INNOAIR

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Innovative demand responsive green public transportation for cleaner air in urban environment

Co-creation workshop on developing ideas for stimuli for citizens to switch to sustainable transportation

February, 2021

Contents

Abstract

Within the INNOAIR project, and specifically WP6: "Multistakeholder digital bureau" – active collaboration on cultural shift, a co-design workshop was organized to bring together young and active citizens, businesses and local institutions together to generate ideas and different stimuli for citizens to change their transportation habits towards more sustainable options. The results from the workshop will be further analyzed within the INNOAIR project and will be used in the development of an application (platform) where citizens can get different bonuses and discounts when are commuting sustainably.

The co-creation workshop tried to use different tools and approaches to gather and discuss ideas. There was an open discussion, combined with a white board collaborative online tool where participants anonymously added their ideas. The discussion was moderated by an experienced moderator in order to touch upon the three topics that the workshop aimed to get insights on.

This report is giving an overview of the main discussion points and outcomes of the co-creation workshop, together with the identified stimuli that will be further analyzed by the project team. It aims to be used as part of the D6.1.2 Framework for cultural behavioral change that will be developed and also other project related activities.

Workshop goals and format

The INNOAIR project organized a co-creation workshop on developing ideas for stimuli for citizens to switch to sustainable transportation on February 23, 2021.
The goal of the workshop was:

- To bring together young and active citizens, businesses, local institutions, academia and NGOs to come up with ideas and suggestions on the different toolsets of stimuli that could be used to promote sustainable transportation within the city;
- To identify behavioural patterns and dependencies in decision-making people have when they choose how to commute;
- To better understand the readiness of citizens to share their data and if there are their limits in terms of data sharing;
- To explore potential further action for Sofia on most challenging air quality problems and, where possible and appropriate, explore scope for possible measures related to mobility habits;
- To promote synergies and stress on the importance of active citizen engagement on topics related to mobility and air pollution.

Also, the workshop aimed at building a group of stakeholders and supporters that will be consulted in the future for additional input on the presented ideas.

Due to the pandemic situation the co-creation workshop was held online via Zoom platform in the following format: a short introduction of the project concept and goals, overview of the specific goals of the workshop and how the results will be used afterwards, introduction of participants with an ice-breaking game, idea-generation session, data-sharing related discussion and a wrap up session. The materials used throughout the workshop are presented in Appendix 1, the white board collaboration tool and results are available [here.](here)

More than 40 people have registered for the workshop and more than 30 participants with different background joined the workshop, there were representatives from the business, actors, housewives, people from the IT industry, project partner representatives and relevant representatives from Sofia Municipality. The full list of registered participants is presented in Appendix 2.

The discussion and idea generation was open to anyone. Invitations were sent out using different channels – social media, website publications, direct e-mails to potential participants. During the registration process a short questionnaire was developed to gather ideas ahead of the workshop and see if there will be some similarities or certain patterns in the opinions shared. During the workshop,

the white-board collaboration online tool Miro was used in order to make it easier for participants to share their ideas and have an opportunity to visualize patterns and similar opinions during the event. In the beginning of the discussion, an ice-breaking game was conducted in order for the participants to feel more comfortable in the group and freely share their ideas.

The co-creation workshop was organised in coordination with the four focus groups that were organized as part of WP6. The reports from the focus groups were used in the preparation of the workshop in order to better frame the discussion and find opportunity areas to explore.
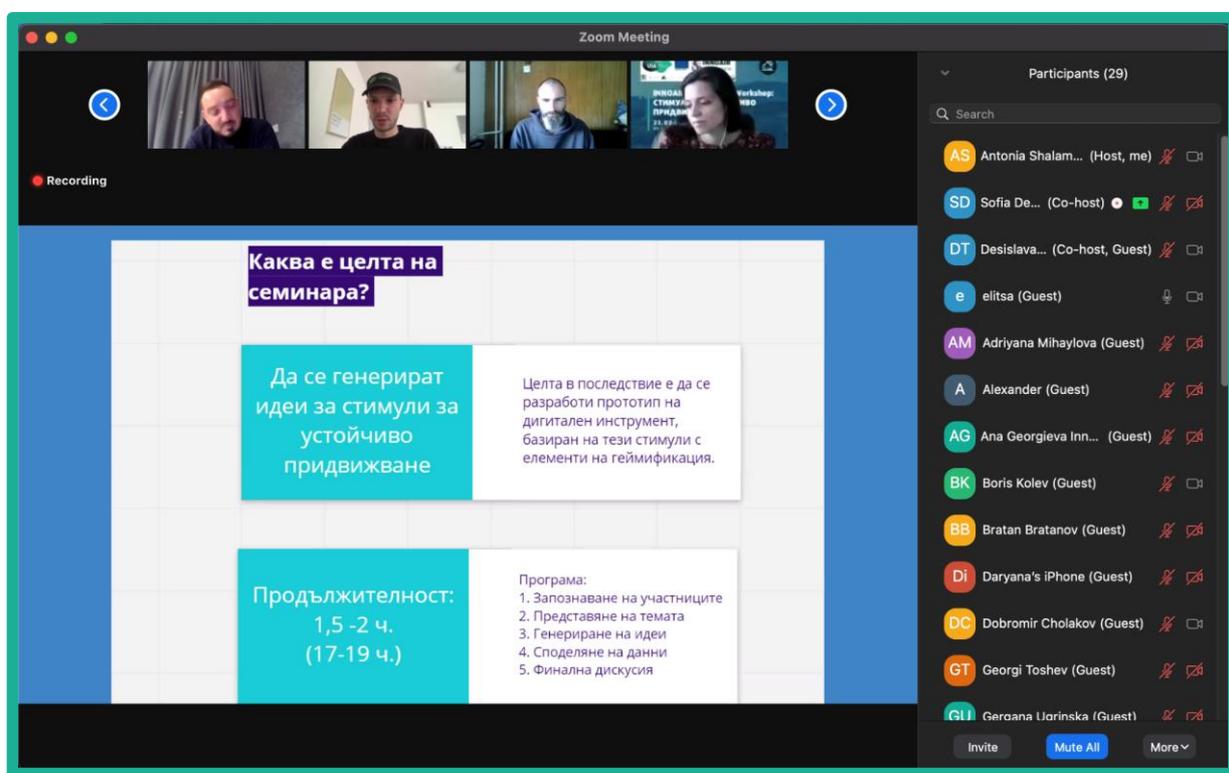
Picture 1: Screenshot of virtual seminar

Co-creation ideas overview

The ideas generated and discussed during the workshop were clustered around nine main topics exploring the main stimuli for citizens to change mobility habits, as presented below:

Infrastructural changes

Providing better conditions for using bicycles in the city, more bike lanes or zones with a speed limit turned out to be perceived as a great motivator and point for consideration for people when they decide how to commute in their daily lives. During the discussion people even suggested that in order for certain behavioral change to occur certain restrictions should be imposed, e.g. transport calming zones, Low emission zones, parking restrictions, etc.

Interconnected and combined public transportation options

Having convenient and affordable public transport, combined with other modes of transport was pointed as essential for such a loyalty system to succeed. It was stated that local government must think about how to make the public transport appealing to citizens and also provide options related to going the "last-mile". In order to choose the public transportation over the personal car, users must have different opportunities and options to commute and be able to use them within one service platform. That platform should integrate information about possible routes, travel time, mobility options and give citizens loyalty points for every journey you take no matter if with the bus, metro or a shared e-scooter. The establishment of mobility hub locations equipped with shared vehicles for alternative transport - bringing public transport or shared electric bicycles or cars, free parking, etc.

Alternative routes options

Providing access to an information database with suggestions for alternative routes for people who do not have enough experience was also discussed as a great stimuli for the general public. The argument behind was that when you try - you will find the benefits yourself. Providing additional information related to the costs incurred was also considered as a great stimulus for behavioral change, e.g. mobile application in which you find out when choosing a route what is the difficulty of the route, the time it will take you and how much money you will save if you use an alternative to the car.

Bonuses for parking

An interesting and innovative approach was considered to motivate people that are not eager to change their daily habits. In order to motivate the active drivers to start considering other options it was suggested to give them bonuses for parking in the paid parking zone. Options that were considered include the following:

- for every 5 trips with the public transport to get 1 hour of free parking in the paid parking zone;
- if you buy a yearly pass to get a dedicated parking space in front of your home;
- accumulating loyalty points, which you can then exchange in the Blue / Green Zone or Municipal Parking. There may be reserved seats (10-15) only for people who accumulate points from not using cars.

It was suggested to use an approach of stimulating drivers by watching and envying other drivers how they can park in these places just because they did not used their car.

Fast and efficient transportation
It was mentioned that in order to make citizens more prone of using public transport the municipality should put efforts in ensuring that public transport is fast and efficient. Participants discussed that if public transport takes considerably more time to get from one place to another, citizens will not prefer it before the car.

Universal access pass and integrated application for payment and getting information
The possibility to have an interconnected network of all types of transport for public use – shared e-scooters, shared bicycles, subway, buses, etc. It was suggested that Urban Mobility Center to introduce a universal transport pass that gives access to all transport services. For example, to load 10 BGN in it and to use the different type of transport in different times and occasions. Participants commented that there should be only one means of payment. As in Italy - Roma Pass - for three to five days there is access to all modes of transport and additional access to various types of museums and attractions. This can stimulate the use of the services for foreigners as well. It was also added that an information platform from which to learn about it is essential.

Loyalty card program and prizes
It was also suggested to invest in creating "City games", like some Scandinavian countries did – a mobile application which shows you interesting facts and information if you choose to walk or bike to your destination. An element of adventure will be a stimulus to try new things, participants suggested. It was also discussed that after unlocking a number of facts it will be good to have a material prize or enter a draw for it. Another stimulus that was discussed was to provide access to other attractions connected with active way of life, e.g. a reserved place to the lifts to the Vitosha mountain.
It was also mentioned that as social creatures people want to show-off, so if an app can calculate how many emissions they saved when they decided not to use their car, it might become very popular.
A group of participants united around the idea of adopting a loyal program, similar to existing ones of the shared mobility services, existing in the city – giving the opportunity to gather loyalty points that can be later used for discounts for products and services, e.g. free parking, public transport pass discounts, pass for museums, theatres, etc.

Involvement of employers
The involvement of employers was pointed out as crucial in order to bring positive change. It was suggested that many employers can used their corporate social responsibility programs to support such measures and bring added value.

Information campaign

All the participants agreed that in order for any stimulus to be effective it has to be properly communicated and stressed the need of conducting a dedicated information campaign that emphasizes the benefits of sustainable transport. Participants mentioned that incentives should help solving people's everyday problems (for example with parking) and need to be more direct, closer to people and related to things that excite them in order to attract them to be interested that there is an alternative of the personal car.

It was suggested that such incentives, even the already existing ones, should be promoted more with an information campaign that reaches people as widely as possible. People who use the car for transport are not at all interested in whether or not there are such incentives - they are simply not interested in this topic. The campaign should be communicated through the pain and problems for them - namely traffic jams and parking.

Within the discussion it was pointed out that people have a purely psychological barrier to getting around with something other than a car as they they think it's not possible in certain occasions. They do not assume that there is an alternative, except for a group of enthusiasts who are at the other extreme. Information campaign showing this is possible and has also many benefits what they gain is needed in order for behavioral change to occur.

The elements of such a campaign that were discussed are to following:
- image communication saying it is fashionable to move in an alternative way;
- sub-campaigns that include the promotion of various incentives, initiatives and practices;
- outdoor advertising - billboards; mass media was mentioned as most effective channels of communication for active drivers;
- engagement of specific target groups: those who already use alternatives - to strengthen this group of society and look for mechanisms that would interest the majority of people, especially the young
- usage of banners in parking lots in malls, but not at public transport stops - there we will not find our target group of people.

An information campaign should try to impact people's consciousness and self-awareness - primarily young people, through massive information and advertising campaigns that present the benefits of alternative urban transport - with an emphasis on convenience, safety and speed, presented in an attractive way. It was repeatedly outlined during the session that bicycle is very competitive way of transport to car in terms of timing.

Another suggestion was to also make part of the campaign informing about the harm of using cars - how it affect us and the environment, presented in a dramatic and shocking way to make it more impactful.

At the end of the idea generation session it was suggested that probably a mixture of the different approaches has to be used in order to really make a difference and introduce change. Apart from that, participants agreed that gamification approach will be successful tool for engaging citizens.

Data sharing considerations

When it comes to data sharing, it turned out that citizens are not very eager to share their data if they do not receive considerable benefits in return. The participants discussed that for data generation and gathering different systems can be used - Strava, Google, etc. They have also mentioned that if the exact usage of this data is clearly outlined and explained, no one should mind sharing information in an application created for the benefit of the city they live in.

However, certain considerations have to be taken into account:
- People usually prefer not to keep their GPS tracker on, as this affects their battery life;
- It should be very clear what kind of data is gathered and how it is protected;
- In order to provide their personal data to third party applications, citizens must be incentivised in a proper way.

It was discussed that very few people would share the location - it is sensitive for many people, but it would be easier to share other data - tagging a location, payment-related events - e.g. buying a ticket, activating a session for using a shared e-scooter or e-car, getting off at a certain stop to scan a QR code and thus accumulating points. It was suggested to gather data in gamified way, without using GPS location tracking and sharing of sensitive personal data.

In order for a person to agree to install a mobile application and share their data there, there must be some very good incentive and it must be valuable for them.

Practice shows that the mobile applications created by the municipality are not very well developed and people, even if they have downloaded them, do not use them often. It was suggested to integrate and link these incentives with other, ready-made and already established applications - such as Lime, Spark, Google Maps and others, if possible. This way, citizens will not need to install an additional application and will use the already built infrastructure of other services. Participants commented that it should be very easy to share data or check themselves for citizens, anything more than scanning a QR code or EFC at a subway stop or in the parking lot to scan should be avoided. Data upload should be something very easy, simple and done in literally a second in order to increase usability of the application.

When the option for fully developed and municipality owned platform was discussed participants mentioned that there must be some very big incentives such as trips, vacations, smartphones, etc. However, big prizes were also identified as stimulus for cheating.

In terms of tracking mechanisms, it was suggested that it is better to have a system that counts and tracks, rather than the individuals themselves. Citizens should not be busy reporting and entering data manually.

Recently, an electronic system for public transport in the city was introduced, through which the passes can be validated - maybe it could track the users and be used to verify whether user X has traveled by bike or walking. Introduction of checkpoints on the main routes and people with a public transport pass / mobile application / QR code to validate that they have passed through it.

Participants suggested to also use the traditional methods for counting target groups and conduct periodic censuses. This will make it clear what are the incentives that motivate people – it is one thing to want to visit the city center with alternative transport during the weekend, and another to go there every day to work. Understanding the reason for using a particular type of transport is important in order to determine the incentive that will be most effective.

Conclusions and recommendations: What is the best way to stimulate people to change their daily commuting behavior?

The most important thing is for people to be aware that by changing their habits of using their personal car for commuting within the city to some other and more sustainable transportation means will benefit the whole society. To clearly outline the end-goal of creating a better environment in the city.

It was also outlined that in order for any of these ideas to be effective, the basics have to be in place – public and shared transport to be fast and efficient when you need it. It was mentioned that with bonuses alone, there is no way to attract people to change their behavior, however by implementing a set of measures and combining them with good information campaign and award-system it can happen. The introduction of a bonus system would be a very good first step to attract the general public, which at present is not very interested in the topic. Little by little, the cultural attitude to this topic could change and the people's psychology could change, and gradually citizen would begin to demand this alternative transport.

The most effective mechanism to achieve this change is for citizens to ask for it first. Providing clear, well-structured and accessible information about the alternatives, routes, benefits, and also the disadvantages if you choose the car in the right way will bring the change that we are aiming for.
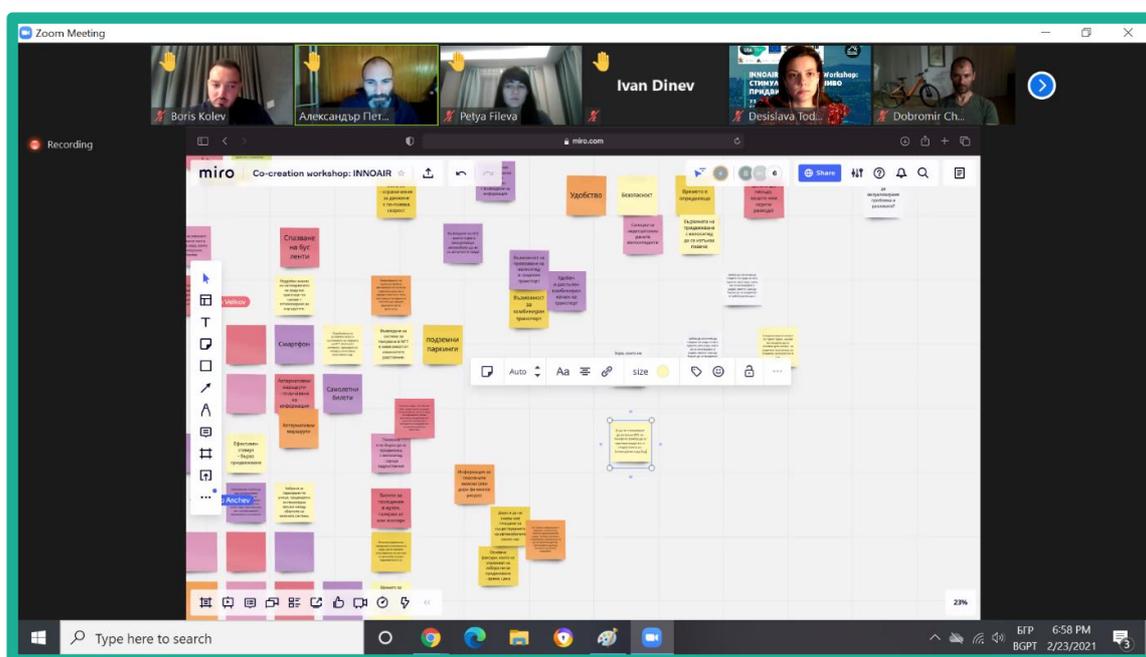
Picture 2: Screenshot of virtual seminar

Appendix 1: Presentation materials and collaborative white-board online tool

Appendix 2: List of existing stimuli for public sustainable transport use, currently available in Sofia and their outreach and efficiency

- **"With us at the theatre"** - an initiative of Sofia Urban Mobility Centre in collaboration with the Youth Theatre "Nikolay Binev". The initiative offers holders of a regularly loaded transport document for a period of three, six or twelve months to buy a ticket for a performance with a 50% discount. There are no additional costs for SUMC.
  Over 2,000 public transport users have benefited from the offer in three years.
  https://www.sofiatraffic.bg/bg/news/3738/kartata-za-obshtestveniia-transport-vazhi

- **Map of Sofia**
  Three-day card for all public transport with discounts at over 50 touristic sites in the capital. The card costs BGN 20 and it is sold in a set with a guide to the sites.
  For two and a half years (excluding the last year of a pandemic, in which the card is not advertised and the platform does not work), 800 cards have been sold.
  https://www.sofiatraffic.bg/bg/transport/1082/karta-sofiia

- **Viber bot and Mastercard payment**
  The Viber bot offers news about traffic in the city, current schedules and routes of public transport, as well as information about parking and types of transport documents. The option for payment through chat with the Viber bot is also available. The Mastercard holders who have paid 4 paid blue or green zones with their Mastercard, receive one free parking in a blue or green zone.
  About 21,000 users since the launch of the service in October 2020 have benefited through this incentive.
  https://www.sofiatraffic.bg/bg/news/3740/cgm-s-opciia-za-zaplashtane

- **Transport Pass - a joint campaign of Hobo and Sofia Urban Mobility Centre**
  Every Hobo user with a valid public transport card could receive a discount of 30 free "unlocking fees" for a Hobo electric scooter, in accordance with Hobo's pricing policy. The discount is valid for 30 calendar days from the date on which the person is approved for the discount and it could be used by the person each time and without limitation in the number of trips per day (within these 30 days) when making a trip with electric scooter Hobo. The user should keep the receipt of the transport card and upload it in the Hobo mobile application, in the Discounts section, along with a photo of the public transport subscription card and the receipt. There are no restrictions about the type of the subscription card.
  Purpose of the campaign:
  ● Encouraging Hobo and SUMC users to move eco-friendly, reducing their carbon footprint
  ● Ability to move quickly from major public transport stops to work / home
  ● Integration of both services and their systems: micro-mobility, as a service, is complement to public transport, which aims to provide the consumers the ability to move quickly, easily and eco-friendly in an urban environment without the need to do it by using a personal car. Hobo scooters can be used as a connection to any public transport in areas where electric scooters operate.
  Launch of the campaign - November 9, 2020
  Data for the period 09/11/20 - 09/02/21
  - 96 users took advantage of Transport Pass
  - 1680 newly registered users - there is no data how many of them are registered because of Transport Pass
  - 148 trips with Hobo made by users with Transport Pas
  https://mysofia.bg/news/s-karta-za-gradski-transport-moze-da-otklyuchite-bezplatno-trotinetka-na-hobo-08-12-2020/

- **The loyalty system of Spark - eGO**
  The bonus system of Spark is based on collecting points. The customer receive points for each time they drive – 1BGN equals 3 eGO points. If using Visa card for payment, they receive 4 points more. There is also a specific number of points (150) if the user drives the electric to a charging station in case the car is below 50 % charged.
  https://spark.bg/en/

- **Discounts for annual public transportation card**

From June 1, 2016 SUMC introduced a new price on the annual card - BGN 365, while the old price was BGN 500. The attached table shows the multiple increase in demand for this type of transport document.

Year	Annual cards issued for all lines / number /	Price /BGN/
2015	226	500,00
2016/I-V	129	500,00
2016/VI-XII	16 679	365,00
2017	25 018	365,00
2018	32 425	365,00
2019	41 246	365,00
2020	32 310	365,00
January 2021	5 294	365,00
1st payment /BGN 200/	57	380,00

From 1 January 2021, passengers using annual public transport cards can now choose between two options. The first is to pay the full amount of the card for the 12-month period, and the second – to pay by deferred payment. These options apply to a personalized card (with a photo) and to a non-personalized one. In the first case, for a single payment, the amount is BGN 365 for a personalized card and BGN 600 for a non-personalized one. The deferred payment could be made in two payments - the final price for the annual personalized cards is BGN 380, and for the non-personalized remains BGN 600. For personalized card, the first payment is BGN 200 and it is for a period of 4 months. The second payment is BGN 180 and it is for a period of 8 months. For non-personalized cards, the payment is in two equal payments of BGN 300 each for 4 and 8 months. An important condition is that the second payment must be made before the expiration of the fourth month from the date of recharging the card.

https://www.sofiatraffic.bg/bg/transport/tarifa-i-prevozni-dokumenti/702/tarifa

- **The MPASS and Mastercard campaign.**

Purchase of a day / night card via mobile phone. After payment by bankcard, mobile operator or promotional code, the user receives a QR code, which is scanned at the entrance of the subway and if checked in the public transport vehicles. The time required to purchase through MPASS is 60 sec.

The campaign started on March 13, 2019 and lasts until the prize fund is used up. All local or foreign individuals who have created a user profile in the MPASS client application and have a debit or credit card Mastercard issued by a bank or financial institution in the Republic of Bulgaria before the start date of the Campaign are eligible to participate in the Campaign. Every MPASS user who registers (saves) a valid debit or credit Mastercard bank card in the MPASS application, receives a promotional code for purchasing a transport document.

- Registration (saving) of a bankcard in the MPASS application is being made by entering the necessary data of the card and making a payment for a transport document. Each user has the right to receive an unlimited number of promotional codes during the campaign period, depending on the number of Mastercard cards that he registers (saves) for payments in the MPASS application.

- The promotional code, while valid (up to 14 days after the payment), entitles you to a 100% discount on the price of a transport document when purchased through the MPASS application, regardless of the type of transport document requested.

The prize fund is worth a total of BGN 44,000.

4,500 prizes from the Mastercard have been distributed, of which 4,300 have already been used and loaded via MPASS.

https://www.ccbank.bg/bg/fizicheski-lica/bankovi-karti/promocii/promocii-s-mastercard