SIMUSAFE
SIMULATOR OF BEHAVIOURAL ASPECTS FOR SAFER TRANSPORT

WORKSHOP

AUTONOMOUS VEHICLES AND ROAD SAFETY: TOWARDS NEW TRAINING MODULES FOR DRIVERS AND DRIVING INSTRUCTORS

MINUTES OF THE MEETING (INTERNAL REPORT)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

1. Executive Summary

The SIMUSAFE project (an acronym for "SIMUlator of behavioural aspects for SAFEr transport") aims at:

- analysing and defining the individual variables related with risky uptake behaviour in urban traffic situations,
- tracing cause-consequence data to evaluate risk awareness and perception, and
- determining core factors of risky behaviour and affected decision making processes.

The ultimate goal is to obtain natural data from different actors (car drivers, motorbike drivers, bicycle drivers and pedestrians) in order to develop a new generation of driving simulator whose Artificial Intelligence components behave in the most realistic possible way.

A specific project task focuses on the analysis of training modules, exams, requirements for instructors and instructors training in Europe, in order to identify new training needs for both instructors and novice drivers. A further task will suggest a new standard to the creation of test scenarios for road safety by using simulators to create better educational tools for new and rehabilitating drivers, also in view of the deployment of autonomous cars SAE level2 (already on the market) and level 3.

EFA (the European Driving Schools Associations) and AIPSS (the Italian Association of Road Safety Professionals) organized a workshop in Brussels involving relevant stakeholders and representatives of the European Commission services in order to discuss about the possible future training schemes.

In fact, the road mobility environment is continuously evolving and vehicle types are beginning to change as a result of increasing levels of automation: vehicle SAE2 are already circulating and the SAE3 ones are close to be deployed.

The discussion conducted during the workshop pointed out that new education and training schemes (for both trainers and novice drivers) should be agreed at European level and implemented in a way which match the speed of the increased implementation of automated driving functions.

The use of driving simulators would provide the possibility to expose drivers to situations they cannot encounter during a regular training and in addition may make drivers aware of dangerous situations they can be involved.

The main issue remains the diversification of training system country by country: a joint regulation, as well as measures and guidelines are necessary to make sure that autonomous vehicles are safe rather than comfortable and convenient for the user.

2. Agenda

Autonomous vehicles and road safety: towards new training modules for drivers and driving instructors.

WORKSHOP – 16 May 2019 – Brussels, Rue de la Loi 223 (Fondazione CSMare)

14h00 Registration

14h30 Welcome speech and introduction of EFA (John Lepine - EFA)

14h40 Speech of Ancuta Pasca –(INEA – SIMUSAFE project officer)

14h50 Current and potential safety issues related to the introduction of autonomous vehicles (Carlo Polidori - AIPSS:)

15h00 Overview of the driving schools in Europe: current issues and needs. How can driving schools benefit from simulators in relation to AV? (Manuel Picardi and Enrique Lorca - EFA)

15h15 Speech of European Transport Safety Council (Antonio Avenoso - ETSC Executive Director)

15h30 Speech of DG MOVE (Casto Lopez Benitez - Team Leader, Road Safety, Vehicles Automatisation)

15h45 Speech of DEKRA (Oliver Deiters - Managing Director)

16h00 Coffee Break

16h30 Round Table with the speakers and the participants – Moderator: Frank Mütze (ETSC)

18h20 Closing remarks ETSC

18h30 End of the workshop

Working Language: English

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

3. List of participants

Participant	Institution	
John Lepine	EFA (*)	European Association of Driving Schools
Ancuta Pasca	INEA	Innovation and Networks Executive Agency - *SIMUSAFE Project Officer*
Carlo Polidori	AIPSS (*)	Italian Association of Road safety Professionals
Manuel Picardi	EFA(*)	European Association of Driving Schools
Enrique Lorca	EFA (*)	European Association of Driving Schools
Antonio Avenoso	ETSC	European Transport Safety Council
Casto Lopez Benitez	DG MOVE	European Commission
Oliver Deiters	DEKRA	German Motor Vehicle Surveillance Association
Frank Mütze	ETSC	European Transport Safety Council *(Round Table Moderator)*
Ceri Woolsgrove	ECF	European Ciclist Federation
Jeannot Mersch	FEVR	European Federation of Road Traffic Victims
Emilio Patella	Unasca	Italian Association of driving schools
Johan Chiers	RYD	Responsible Young Drivers
Luis Escobar Guerrero	DG MOVE	European Commission
Tom Alkim	DG RTD	European Commission
Peter Lehnert	MOVING e.v.	Federation of traffic publishers
Emmanouil Brouzas	R.S.I	Road Safety Institute "Panos Mylonas"
Stéphane Espié	IFSTTAR (*)	Institut Francais des Sciences et Technologies des Transports, de l'Amenagement et des Reseaux

(*) Partner of the SIMUSAFE project

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

4. Methodology

The workshop aimed at stimulating a discussion among relevant stakeholders on the training needs for both drivers and driving instructors, even with the use of advanced driving simulators, in view of the deployment of autonomous cars.

In order to have time for an effective discussion, the number of initial speeches and presentation was limited to those arguments able to introduce the main item to be discussed.

Two hours were allocated to a round table involving all the participants and moderated by an expert coming from the European Transport Safety Council.

Logistics, venue and coffee break were offered by Fondazione CSMare

5. Minutes of the meeting

5.1. Presentations and speeches session

John Lepine, Past President of EFA welcomed the participants and introduced the European Driving School Association that represents more than 20 driving school associations in 21 European countries. *(presentation available on the workshop web page www.aipss.it/eventi5-en.html)*

Ancuta Pasca (INEA – Innovation and Networks Executive Agency and SIMUSAFE project officer)

The Innovation and Networks Executive Agency (INEA) is the successor of the Trans-European Transport Network Executive Agency (TEN-T EA), which was created by the European Commission in 2006 to manage the technical and financial implementation of its TEN-T programme. INEA officially started its activities on 1 January 2014 in order to implement the following EU programmes: Connecting Europe Facility (CEF); Parts of Horizon 2020 – Smart, green and integrated transport + Secure, clean and efficient energy; Legacy programmes: TEN-T and Marco Polo 2007-2013. INEA's main objective is to increase the efficiency of the technical and financial management of the programmes it manages.

The goal of the SIMUSAFE project (Simulator of Behavioral Aspects of Safer Transports) is to look at key factors that influence safe transports users behavior in general, both individually and collectively taking into account demographic factors and societal framework conditions from the knowledge which has been started to be collected in 2017. Moreover, SIMUSAFE project should ensure safe user performance to pro-actively anticipate user response to reduce the numbers of convention accidents in the road transport system. INEA is managing 3 pilot projects those outputs may help in defining the needs of drivers and driving instructors:

L3 PILOT https://www.l3pilot.eu/

Ensemble http://www.platooningensemble.eu/

SKILLFUL http://www.skillfulproject.eu/

(audio of the full speech available on the workshop web page)

Carlo Polidori, president of AIPSS (Italian Association of Road Safety Professionals) and co-organizer of the workshop underlined that today driving on autonomous vehicles generates the degradation of the

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

human driving skills and a driver used to run an autonomous car becomes dangerous when he goes back to a normal one. It is therefore necessary to make a compulsory register for automated car owners and a periodic driving test on a normal car in order to check the level of driving skills.

(presentation available on the workshop web page)

Manuel Picardi , EFA Vice President, presented the preliminary results of the survey conducted among its associates (details in Annex 1), then announced that the major problem that EFA wants to achieve is the standardization of criteria for novice drivers and for driving instructors. In addition, EFA would like to develop road safety campaigns to raise users awareness. Regarding SIMUSAFE project, the first task is how it will be possible to introduce the use of simulators for obtain the license and for becoming driving instructors? So, EFA intends to collect some information from at least 20 countries (EFA has already started the information collection from 14 different countries). The main issue remains the diversification of training system country by country.

The second task is how to become driving instructor in Europe and how to maintain this competence? Indeed, most of the driving instructors in Europe obtained their driving license more than 20 years ago. Therefore, an upgrade of competence is essential. In addition, today the biggest problem remains the introduction of the automatic vehicles, because it will be more and more complicated to evaluate if the drivers will be able to drive this kind of vehicles.

EFA is starting new process and try to take part a new consortium in the field of high skills of the competence for driver instructors and new drivers. Consequently, the third task is how to increase with these high skills and involve the different stakeholders around European driving schools, local driving schools, in different universities and academy for driving instructors and how to define some standards all around Europe. For that reason, a summer school is foreseen with special section where driving instructors will be invited to attend to better define their skills face with the new challenges.

(presentation available on the workshop web page)

Antonio Avenoso – ETSC Executive Director)

ETSC is a Brussel-based independent non-profit making organisation dedicated to reducing the numbers of deaths and injuries in transport in Europe. ETSC provides an impartial source of expert advice on transport safety matters to the European Union's institutions and member states on transport safety policies. ETSC has 60 member organisations from all across around Europe.

Regarding road safety in Europe, there is an EU target to reduce by half the number of annual road deaths between 2011 and 2020. However, the last five years has seen stagnation, and more should therefore be done to reduce the high number of people who lose their lives and are seriously injured on European roads.

The General Safety Regulation (GSR; which was proposed by the European Commission in 2018 and on which the Council and European Parliament recently reached an agreement) propose the mandatory installation of new vehicle safety technologies, with a focus on mandating advanced driver assist systems that aim to help the driver prevent collisions and/or reduce the severity of the collision. The importance of this forthcoming Regulation for improving road safety is comparable to the introduction of the seatbelt decades ago.

The GSR is also considered to pave the way for any future autonomous driving, as it mandates technologies such as AEBS, ELKAS, and EDR. It also mandates Intelligent Speed Assistance, a building block for autonomous driving, as respecting the speed limit is a pre-requisite for vehicle automation.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

The GSR furthermore provides the Commission with the power to lay down the test procedures and technical requirements for the type approval of these vehicles.

However, while these rules are far away (at the very earliest next year, and then only for the low speed highway pilot (traffic jam pilot), not for highly automated vehicles) EU type-approval legislation contains an exemption procedure that could allow automated vehicles to be approved for use on the road without those rules to be place in yet. The European Commission has published guidelines on how these exemption rules should be applied to automated vehicles. The majority of these guidelines focus on the performance of the vehicle, however a small section is dedicated to informing the driver.

ETSC expressed its concern that drivers may overestimate the abilities and limitations of advanced driver assist and (semi-)automated systems installed in their vehicles, providing the example of the Lane Change Assist System which it fears may be misunderstood as an automated system, while in fact it is a 'Level 2' system requiring the human to monitor the driving environment. It also highlighted that overestimation by drivers and lack of knowledge on limitations had already led to fatal collisions.

ETSC indicated to have written to the European Commission, expressing their concerns in a letter, notably asking them how all potential drivers, and not just the person buying the vehicle would be informed of the systems' functions and capabilities.

Summarizing, Antonio stated that there currently was a lot of focus on the technical specifications and the expected performance of the automated vehicles, while at the same time they felt that there was a lack of focus and attention to the position of the driver, despite fatal collisions having taken place due to overreliance and a lack of understanding. Antonio therefore cautioned that what should be prevented is a situation in which those vehicles are allowed on the market from a technical perspective, while we still have unprepared and unskilled drivers. *(presentation available on the workshop web page)*

Casto Lopez Benitez (DG MOVE Team leader, Road Safety,)

DG MOVE develops and implements the Commission's policies on transport. Technology is being deployed very quickly and there are huge expectations about its benefits in terms of safety, efficiency and sustainability.

The guiding principle for the technology deployment (like for example driver assistant systems) should be a road safety improvement for all road users. Nevertheless, drivers are the users most affected by the technology and the innovation.

The safety challenge is to ensure drivers are able to use automated features (emergency breaking, detection of pedestrians and cyclists) and do it in a safe way.

Driver training is not under the scope of the Directive 2006/126/EC on driving licences, but a competence for Member States. In any case, drivers should be aware of which technologies are fitted to the vehicle, what they are capable of doing, and also what the they cannot do.

There is a study ongoing about effects of the automation on driver behaviour and performance. It includes a literature review exercise (not a research) and the preparation of recommendations for the Commission.

Member States are working on the implementation of the recent amendment to the Directive 2003/59/EC on the training of the professional drivers, which is a flexible instrument whose content can be adapted to the needs of professionals driver. The advantage offered by this legal instrument is the requirement of a training every 5 years; nevertheless good quality training is expensive and this is a problem.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

Beyond legislation, stakeholders like industry, manufacturers, companies managing fleets have a big role to play).

Finally, the use of driving simulators would provide the possibility to expose drivers to situations they cannot encounter during a regular training and in addition may make drivers aware of dangerous situations in which they could be involved.

(Video of the full speech available on the workshop web page)

Oliver Deiters (DEKRA Managing Director)

Professional drivers should be trained for the next 10 years and they are actually expecting new training areas in the future in terms of the use of features, apps and services that have been deployed and that will be deployed. Indeed today, professional drivers are not able to use these equipments.

(presentation available on the workshop web page)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

5.2. Round Table session

(short 4 minutes video available on the workshop web page)

Franck Mutze (ETSC - Round Table Moderator) starts the debate asking **Tom Alkim** (DG RTD – European Commission) to introduce himself and provide his comments.

Representing Rijkswaterstaat as a pro-active road operator striving to be a front runner in Europe regarding C-ITS and Automated Driving his focus is on cooperation. Cooperation with industry, knowledge institutes and public organizations on a national as well as on an international level. Tom Alkim has been active in several national field operational tests, European projects and he is one of the founding fathers of DITCM (Dutch Integrated Testsite Cooperative Mobility). Currently, Tom Alkim is part of the governmental team responsible for Automated Driving in The Netherlands (Tom Alkim is relatively new to the European Commission, he joined 6 months ago as a Policy Officer (SNE) Connected & Automated Driving) where he tries to bring together all the member states, the European Commission and the industries so as to take some collective actions on automated driving. His first expectation is how to improve this field of automated vehicles and let them on the road? According to him, it is very difficult because today with automation there are different levels of automation. There is a part of the task to the driver goes into the software, so there is a new eco-system. Two projects conducted by Tom Alkim are dealing with this subject and can be relevant. There are also three pilot projects where a lot of tests on the real road with real conditions have been carried out in recent years. Moreover, Tom Alkim and Ancuta Pasca (INEA) are working on SIMUSAFE and other projects "Mediator" on the responsibility of the driver that can also be relevant for the current project. Finally, "in the past ten years, to enlarge technologies on the road, we had to adapt legislations", he said. And today, if we want that these technologies can be allowed on the road it is necessary that the driver is able to use them, because we have still need help from the user.

Franck Mutze reiterated what **Carlo Polidori** said: "driving on autonomous vehicles implies the degradation the driving skills, it is a fact" and the concern that a person who used to drive an autonomous vehicle and when he needs to take back control of a conventional vehicle can be a danger on the road.

John Lepine (EFA) takes the floor saying that car sellers and car rentals don't even know all the functions and features embedded in these kinds of vehicles, they don't know how to use them and they chose what should know the driver without knowing his skill level. Driving schools don't train future drivers to use features, tools and any other aspects that can possesses an automated vehicles.

According to **Oliver Deiters** (DEKRA) manufacturers are building systems which might be updated constantly and perhaps add different services to their vehicles to provide guidelines and help to users. Unfortunately, all these additional features are continuously changing.

Stéphane Espié (IFSTTAR) thinks that training program is relatively linked to the test and training program would perform only by putting the skills in the test. "If we start to discuss about what we need to improve in the training, we have at the same time to speak about how we will test that it is properly trained after".

Then, **Franck Mutze** asks a question about the need to upgrade the driving license and about the requirement to a specific training to drivers who drive new systems.

For **John Lepine**, there is a lack of standardization and a gap in terms of methods and trainings between European countries. Anywhere in Europe you need to specific driving test to drive an autonomous vehicle except the French system. Moreover, some drivers can't improve their skills because they don't make a lot of kilometres per year (use public transports for example). So they lose ability to drive.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

Casto Lopez Benitez pointed out that a driver with a B licence limited to automatic vehicles must pass an exam to get a non-limited license.

According to **Carlo Polidori** (AIPSS), market and manufacturers tend to influence the society primarily in order to make profit and such influence sometime does not comply with the public utility; he makes the example of European cities full of SUVs with only one driver on board. A common regulation limit thi kind of influence in the field of autonomous vehicles.

Manuel Picardi (EFA) says that the society is not ready to drive these kind of vehicles because of the advertisements which makes believe that the customer is able to drive them. Hence, customer is completely confused and amazed about this situation and at the end he loses his concentration and don't pay attention to what is going on around him and on the road because the driver has firm confidence in his vehicle.

Franck Mutze comes back to the topic regarding the compulsory periodic test for conventional vehicles to evaluate their capacity to drive high technological vehicles. According to **Manuel Picardi**, it is complicated to make understandable the importance of an update.

Carlo Polidori says that we have to make a difference between people driving conventional vehicles and people driving autonomous vehicles. It is quite different for people driving with an autonomous because they expect the car doing something that a conventional vehicle cannot do. Waiting for a clear regulation is the only way to prove that the driver is still able to drive a conventional vehicle (unless there will be a new regulation for driving license in the future). Furthermore, features on vehicles are changing so fast and are different from car to another car. Consequently, it is nevertheless complicated to make understand the importance of a compulsory periodic training to prove that drivers can drive a conventional car with new regulations and features.

Franck Mutze asks some recommendations regarding the adaptability of the driver at the time when the driver need to taking back control of the vehicle.

Drivers are not trained when the vehicle doesn't work as planned. That's why, for **Stéphane Espié**, pedagogic tools would be useful to detect failures and allow to the driver to anticipate these failures and to be able to get back behind the wheel to avoid an inevitable disaster thanks to a specific training.

The harmonization of the competences of the driving teachers, according to **Enrique Lorca** (EFA President), would be a good starting point to provide a good practicing for driving teachers to allow them to be ready for the semi-autonomous car. It is nonetheless difficult due to disparate systems in each European country so it is necessary to harmonize it. The example of Norway has been given because they succeeded to establish a framework to become a good driving teacher thanks to a specialized university; he adds that even road signs and traffic rules are completely different between Member States due to the culture of each country. However, still in Finland, it is noticed that tourists cause more accidents and damages because of the lack of traffic rules standardization in Europe; as for example, the priority rules in roundabouts are different in some countries, as well as the sign to show the driver is novice (e.g. Lithuania).

Finally, **Franck Mutze** rounds off the debate with some inquiries about the role of the simulator.

According to **Stéphane Espié**, usually it is still too expensive; however, driving is 80% a visual task and it is possible today to use the new technology and afford an adaptable simulator at a reasonable price that can also be dedicated to the cognitive skills. It is not necessary to consider the simulator as a whole, because it is now possible to design a specific trainer simulator.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

Carlo Polidori thanks all the participants and invites them to send further comments that will be collected in the minutes of the meeting.

6. Outputs

Several questions remain open, but it is commonly recognized that drivers need to follow specific trainings and lessons on semi and full automated vehicles and how to use these IT features and equipment. Vehicle manufacturers are building systems which might be updated constantly and often add different services to their vehicles to provide guidelines and help to users. Unfortunately, all these additional features are continuously changing and it is extremely difficult to follow every change.

Since driving on autonomous vehicles generates the degradation of the human driving skills and a driver used to run an autonomous car may become dangerous when he goes back to a normal one, a periodic driving test on a normal car could be useful to ensure the level of driving skills.

The main issue remains the diversification of training system country by country: a joint regulation, as well as measures and guidelines are necessary to make sure that autonomous vehicles are safe rather than comfortable and convenient for the user.

The use of driving simulators would provide the possibility to expose drivers to situations they cannot encounter during a regular training and in addition may make drivers aware of dangerous situations they can be involved.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

Annex 1 Preliminary results of the EFA Survey

This annex synthetizes the first results of a questionnaire launched by EFA (the European Driving schools' association) to the driving schools of more than 20 European Countries, that will be the basis of a project deliverable; the current partial version has been elaborated as an introductory document to the workshop and presented by the EFA Vice President Manuel Picardi during the workshop:

Autonomous vehicles and road safety: towards new training modules for drivers and driving instructors

held in Brussels on 16th of May 2019.

It is composed by two sections summarizing the requirements for the training of novice drivers and training instructors in 14 European Countries (out of the 20 scheduled) . Each section has a table with the questions asked and a synthesis of the answers, plus the two most representative graph charts.

The preliminary results of the questionnaire show a noticeable fragmentation in several approaches to the training of both novice drivers and driving instructors, that could further diverge with the introduction of new rules related to the autonomous vehicles; a common agreement at European level on new education and training schemes cannot be further delayed and the round table foreseen in the above mentioned workshop is expected to provide the firsts inputs, that will be elaborated and inserted in a specific deliverable of the SIMUSAFE project.

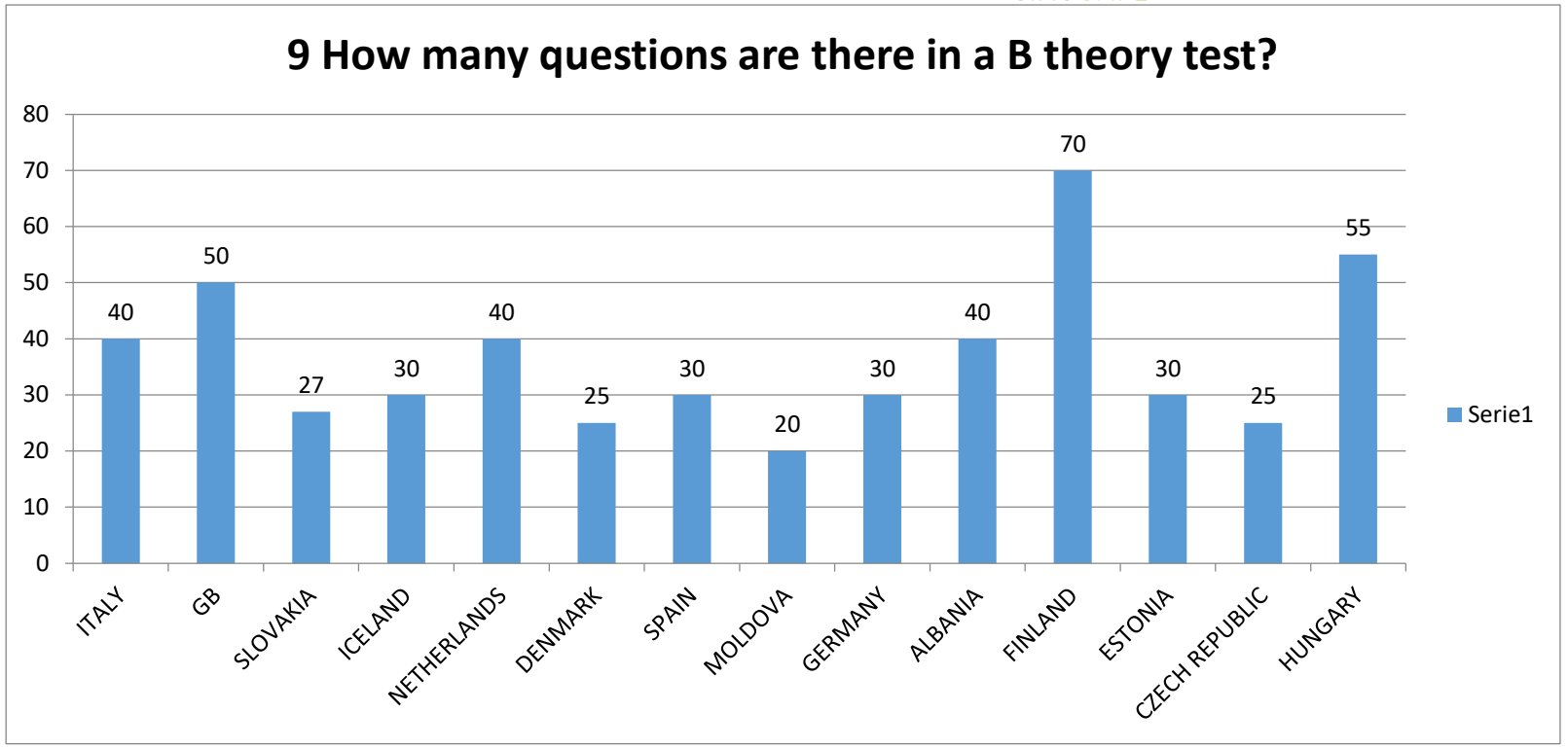
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

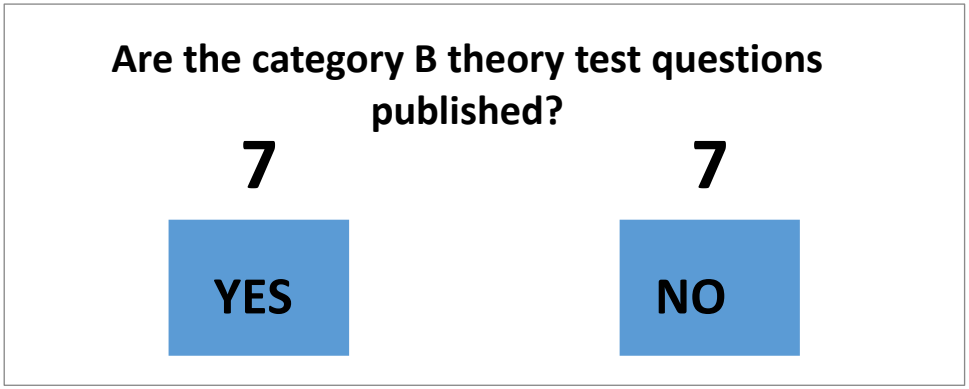
Workshop 16 May 2019 in Brussels

SIMUSAFE

Training of novice drivers

		ITALY	GB	SLOVAKIA	ICELAND	NETHERLANDS	DENMARK	SPAIN	MOLDOVA	GERMANY	ALBANIA	FINLAND	ESTONIA	CZECH REPUBLIC	HUNGARY	Yes /V/ M	No/C/L
1	Do you have to pass a medical check to obtain B driving license?	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	11	3
2	Is it possible start training for a cat B license before the age of 18 years?	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	11	3
3	Road Signs, Norms of Behavior, Documents and Car Maintenance: are these topics included in theory program for cat B license?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	14	0
4	Are there compulsory driving theory lessons in your Country?	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10	4
5	Is a Hazard Perception Test required?	No	Yes	No	No	Yes	Yes	No	No	Yes	No	No	No	No	No	4	10
6	Must theory test be passed before training begins?	Yes	No	No	No	No	No	No	Yes	No	Yes	No	No	No	Yes	4	10
7	Is the testing organization a governmental institution (G) or a private enterprise (P)?	G	G	G	P	G	G	G	G	P	G	G	G	G	G	12	2
8	Is B theory test computerized?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	13	1
9	How many questions are there in a B theory test?	40	50	27	30	40	25	30	20	30	40	70	30	25	55		
10	Are the category B theory test questions published?	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	No	7	7
11	Is a learner's permit needed before training begins?	Yes	Yes	No	Yes	No	No	Yes	yes	Yes	Yes	Yes	Yes	No	Yes	10	4
12	Are there compulsory elements in the practical training?	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	10	4
13	Is a Log book with a record of training compulsory?	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	9	5
14	Are simulators used in the training? Please indicate if it is a voluntary (V) or compulsory (C) element	V	V	V	V	V	V	V	V	V	V	V	V	C	V	13	1
15	Are parents and other qualified drivers allowed to accompany learner drivers when they are practicing?	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	No	No	8	6
16	Is there compulsory second-phase (post-license) training?	No	No	No	Yes	No	No	No	No	No	No	No	Yes	No	No	2	12
17	Is there a minimum learning period (e.g. six months/100 hours) before the driving test?	Yes	No	No	No	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	6	8
18	Are any restrictions placed on novice drivers BEFORE (e.g. bans on passengers, driving at night, stricter penalty/demerit point systems)?	Yes		No	No	Yes	No		Yes	Yes	No	No	Yes	No	Yes	6	6
19	Are any technology systems (ADAS) allowed during the driving exam?	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No	No	7	7
20	Is the Theory Course price regulated by law (L) or by Market(M)?	M	L	M	L	M	M	M	M	M	M	M	M	M	M	12	2
21	Is the Training price regulated by law (L) or by Market(M)?	M	M	M	L	M	M	M	M	M	M	M	M	M	M	13	1

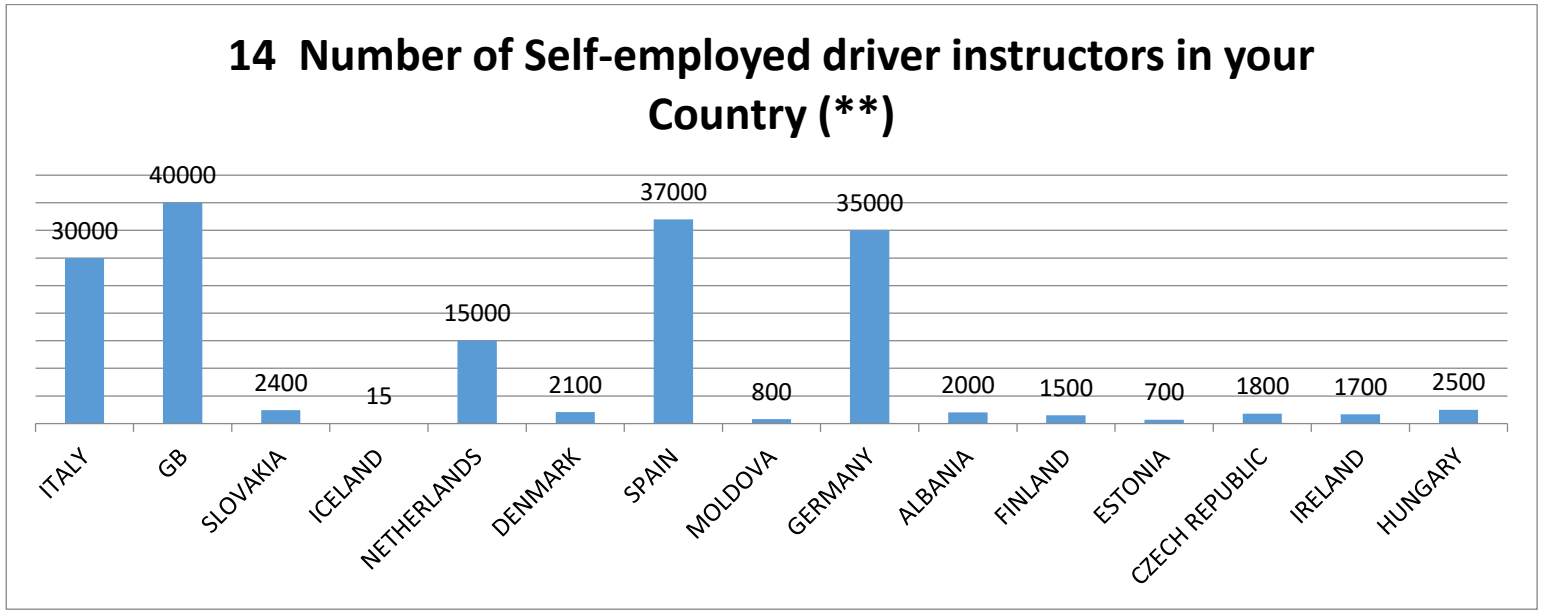


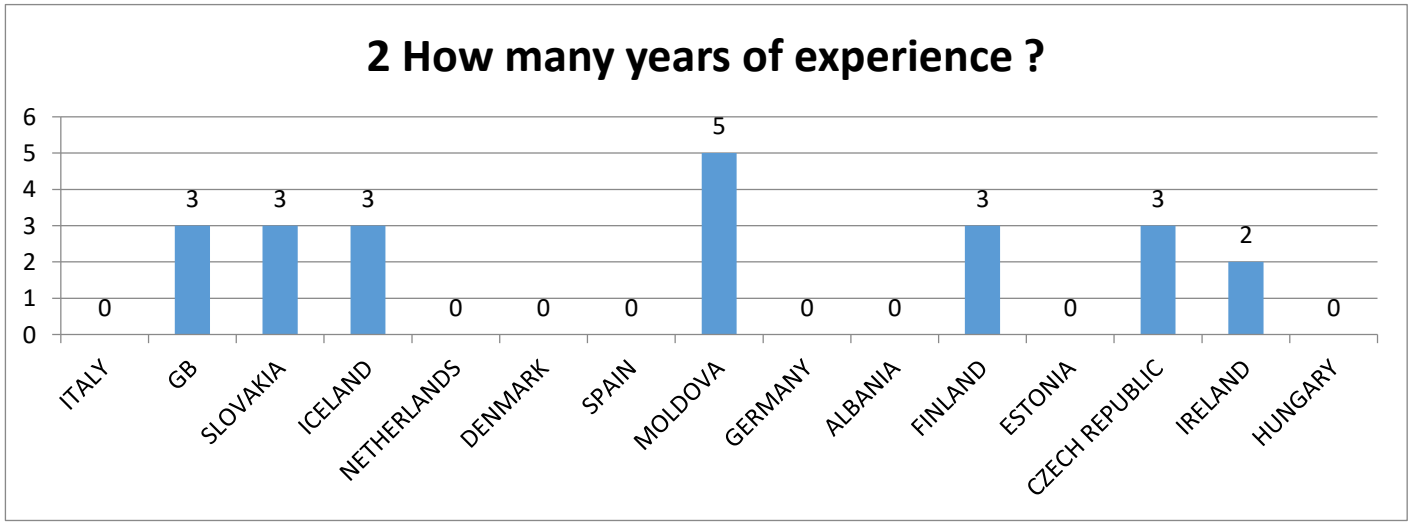


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

Driving Instructors		ITALY	GB	SLOVAKIA	ICELAND	NETHERLANDS	DENMARK	SPAIN	MOLDOVA	GERMANY	ALBANIA	FINLAND	ESTONIA	CZECH REPUBLIC	IRELAND	HUNGARY	Yes /V/G	No/C/S
1	Minimum age to become driving instructors	24	21	25	21	18	24	20	23	21	30	21	21	24	19,5	23		
2	Is a secondary school diploma requested to become instructor?	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	10	5
3	How many years of experience ?	0	3	3	3	0	0	0	5	0	0	3	3	3	2	0		
4	Is a periodic health check foreseen?	No	No	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	2	13
5	Is the Instructors training voluntary (V) or compulsory (C) ?	C	V	C	C	V	C	C	C	C	C	V	C	C	V	C	4	11
6	Do you have to pass any exam?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	15	0
7	Is the education of driving instructors teachers general (G) or specific (S)?	G	G	S	G	G	S	S	G	G	S	G	S	G	G	S	9	6
8	Is it allowed to use a simulator for driving instructors initial training?	No	Yes	No	No	Yes	Yes	No	No	Yes	No	No	Yes	No	No	Yes	6	9
9	As a driving instructor/ teacher, do you have to attend at periodical training course?	Yes	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	6	9
10	If the answer to the question 9 is "Yes", are driving simulators used in the periodic training?	No		No			No			No			Yes			No	1	5
11	Do you have to pass any exam to confirm the maintenaince of your skills?	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Yes	7	8
12	if the answer to the question 9 is "No", do you think an updating course is necessary?		Yes		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes		9	0
13	Number of driving schools in your Country	7000	40000	650	200	8000	1200	8300	200	7000	400	500	250	1800	1700	700		
14	Number of Self-employed driver instructors in your Country	30000	40000	2400	15	15000	2100	37000	800	35000	2000	1500	700	1800	1700	2500		
15	Are there specific requirements to open a new driving school in your Country?	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	11	4

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

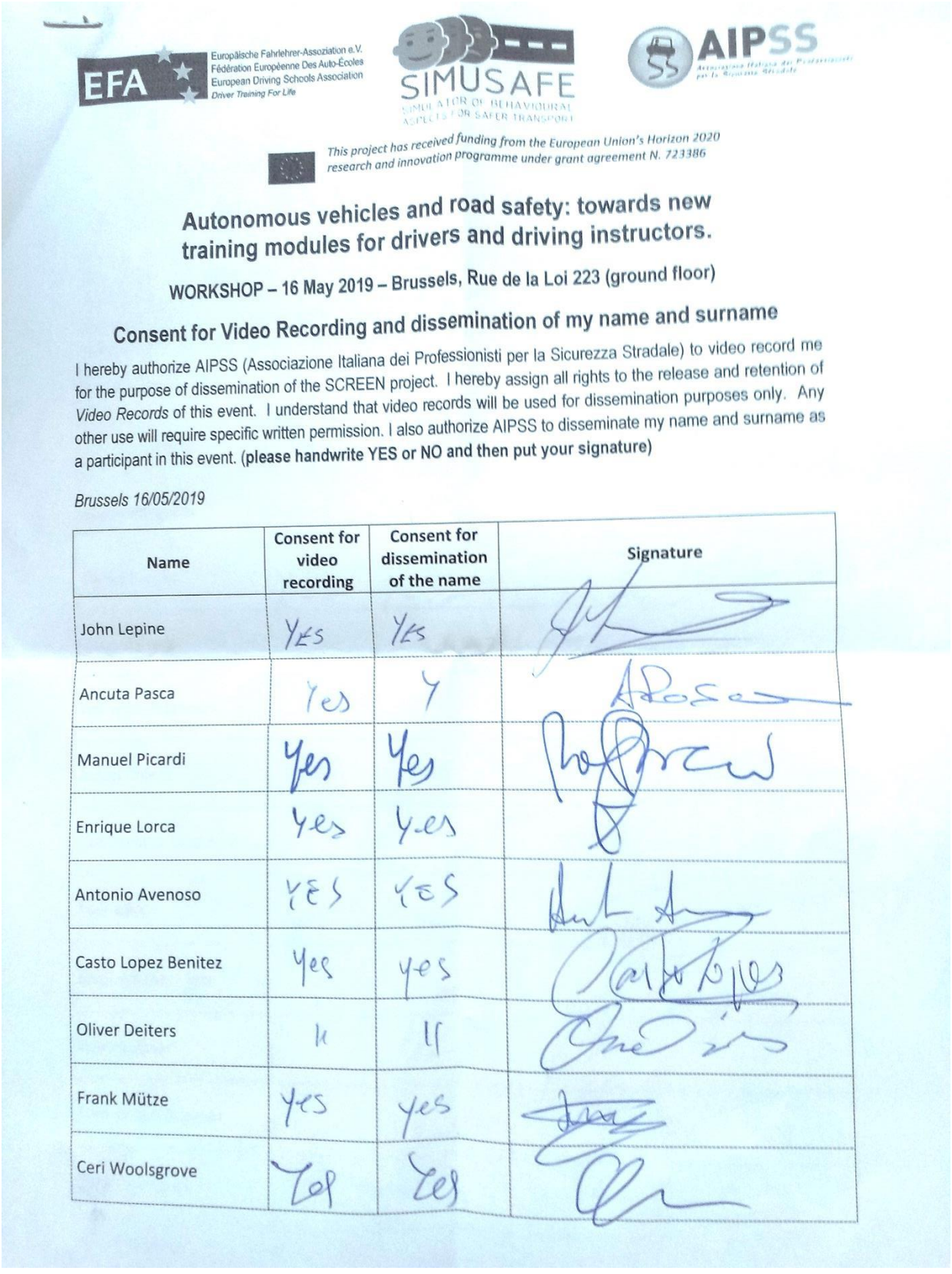




This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386
The content of this deliverable does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s)

Annex 2 Consent for video recording and dissemination

All the participants gave their consent for having their names disseminated in public documents related to the workshop; one of them did not give the consent for being recorded and therefore he does not appear in the short movie available at http://www.aipss.it/eventi5-en.html.



EFA Europäische Fahrlehrer-Assoziation e.V. Fédération Européenne Des Auto-Écoles European Driving Schools Association Driver Training For Life

SIMUSAFE SIMULATOR OF BEHAVIOURAL ASPECTS FOR SAFER TRANSPORT

AIPSS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

Autonomous vehicles and road safety: towards new training modules for drivers and driving instructors.

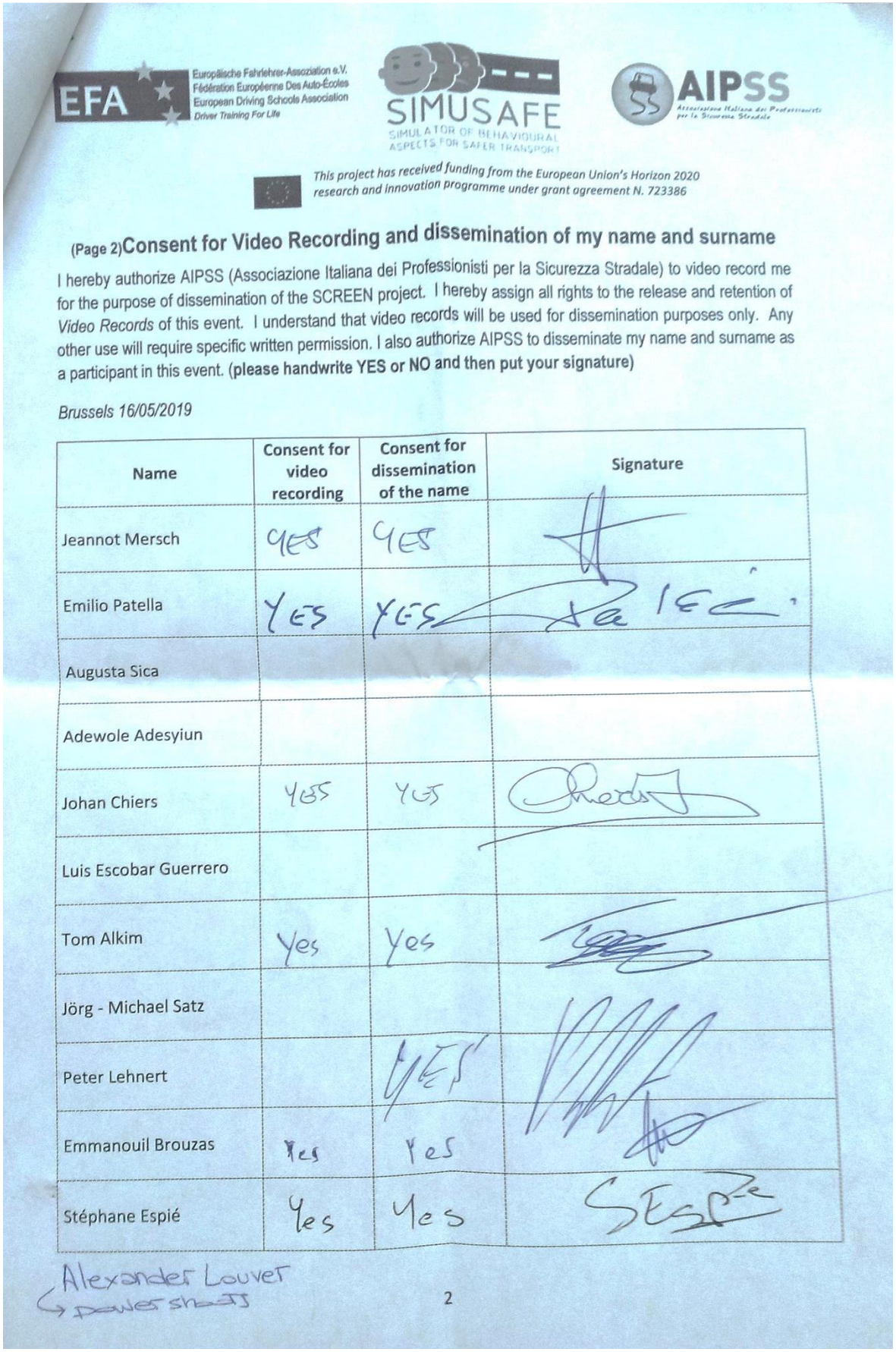
WORKSHOP – 16 May 2019 – Brussels, Rue de la Loi 223 (ground floor)

Consent for Video Recording and dissemination of my name and surname

I hereby authorize AIPSS (Associazione Italiana dei Professionisti per la Sicurezza Stradale) to video record me for the purpose of dissemination of the SCREEN project. I hereby assign all rights to the release and retention of *Video Records* of this event. I understand that video records will be used for dissemination purposes only. Any other use will require specific written permission. I also authorize AIPSS to disseminate my name and surname as a participant in this event. (**please handwrite YES or NO and then put your signature**)

Brussels 16/05/2019

Name	Consent for video recording	Consent for dissemination of the name	Signature
John Lepine	YES	YES	
Ancuta Pasca	Yes	Y	
Manuel Picardi	Yes	Yes	
Enrique Lorca	Yes	Yes	
Antonio Avenoso	YES	YES	
Casto Lopez Benitez	Yes	yes	
Oliver Deiters	Y	Y	
Frank Mütze	Yes	yes	
Ceri Woolsgrove	Yes	Yes	



EFA Europäische Fahrlehrer-Assoziation e.V. Fédération Européenne Des Auto-Écoles European Driving Schools Association Driver Training For Life

SIMUSAFE SIMULATOR OF BEHAVIOURAL ASPECTS FOR SAFER TRANSPORT

AIPSS Associazione Italiana dei Professionisti per la Sicurezza Stradale

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

(Page 2)**Consent for Video Recording and dissemination of my name and surname**

I hereby authorize AIPSS (Associazione Italiana dei Professionisti per la Sicurezza Stradale) to video record me for the purpose of dissemination of the SCREEN project. I hereby assign all rights to the release and retention of *Video Records* of this event. I understand that video records will be used for dissemination purposes only. Any other use will require specific written permission. I also authorize AIPSS to disseminate my name and surname as a participant in this event. **(please handwrite YES or NO and then put your signature)**

Brussels 16/05/2019

Name	Consent for video recording	Consent for dissemination of the name	Signature
Jeannot Mersch	YES	YES	
Emilio Patella	YES	YES	
Augusta Sica			
Adewole Adesyiun			
Johan Chiers	YES	YES	
Luis Escobar Guerrero			
Tom Alkim	Yes	Yes	
Jörg - Michael Satz			
Peter Lehnert		YES	
Emmanouil Brouzas	Yes	Yes	
Stéphane Espié	Yes	Yes	

Alexander Louvet
↳ power shell

2

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386

Annex 3 Pictures

Presentations, more pictures, video and audio files are available at http://www.aipss.it/eventi5-en.html.

All the presentations are available at www.aipss.it/eventi5-en.html

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 723386