

## 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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AUTHOR: Intermodal Transport Cluster  
PP No.5 KIP  
PPS Involved (nr only)  
Status: Final  
Distribution: Public  
Date: 30/12/2019

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## 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 motor vehicles in 1998	Registered road motor vehicles in 2017	Registered passenger cars in 1998	Registered passenger cars in 2017
<b>CROATIA</b>	523.162	821.055	440.756	666.930
Zagreb county (Incl. city of Zagreb)	330.603	517.795	277.974	427.363
Primorje-Gorski Kotar	105.993	164.714	90.552	132.115
Istria	86.566	138.546	72.230	107.452
<b>ITALY</b>	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 Giulia	760.352	889.744	695.139	792.485
Emilia-Romagna	2.667.133	3.269.452	2.379.250	2.846.524
Abruzzo	743.303	1.000.034	664.334	870.648
<b>TOTAL (ITALY + CROATIA)</b>	7.485.139	9.509.958	6.684.116	8.281.322

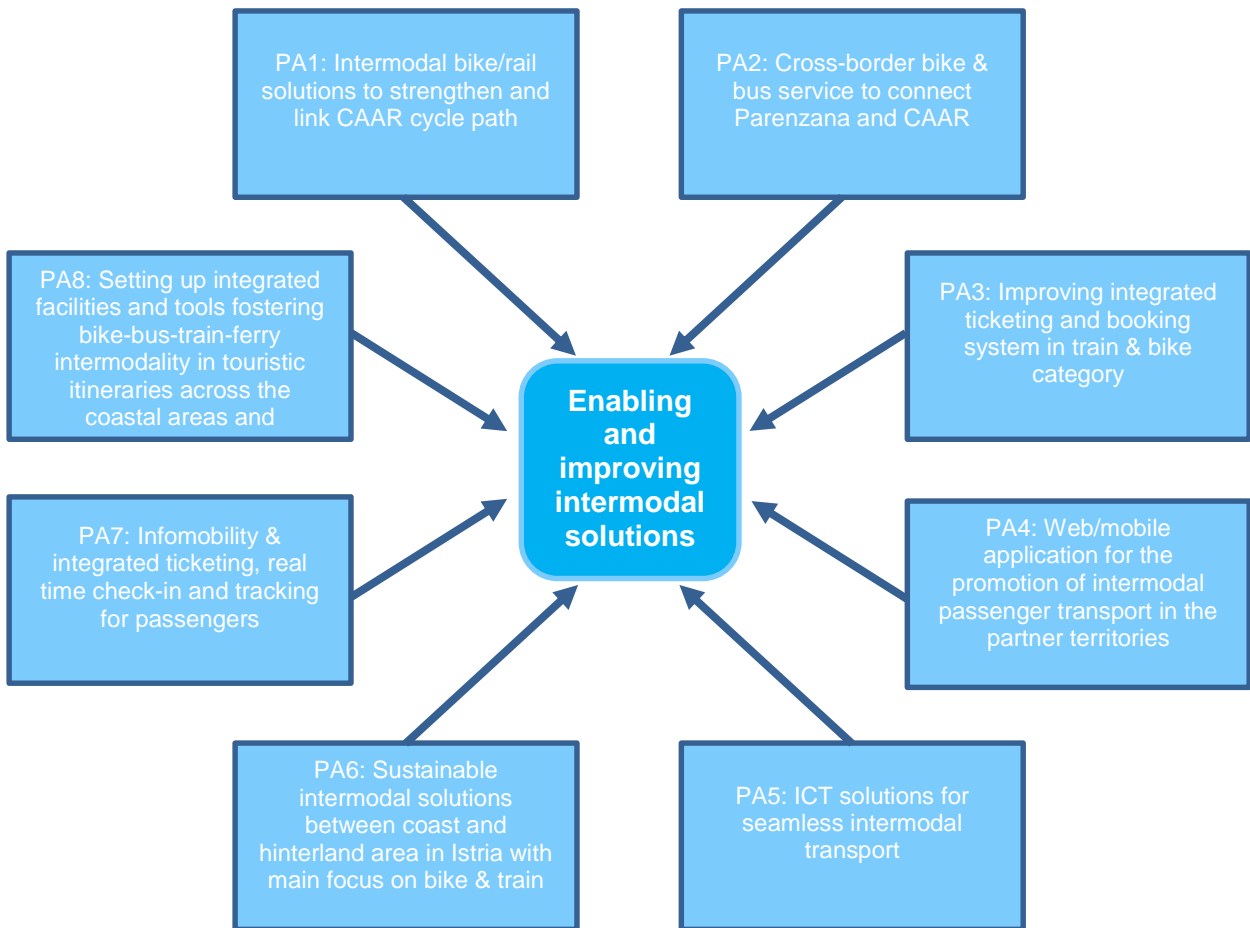
Source: dzs.hr (for Croatian regions); Eurostat.ec.europa.eu (for Italian regions)

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 car-independent 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.

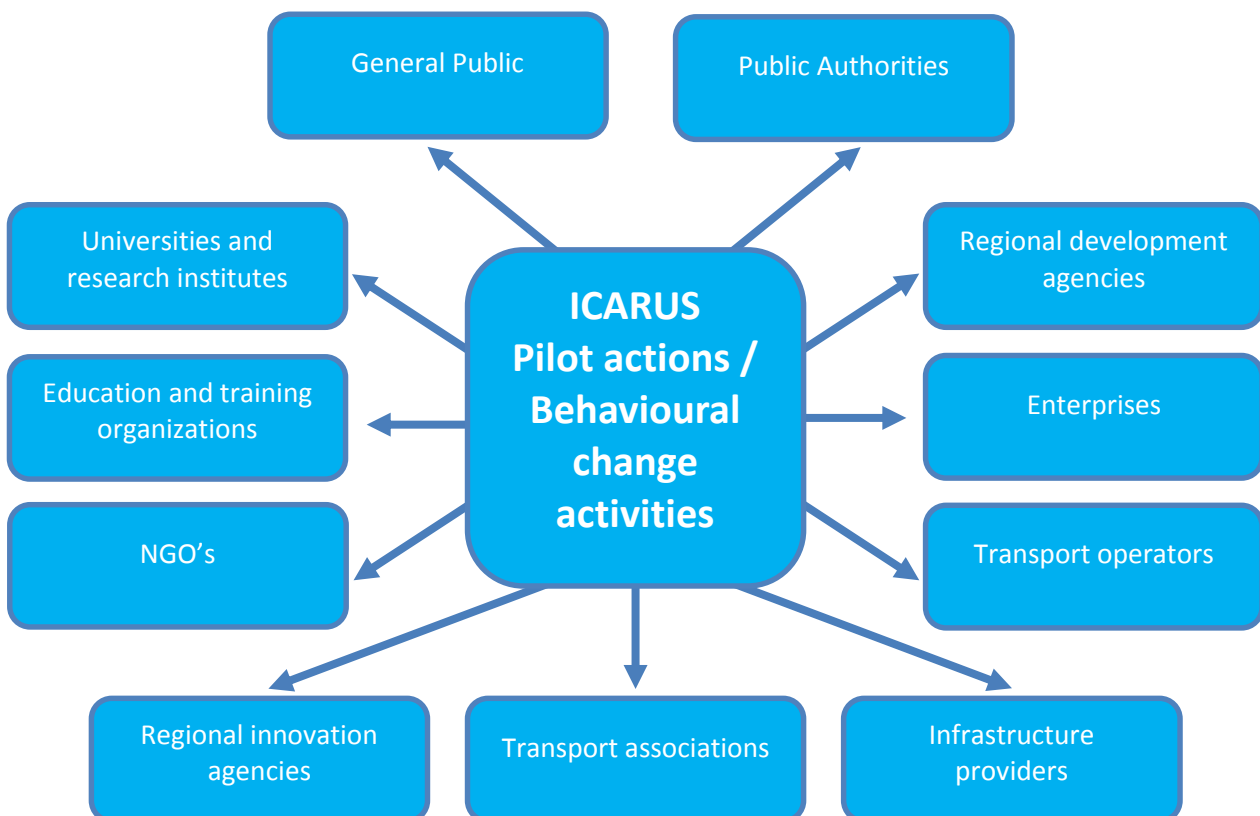
Most can be assigned to three levels (Di Vito, 2019):

- 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.

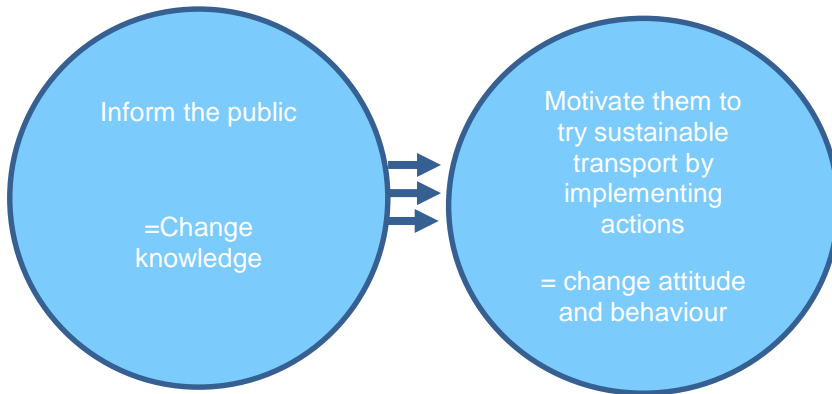
## 7. Activities to promote transport behaviour change

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 behaviour. Design and standard templates for wayfinding and to push the change of behaviour	All target groups
Promotional material at ticket sale locations	General public, students
Promotional material inside buses and trains	General public, students
Published articles on transport provider’s website & other related sites incl. social media	All target groups
Local media campaigns (radio, local newspaper, magazines & newsletters)	All target groups
Conferences / presentations	All target groups
Behavioural change events to ease the behavioural change to an intermodal seamless mobility. Meetings, workshops and lectures/presentations towards the modal shift.	General public, regional development agencies, enterprises, transport operators including operators of multimodal logistics, infrastructure providers, transport 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 sessions to introduce bike & public transport combination to new users	All target groups
Behavioural change events to ease the behavioural change to an intermodal seamless mobility. Meetings, workshops and lectures/presentations towards the modal shift	General public, regional development agencies, enterprises, transport operators including operators of multimodal logistics, 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 users to try combining public transport & recreational activities	All target groups
Organizing bike ride events with predetermined routes	All target groups
Offering discounted or free rides for using services implemented within ICARUS	All target groups

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

## 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

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## 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.*