies,	
	NGO's, education and training organizations	
	as well as universities and research institutes	

For example, promotional material may be shared at bike renting / sharing stations which informs the cyclists about the "Bike-train route" through the Region of Istria or about the wheeling ramps and round trip extension along the CAAR cyclepath, depending on which region the bike renting / sharing station is located. As pilot action 7 focuses on setting up integrated facilities such as bicycle racks & bicycle sharing stations, an opportunity arises to use those



facilities for promotional purposes as well, presenting to its target audience where the nearby bike routes are located, informing them about possible intermodal offer / routes. HZPP could include similar promotional materials at train stations across Croatia, showing off their new integrated ticketing and booking system in the train & bike category. Similar to this, ARAP Abruzzo could include promotional materials about their ICT tools at relevant train stations in Italy. The context of where and when the information is distributed is key, because if people receive the message at the right place and the right time, they can talk about the ideas and make them their own. Different methods such as visual digital or print media, conferences, presentations etc. can be used to inform the general public, students, etc. about the new services. The information used must be easily understandable, clear and concise and must be easily accessible. The public transport provider's website must be informative and easy to use. Even though smartphones are becoming the norm, well designed paper schedules are still necessary for people without smartphones, and those schedules should be made available in a wide variety of locations. The web/mobile application for the promotion of intermodal passenger transport on Croatian and Italian territory developed during pilot action 4 is a great example of a way to inform the public about the new routes and offers from public transport providers, as well as letting the public find out more about intermodal and sustainable transport, and offer them information on all pilot actions implemented in the ICARUS project. This application will feature an interactive map which will allow users to find information on the region they are interested in, information about public transport providers in the region and find links to their timetables. Digital information and integrated travel planning towards the Adriatic coast will be provided through ICT solutions in pilot action 5. Through these activities stated in the Table 2 and with the help of the universities, schools but also by engaging public authorities, it is possible to inform the general public and students about the new services which will be made available through ICARUS. It is also important to engage public authorities in order to create synergies and to also use their help in promoting these new services.

Another way to make sure the informative activities generate a significant behaviour change is by soliciting feedback from those who receive the information. This could include posts on



websites or short digital surveys / polls, which should be structured in such a way that give the creator relevant information on how much the person taking the survey / poll is informed about sustainable transport, the ICARUS project, its pilot actions, if and how often they will use the services which will be provided by the project's pilot actions, as well as enable the person to add suggestions for improvements in the future. These surveys could be made available via Google Forms and shared on partners websites and social media accounts, and they can also be accessible on relevant locations such as train stations or bike sharing stations.

7.2. Activities to change attitude and behaviour

The primary goal in promoting sustainable transport is getting people to use the bicycles and / or public transport services. This type of action promotes sustainable transport by motivating people to use public transportation and new services implemented through ICARUS. It is especially aimed at those who haven't used it at all or who haven't used it regularly.

Table 3. Change of attitude and behaviour activities within ICARUS

Actions	Target Groups	
Organizing social events / information	All target groups	
sessions to introduce bike & public transport		
combination to new users		
Behavioural change events to ease the	General public, regional development	
behavioural change to an intermodal	agencies, enterprises, transport operators	
seamless mobility. Meetings, workshops and	including operators of multimodal logistics,	
lectures/presentations towards the modal shift	infrastructure providers, transport	
	associations, regional innovation agencies,	
	NGO's, education and training organizations	



	as well as universities and research institutes
Organizing events which enable first-time	All target groups
users to try combining public transport &	
recreational activities	
Organizing bike ride events with	All target groups
predetermined routes	
Offering discounted or free rides for using	All target groups
services implemented within ICARUS	

These groups of actions involve individuals and / or groups of people and allow them to try out and evaluate activities implemented on the sustainable basis. These actions should be promoted as entirely voluntary so they could lead to long-term behaviour change. This can be accomplished by offering test rides on public transport and by organizing bike rides with predetermined routes. For example, during pilot action 6, a "Bike / train route" through the region of Istria will be used to promote connections between hinterland and coast, as well as connections to and from Italy, all while using sustainable modes of transport. An especially effective way of doing this would be to offer a discounted or free train ride to cyclists and but also all other target groups who are interested in trying cycling, and taking them all together through this route. An event of this type would both get cycling enthusiasts to try the new route and would connect people with similar recreational interests which would get more people talking about the route and the event, thus further promoting public transport and bicycle riding in the region of Istria. Similar events could be performed in other regions, especially in the Friuli Venezia Giulia Region for the round trip extension along CAAR and Parenzana cyclepaths. These events would promote bike / train or bike / bus offers by public transport providers, as well as help promote sustainable transport itself. The important factor to keep in mind during these events which promote new actions or activities is familiarity. Familiarity helps with people being less afraid of new actions or activities. It can be achieved through information sessions or social events in which people get to experience new behaviour in a safe and supportive environment. The round trip extension of public transport service during weekends and bank



holidays connecting CAAR and Parenzana, and the "bike-train route" through Istria are also aimed at the enjoyment of their users which can have a big impact on inspiring people to take on new activities and change their current behaviour. Events which offer recreation, social interaction and a focus on the positives can be hugely influential in behaviour change. These events should invite people to try out cycling on the new routes and new intermodal transport offers, meet new people and enjoy a day of recreational activity in an environment they feel comfortable in.



7.3. Change of behaviour plan

In order to reach common goals and to motivate people to start using public transport and new services implemented within ICARUS, each ICARUS partner implementing a pilot should draw a behaviour change plan specifying target groups to be tackled including activities with timeframes to be implemented. The plan should be a simple document on 2 or 3 pages containing definition of target groups and behaviour change activities with timeframes to be used for the promotion of their pilots (see Annex I). The table 4 shows the behaviour change activities that might be used across pilot actions in order to mobilize all the specified target groups.

Table 4: Categorization of behaviour change activities across pilot actions

Name of the pilot action	Category of behaviour change activity	Target groups
PA1: Intermodal bike/rail solutions to strengthen and link CAAR cycle path	Informative activities +activities to change attitude and behaviour	All target groups
PA2: Cross-border bike & bus service to connect Parenzana and CAAR	Informative activities +activities to change attitude and behaviour	All target groups
PA3: Improving integrated ticketing and booking system in train & bike category	Informative activities	All target groups
PA4: Web/mobile application for the promotion of intermodal passenger transport	Informative activities	All target groups
PA5: ICT solutions for seamless intermodal transport	Informative activities	All target groups



PA6: Sustainable intermodal solutions	Informative activities	All target groups
between coast and hinterland area in	+activities to change	
Istria with main focus on bike & train	attitude and behaviour	
PA7: Setting up integrated facilities and	Informative activities	All target groups
tools fostering bike-bus-train-ferry		
intermodality in touristic itineraries across		
the coastal areas and hinterland		
PA8: Infomobility & integrated ticketing,	Informative activities	All target groups
real time check-in & tracking for		
passengers		



8. Conclusions

With the growing amount of both freight and passenger transport, the risk of pollution and congestion is increasing, and it is no longer feasible to resolve these issues through further road building and technical solutions alone. Therefore, it is important to try to change the general public's behaviour and make them move away from single occupancy motorized vehicles, in favour of more sustainable, energy-efficient and environmentally friendly modes of transport. To turn public transport into an everyday transport mode of choice for the general public it is important ensure that the service is fast, frequent, comfortable, affordable, safe, reliable and offers routes for which there is a demand. Testing new solutions such as timetable harmonisation, car/bike sharing, ICT solutions for seamless information flow, intelligent and integrated multimodal payment systems, dynamic travel planning and cross-border intermodal services will call for behavioural change and the application of new concepts, such as "Mobility as a Service". As behaviour change is a difficult process affecting the lifestyle of an individual, the change should be achieved by offering the individual something that they personally desire, as well as help eliminate fears and worries about public transport. In order to change the behaviour of a certain group or individual, first they must be informed about the benefits, after that they need to be motivated to try sustainable modes of transport, and lastly through more activities and constant actions it will be made possible to change the group's or individual's behaviour. The actions of the ICARUS project aim to change the behaviour of eleven main target groups - general public; public authorities; regional development agencies; enterprises; transport operators; infrastructure providers; transport associations; regional innovation agencies; NGO's; education and training organisations; and universities and research institutes. For each of these groups, different change of behaviour activities will be implemented.



9. Reference

- 1. C40 Cities Climate Leadership Group. 2019. How to make public transport an attractive option in your city. https://www.c40knowledgehub.org/s/article/How-to-make-public-transport-an-attractive-option-in-your-city
- Croatian Bureau of Statistics. 2019. Transport Review by Counties. https://www.dzs.hr/Hrv Eng/Pokazatelji/Transport%20i%20komunikacije/Transport%20-%20Pregled%20po%20zupanijama.xlsx
- 3. Di Vito, M. 2019. Desk work on behavioral change. Most importan solutions adopted to convince users and operators to make a radical change and co-create the solutions to be adopted. ICARUS Project, WP3, A 3.1.
- 4. Eurostat. 2019. Stock of vehicles by category and NUTS2 regions. https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=tran r vehst&lang=en
- Kolyvas, N. 2018. Determining and Changing User Behaviour. https://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/events/Manchester_event_21-11-2018/4.Kolyvas_Travel_Behaviour.pdf
- LaMorte, W. 2019. The Trantheoretical Model (Stages of Change). http://sphweb.bumc.bu.edu/otlt/MPH-
 http://sphweb.bumc.bu.edu/otlt/MPH-
 Modules/SB/BehavioralChangeTheories6.html
- 7. Mundorf, N; Redding, C; Paiva, A. 2018. Sustainable Transportation Attitudes and Health Behavior Change: Evaluation of a Brief Stage-Targeted Video Intervention. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5800249/
- 8. Pardo, C. 2006. Public awareness and behavior change in sustainable transport. https://sutp.org/files/contents/documents/resources/H_Training-Material/GIZ_SUTP_TM_Public-awareness-and-behaviour-change_EN.pdf



Annex 1: Change of behaviour plan

Change of behaviour plan is a simple 1-2 page document where each partner describes the actions to be implemented for motivating their target groups to use public transport and new services (pilots) started within ICARUS. Events are targeted to behavioural change and they do not necessarily depend on the pilot. Each testing partner should plan 3 behavioural change events.

Table of contents:

1. Pilot action description

Please describe your pilot action in a few sentences as an introduction to your change of behaviour plan.

2. Target groups to be reached

Please define the target groups you aim to reach by change of behaviour activities. Describe why you choose these target groups and their importance.

3. Change of behaviour activities with timeframes

Please list activities with timeframes you aim to implement for your target groups. Provide a detailed description of the event you plan to implement.