iDREAMS

NEWSLETTER

No. 6

December 2022

IN THIS ISSUE

DEAR READER,

We are approaching the last couple of months of i-DREAMS. But traditionally, we like to give you an update on the project status before the winter holidays. After the summer break we started analysing the first available data from our field trials in Belgium and the UK. And the first results are quite interesting! In this newsletter we therefore like to give you some insights in these first findings. We have also presented these first outcomes to our User Advisory Board (in September) and our Expert Advisory Board (in October). Both advisory boards provided us with some valuable feedback and suggestions that will help us in further analyses in the upcoming months. In the past six months we also actively worked on our research output by participating in the Transportation Research Arena (in Lisbon, Portugal) and the Annual Polis Conference (in Brussels, Belgium) and by publishing both scientific (presentations and papers) as well as non-scientific dissemination material in the form of 6 new deliverable interviews and a second Policy Brief. We have actively communicated about this on our social media, but we have also summarized it for you in this newsletter. We hope you will all enjoy reading this 6th i-DREAMS newsletter and we wish you and you loved ones a Merry Christmas and a happy New Year!

PROF. DR. TOM BRIJS
COORDINATOR

DOES THE i-DREAMS SYSTEM WORK? FIRST RESULTS FROM THE CAR AND TRUCK TRIALS

Does our i-DREAMS system work? That of course is the most important question that we hope to be able to answer positively. We had a talk with Tom and Kris Brijs and asked them if they could already provide us an answer to that question. In the past period, the research team was able to work with the first data that was collected during a couple of car and truck trials in Belgium and the UK. But to make sure that everyone understands correctly how the i-DREAMS system works, we first would like to explain that again in a concise way.

The i-DREAMS system constantly monitors the driver, the vehicle and the environment. Via a sensor set, a variety of parameters are monitored and in case of danger translated into warnings. The system distinguishes three phases: *the safe driving phase*, where everything is ok, *the danger phase* where there is an increased risk of collision and *the avoidable accident phase* that insists on intervention to avoid crashes. After the trip, the driver can obtain feedback by consulting the i-DREAMS app. Several functionalities provide insight in the own driving behaviour and performances. Lastly, the driver can use some gamification features to challenge him/herself to keep the quality of the driving performance at the highest level as possible.

After a rough period, largely due to corona, where massive amounts of data have been collected in challenging conditions, we finally were able to take a first look at the results. The outcome and process evaluation are ongoing while more and more data are coming in. But let's have a look at some first impressions.

OK guys, thanks for sitting down with me. We would like to give our readers a first impression of the results from the car and truck trials. Are there any aspects that they need to take into account to understand everything correctly?

Kris: "I guess it is important to keep in mind what the difference is between outcome and process evaluation. In i-DREAMS we try to realize behavioural change to ultimately improve road safety by reducing the number of crashes and the number of risky events that might lead to crashes. We try to do this through interventions in the vehicle and after the trip. We are now checking if we are seeing the desired effect of these interventions. That is the outcome evaluation. For this type of evaluation, we use all sensor data and data from the entry and exit questionnaires. Those outcome results also depend on how interventions are implemented and executed. That focus on how the interventions are implemented, is the process evaluation. If interventions are not implemented as intended for example, they might not have the desired effect, so it is important to get insight in that. We have three sources of information we use to asses that process: (1) the results from our helpdesk that made an inventory of all questions and answers and solutions that were reported, (2) the results from specific questionnaires where we asked how clear, user friendly, attractive, useful, etc. the technology was and (3) objective use indicators (e.g. number of app opens, clicks…). It is important to understand that the conclusions from the process evaluation might have an impact on the outcome evaluation."

Tom Brijs
Hasselt University

Tom: "It is also important to keep in mind that when we talk about the first results, we only talk about outcomes related to Belgian car data, from both wave 1 and wave 2, Belgian truck data from wave 1 and UK car data from wave 1. This also means that there is a lot of data that is not taken into account yet. So, there is a possibility that the end result deviates from what we observed so far."

Tom, you were talking about wave 1 and 2. Can you please explain the difference?

Tom: "For cars, wave 1 started in the spring of 2021. About 25 cars were equipped in that period and participants started their 18 weeks of participation. Afterwards, equipment was removed and a new set of cars was equipped again, somewhere early

in 2022. That second set of cars was part of wave 2. A similar procedure took place in the UK. For trucks we started to equip the first vehicles in Belgium, in October 2021 in two transport companies. They are considered as wave 1 in the truck context and data of these companies are taken into account in these first results. After deinstallation of that equipment, it was reinstalled again in new trucks from 3 other companies. They are considered as wave 2 and are not yet included in these preliminary results."

UHasselt's instrumented vehicle, equipped with i-DREAMS technology

Can you explain what happened during those 18 weeks of participation?

Kris: "During the first four weeks we just let our sensors do the work, but no interventions were launched yet (= phase 1 – 4 weeks). In week 5 we started the in-vehicle interventions. Participants were then warned for imminent danger while driving (= phase 2 – 4 weeks). In week 9 we then also included the i-DREAMS app in the mix on top of the in-vehicle interventions. The app functionalities that

were made available would give drivers insight in their trips and translate performances into scores (= phase 3 – 4 weeks). And then, in week 13, we added some gamification features on top of that. In the app, drivers could then find tips and facts related to their driving behaviour and they could take up goals to challenge themselves to improve (= phase 4 – 6 weeks)."

OK, now I am curious. What do the first results tell us? Did the interventions work?

Tom: "Since these first results are only based on part of the data and are coming from very preliminary analyses, we still have to be careful in drawing strong conclusions. But yes, from what we see now, the interventions seem to be working. In these first analyses we saw that the number of risky events per 100 km decreased both with car drivers as well as truck drivers. We are actually seeing that the biggest decreasing effect takes place after the launch of the in-vehicle interventions in phase 2. After that, in phase 3 and phase 4, there is more or less a status-quo, or even a small extra decrease, although not always statistically significant. And we also see the biggest decrease in '*the danger phase*' and '*the avoidable accident phase*' and more specifically in the latter. This means that mainly the number of events containing the highest risks are decreasing, which is of course what we are happy to observe."

Kris: "I would like to add some reflections to that. The goal of behavioural intervention can be twofold: either unwanted behaviour is corrected to desired behaviour, or desired behaviour is perpetuated over time.

From what we see now, it seems that we are in the second scenario as far as the effect of the i-DREAMS app is concerned. It seems that the added value of adding the app is not creating an extra positive effect in the sense of an extra decrease of the number of risky events. It is rather keeping the behavioural change in the right direction over time. Although I am speculating a bit right now, I wonder if the app does have a certain net effect? But maybe I first need to explain how we approach behavioural change in i-DREAMS. The goal is to improve road safety by decreasing the number of crashes and risky events. That is what we call, our safety outcome. To do that, we zoom in on specific categories of driving tasks, namely: vehicle control, speed management, sharing the road with others and driver fitness. We call them our safety promoting goals (SPG). To measure these SPG's, we measure specific driving tasks which we call performance objective (PO's). For the SPG 'vehicle control', those PO's are 'acceleration', 'deceleration' and 'steering'. If you know that we don't offer real-time interventions for those PO's, but we still notice that events related to them decrease, then it makes you wonder what causes that? Could it be the app or is it what we call the 'Hawthorne-effect'[1] ? I am looking forward to the results from further analyses to better understand that."

---

[1] The Hawthorne-effect is when subjects of an experimental study attempt to change or improve their behaviour simply because it is being evaluated or studied and not because of changes in the experiment parameters or stimulus.

Kris Brijs
Hasselt University

Did you observe any other notable things in those initial analyses?

Tom: "We did notice that the Belgian car results from the first wave deviated from what we saw in wave 2 or from what we saw in the UK. We actually did not see that trend of decreasing risky events from phase 1 to phase 2 and a sustainable, even slightly better effect in phases 3 and 4. The Belgian second car wave, first truck wave and the first UK car wave results however were very comparable. Although we do not have any 'proven' answers yet, we did notice a correlation with the amount of traffic that was on the roads in Belgium during the COVID restrictions. In phases 1 and 2 traffic was a lot less busy than in phases 3 and 4, because COVID restrictions were lifted after phase 2. That might explain the deviation in the Belgian car results from wave 1."

COACHING

MOTIVATION   INSPIRATION   COACH   SUPPORT   DEVELOPMENT   ADVICE   SKILL   KNOWLEDGE

Kris: "We also see some differences in app use. Based on the current data, we see that both car and truck drivers interacted with the app, although there are some differences between modes, countries and waves even. We definitely see more app uptake among car drivers, compared to truck drivers. Almost every car driver interacted with the app, which was absolutely not the case with truck drivers. But even among truck drivers there are big differences. From the 5 companies in Belgium that participate, in 2 of those companies we see a lot more uptake compared to the other 3. That makes you wonder why that is. Perhaps it has to do with the presence of a coach who motivates drivers to use the app, whereas that coach is not there in another company? For now, that is merely speculation, but it is something to look into."

"We definitely see more app uptake among car drivers, compared to truck drivers."

Car drivers all volunteered to participate, but with truck drivers, the companies were the ones that chose to participate and not the individual drivers. Could that have played a role that led to the differences you now see in app uptake?

Kris: "This is speculation of course, but self-selection is a well-known phenomenon in intervention evaluation. Even in open recruitment, you can end up with a self-selected sample. Of course, there will also be a lot of people who are not interested at all, who therefore did not apply as participant and are therefore not among the participants. It is certainly possible that this phenomenon also plays a role with us. But besides that, for professional drivers the driving itself is a professional activity that generates income. For them, there is therefore an additional consequence in their minds. Even if you emphasise in all your communication that participating will have no impact whatsoever on the employment status, you never know whether they fully believe that, of course. It could have all played a role in the app uptake. We will have to look into it further."

iDREAMS

Can you see what the most popular app features were?

Kris: "We noticed that with car as well as truck drivers, everything related to trip information is very popular, like trip scores, event mapping, getting more information per event… With the truck drivers, the leaderboard also is very popular. But apparently the tram drivers were not so enthusiastic about that. At least that is what they told us in the focus groups that were organised in the UK. They feared that it would make drivers focus on aspects of the driving tasks that can improve one's position in the leaderboard, but then lose sight of the overall safety picture."
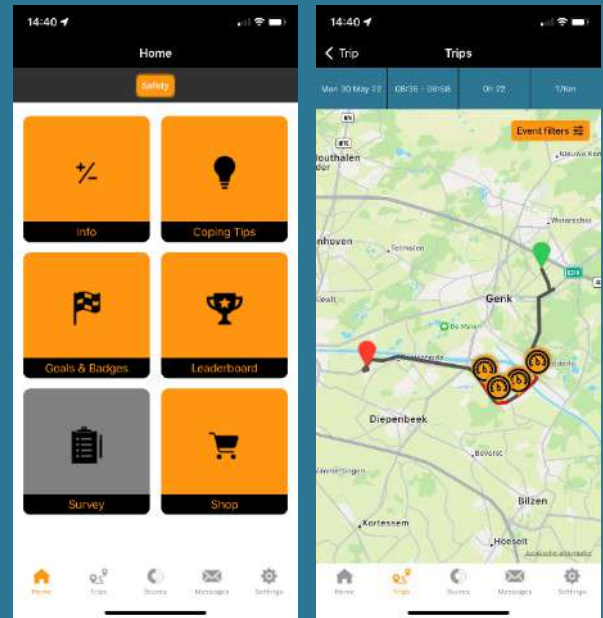
Knowing what you know now, if you had the chance to do everything all over again, is there anything you would do differently?

Tom: "I don't think there is much that we could have done differently in the context we had to operate in. Of course, there are things we would like to have done in another way, but we always had to balance numerous practical considerations and I think that the choices we made were the most optimal ones. If however we ignore all those practical boundaries, we can come up with quite a few alternatives, which can of course also be recommendations for further research."

Kris: "Indeed we could! One of the things we are very sorry to have not been able to do, is taking up a control group plus randomisation of allocation of participants to either the test or control group. A control group is a group of drivers that would not be exposed to the interventions. Strictly speaking, this implies that we cannot make a statement towards causality, i.e. towards impact of interventions on the outcome measures. It was practically impossible to do that, because if you split all the participants into two groups, your sample becomes half the size. We also had to divide over several modes, so the sample becomes even smaller. In the end, the statistical power then becomes much too small to be able to come to any conclusions. Also, we now have a 'full within subject design' where each participant first has a baseline measurement, then real-time interventions (which remain active), then app, then gamification. Anything added per phase also remains active in the phases that follow. This way, you cannot determine the net effect of interventions. For that, you would have to look at that 'between subject'. So, only when you roll out interventions separately from each other, you are able to look at the actual impact of each intervention. Again, randomisation of the order of interventions would then come into play. But practically and organisationally, that is all very difficult."

Maybe this can all be recommendations for future research?

Tom: "Definitely! These are all aspects to tackle in a lot of new future research projects. I would even like to add some extra thoughts. I think there is still a lot more potential for the app and ways to increase app uptake which we did not explore yet. First there is the web dashboard. It is actually created for company coaches to get insight into the performances of their drivers, to steer those performances and to manage the app functionalities that are offered. We were not able to work on that with the company coaches of the participating companies yet. We did introduce to them the dashboard, but it was net yet used to the fullest. For example: coaches could have activated and used a chat function in the i-DREAMS app, to communicate with their drivers. This was not tested yet, but it could have resulted in better app uptake if it was. Besides that, we also started to explore the integration of e-learning in the app. Truck drivers have to undergo mandatory professional training to obtain the Certificate of Professional Competence. We are looking at blended learning options to organise this via the app instead of in a classroom. The idea is to offer content via micro-learning modules. This way you create a permanent learning environment, which is proven to have a more sustainable effect, instead of undergoing training once per year. And there is also the 'shop' feature in the app. Drivers can buy rewards there with credits that they collect by obtaining good performance scores in the app, realizing goals and earning badges. This extrinsic reward option was not explored yet and might also result in increasing app uptake."

Well, from what I got to hear from both of you, it seems like there is certainly no lack of motivation. On the contrary! It seems that you are extra motivated to add another sequel to this project to get as many more answers as possible to the questions you still have in mind. It is very nice to notice that much motivation at the end of a challenging project such as i-DREAMS. I would like to thank you both for talking to me and I wish the entire team the best of luck in the upcoming final sprint towards the end of the project.

**EDITH DONDERS
DISCOM MANAGER i-DREAMS**

HOW DOES THE RAIL SECTOR FEEL ABOUT THE i-DREAMS SYTEM?

The goal of i-DREAMS was to test the system in different modes, including light rail (trams) and heavy rail (trains). We had a talk with Rachel Talbot on how the trials were approached in these rail modes.

Hello Rachel, nice to talk to you again. To come straight to the point. How did the rail trials go?

Rachel: "There is a very big difference between what we could do in trains compared to trams. I will first tell you a bit more about the trains. As it turned out, the i-DREAMS system was not compatible with trains. The system is based on 'line of sight driving', which trains don't do. We therefore used the trains as a transferability study, so some of the train work will therefore be reported under WP8: transferability to other modes. We got into contact with driver managers and trainers and we tried to do a simulator study. But due to various technical issues, that was not possible. So, we organised focus groups instead."

How did you approach these train focus groups?

Rachel: "We presented the principles of the Safety Tolerance Zone and asked them what the main issues were that they encountered while driving a train. The main issues were fatigue, speed and SPAD's[2]. Speed was considered to be well covered already, since they have a system that can take over the train when they are speeding. Headway time monitoring was not relevant in the rail context, since that happens in the operation room, not in the cabin. In the train focus groups, we only talked about real-time interventions, so not about the app.

---

[2] Signal is Passed At Danger

We explained where we wanted drivers to be in the STZ, how we monitor parameters to calculate it and how we would nudge them to the desired behaviour. They were actually quite interested in the idea, especially in the concept of monitoring fatigue. But on the other hand, they were very sceptical about being monitored."

And what about the tram trials. I believe that for trams you did organise simulator tests?

Rachel: "Yes, indeed we did. For trams the equipment was much more relevant, because trams do drive 'line of sight'. In our case study, we had some segregated tracks where no other vehicles had access to, other than pedestrians crossing it. And then we had a busy town centre section, where the tram was driving around ordinary roads. With trams we did test headway, with a focus on vulnerable road user detection and we also looked at speed, which they are already heavily monitored for, and fatigue."

What were the main issues that were relevant for trams?

Rachel: "The main focuses were on fatigue, speed and vulnerable road user detection. They already had a system in the cabin that monitors eye closure to monitor fatigue, but they also wore our wearable. We did some tests in their training simulator, but not everything functioned correctly. We mainly had issues with the vulnerable road user detection. Another challenge in the simulator tests was the measurement of fatigue. Although there are techniques that enable it, we couldn't make the participants artificially tired, because we were taking them off shift. A lot of them needed to come back on afterwards. Of course, we could not do anything to jeopardise their shift."

Rachel Talbot
Loughborough University

Was there something that really stood out to you in the simulator tests?

Rachel: "We got the participants to do a cognitive load test during their city centre simulator trip. And they really found that very challenging. Normally in a cognitive load test you do something like counting backwards in sevens or threes, but with our tram participants we had to do tens. Because they were so hyper focused on their driving task, they could not do sevens or threes. And they abandoned the counting test when they felt it distracted too much, which is of course what they should do! It became very clear, that distraction is avoided at all cost! Cell phones are not even allowed in the cabin."

Did you get some insights into their thoughts about the in-vehicle interventions?

Rachel: "They were mainly interested in information that could help them anticipate. Speed warnings for example, they were really in favour of being notified beforehand about speed limits on upcoming sections. Same for fatigue. They really were positive about the concept of being made aware of fatigue when it is detected. Actually, in all the feedback that we received, it became abundantly clear how important 'safety' is for each driver."

"They were mainly interested in information that could help them anticipate."

Were you able to get some feedback on the app from the tram drivers?

Rachel: "Yes, we conducted some focus groups where we presented some of the app visuals on a PowerPoint slide and explained to them what they saw. Unfortunately, we were not able to let them experiment with some of the functionalities themselves. Here also, they were very interested in functionalities that could help them anticipate in situations. The mapping of events for example. It was considered helpful to all the drivers to know the areas that are generally considered to be dangerous. Also, the tips and facts were enthusiastically welcomed. They however were very sceptical about the leader board and even the term 'gamification', since

'safety' for them was not to be considered a game. Of course, gamification is not that. It is merely a technique to keep drivers motivated to drive as safe as possible. But it showed that even the use of specific terminology has an influence on how things are perceived."

So, to conclude, what are the main aspects that stayed with you after the tram focus groups?

Rachel: "What struck me most was the drivers' scepticism, both with trains as well as trams, about how the monitored data would be used. When information is used to improve safety, they are all for it, but there is much fear that systems such as i-DREAMS have the secondary purpose of controlling the driver (to penalise him at the end). So, the thought of additional data being collected about them caused some mixed responses. There were some tram drivers who remarked though that dashcam material might be useful to help their case. For example, if a pedestrian would cross the tracks to closely to the tram, dashcam video material might be able to prove that they did not make any mistake. Anyway, the participants' focus on safety was really clear. They all take their jobs very seriously. And from that standpoint, they seemed to be enthusiastic about the concept of the Safety Tolerance Zone and the i-DREAMS system we introduced. Although it became clear that the system will require some adjustments in order for it to be implementation-ready in a rail context."

OK Rachel, thanks a lot!

**EDITH DONDERS
DISCOM MANAGER i-DREAMS**

THIRD USER ADVISORY BOARD MEETING

The **UAB** is a group of relevant stakeholders that supports the consortium in ensuring the research continues to address the key issues. It also advises on a major route to implementation of the results.

After the first two meetings took place online (due to COVID-19), we were now able to join physically in Brussels on September 26. The UAB members that participated were representatives from the public transport sector (CARRIS), road safety government services (ANSR), transport policy and research (RAC), the car sector (Toyota Motor Europe) and pedestrian (IFP) and cyclist (ECF) federations. Furthermore, consortium representatives as well as representatives from the European Commission participated in the meeting.

During the meeting the first results of the outcome and process evaluation were presented, the i-DREAMS system was demonstrated (in the vehicle as well as an app/web dashboard presentation) and an insight was provided into the valorisation approach. To conclude, the importance of i-DREAMS for policy (European as well as national, regional and local) was sketched. The material that was presented triggered some interesting discussions that led to questions and advices related to possible interesting further research questions, the scoring methodology used in the i-DREAMS app, the weight of the context variables in the scoring process, user attention demanded by the i-DREAMS technology in the vehicle and the way events during a trip are defined. Finally, suggestions were made on how to approach the market and society and the choice of market segments to focus on.

THIRD EXPERT ADVISORY BOARD MEETING

The **EAB** is a target group of experts in the field of road safety, human factors and automation. The EAB supports the consortium in strategic choices throughout the project by providing useful input in terms of knowledge, network, policy orientation, etc.

This third meeting took place online, on October 5, mainly for practical reasons since the EAB members are located in Australia, New Zealand, Canada, the US and Qatar. In this third meeting four out of five EAB members participated: Prof. Judith Charlton (Professor and Director of Monash University Accident Research Centre, Australia), Dr. Wael Khaleel Alhajyaseen (Associate Professor at Qatar Transportation and Traffic Safety Centre), Dr. Carol Flannagan (Research Associate Professor at the Transportation Research Institute of the University of Michigan) and Dr. Samuel G. Charlton (Professor at the University of Waikato, New-Zealand). Dr. Ward Vanlaar (COO of the Traffic Injury Research Foundation) was not able to join.

The EAB members were also given insight into the first results from the outcome and process evaluation and together with the participating consortium members the approach was discussed. It was acknowledged how rich and complex the massive amount of data is that we collected and that it is a challenge to explore within the timeframe available. But of course, the availability of the rich data set in itself is an important output of the project.

The EAB members found it interesting to see how the consortium went from theory to actual implementation of the equipment. The first stage of analysis was presented, focusing on strategic outcome indicators. They mentioned to be looking forward to what is to come, to the more complex and in-depth insights that will follow. The most important advices/comments that were given to the consortium related to the focus of the significance analysis, suggestions on how to better understand complex relationships between all the contextual variables that are taken into account and how to distinguish between drivers that were highly engaged in using all the aspects of the i-DREAMS system and those who showed less engagement. To conclude, they expressed to be curious about the results of the dose-response relationships between app use and risk event data.

i-DREAMS DISSEMINATION ACTIVITIES

i-DREAMS members participated in the following conferences:

14 - 17
Nov 2022

Transportation Research Arena, Lisbon, Portugal. Besides a i-DREAMS demonstration exhibit with a driving simulator setup and an instrumented vehicle, 3 presentations were presented.

- Brijs K., Adnan M., Ross V., Cuenen A., Vanrompay Y., Khattak M.W., Katrakazas C., Michelaraki E., Filtness A., Talbot R., Hancox G., Brown L., Papazikou E., Gruden C., Wets G., Yannis G. and Brijs T. (2022). Effectiveness of real-time and post-trip interventions from the H2020 i-DREAMS naturalistic driving project: A Sneak Preview.

- Brijs K., Ross V., De Vos B., Filtness A., Talbot R., Hancox G., Pilkington-Cheney F., Katrakazas C., Michelaraki E., Yannis G., Kaiser S., Furian G., Lourenço A., Wets G. and Brijs T. (2022). Framework for behaviour change implemented in real-time and post-trip interventions of the H2020 i-DREAMS naturalistic driving project.

- Michelaraki E., Kallidoni M., Katrakazas C., Brijs T. and Yannis G. (2022). How to define a safety tolerance zone for speed: insights from the i-DREAMS project.

30 - 1
Nov/Dec '22

Annual Polis Conference, Brussels, Belgium

- Brijs T. (2022). *Pecha Kucha PPT.* Keeping drivers inside the Safety Tolerance Zone: i-DREAMS

Deliverables

One new deliverable was submitted on October 31. **Deliverable 9.5 *'Report on the activities of and recommendations made by the User and Expert Advisory Boards'*** describes how cooperation between UAB and EAB with the consortium took place and how their input was taken into account throughout the project. D9.5 is part of WP9 'Stakeholder consultation and dissemination'. After approval from the European Commission, the report will be made available online.

Furthermore, 23 other deliverables have already been submitted and approved.

CLICK HERE TO CONSULT THE i-DREAMS DELIVERABLES

Scientific publications

So far, an impressive amount of scientific publications related to i-DREAMS has been published. All this output is available via our project website.

CLICK HERE TO CONSULT THE i-DREAMS SCIENTIFIC PUBLICATIONS

Other (non-scientific) publications

Besides scientific output, we try to report on our research progress in easy-to-understand language. To this end, several other output formats appear on a regular basis. In the past period we have published our second Policy Brief, as well as 6 new deliverable interviews: D3.2, D3.3, D3.4, D3.5, D5.1 and D9.1. In these interviews we talked with the authors of the respective deliverables to fully understand what these technical reports are all about.

CLICK HERE TO CONSULT ALL THE i-DREAMS NON-SCIENTIFIC PUBLICATIONS
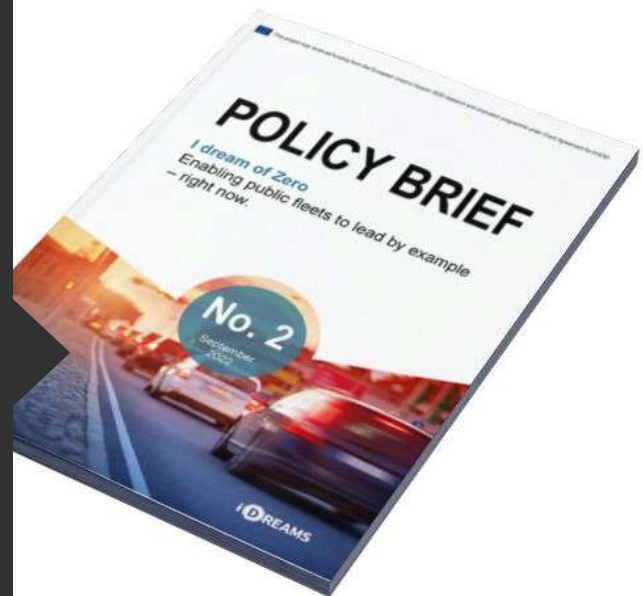
D3.2
Toolbox of recommended data collection tools and monitoring methods and a conceptual definition of the Safety Tolerance Zone

D3.3
Toolbox of recommended interventions to assist drivers in maintaining a safety tolerance zone

D3.4
Experimental protocol

D3.5
Standard protocol for handling big data

D5.1
Organisation of the driving simulator and on-road trial experiments in i-DREAMS

D9.1
Report on vehicle survey operator needs

i-DREAMS CONSORTIUM CALENDAR

Activities carried out in the past six months

26
Sep 2022

Third User Advisory Board meeting
Renaissance Hotel in Brussels, Belgium

5
Oct 2022

Third Expert Advisory Board meeting
Online

14 - 17
Nov 2022

Participation from several consortium members in Transportation Research Arena
Lisbon, Portugal

30 - 1
Nov/Dec '22

Participation from Tom Brijs in the Annual Polis Conference
Brussels, Belgium

Planned activities

17 **Jan 2023**	**i-DREAMS Tenth Steering Committee meeting** Online
14 - 16 **Feb 2023**	**RTR conference** European conference on results from road transport research in H2020 R&I projects
26 **Apr 2023**	**i-DREAMS final event** Physically in Brussels

MERRY Christmas & HAPPY NEW YEAR