



**2016**  
ANNUAL REPORT

BRSI Belgian Road  
Safety Institute



# FOREWORD

Welcome in the annual report of the BRSI! We have been working on the behavioural analysis and change on road safety on the basis of scientific evidence for 30 years. Our power is that we combine practice and theory under one roof, our searchers collaborate closely with fellow workers on the field. Based on the acquired knowledge and efforts, we give matter for conversation to enterprises and companies that want to work on behaviour and traffic. We position ourselves as an independent organisation for the authorities, the academic world and the companies. We want to be an organisation dealing with important themes and subjects!

As independent organisation, we adapted our structure to the sixth State reform in 2016. With this struc-

ture, we can feel secure about our future. A future that was partly made possible thanks to our partner, Royal Automobile Club Belgium. The BRSI's genes will not change; the BRSI remains a not-for-profit organisation that is active at the national as well as the international level as far as road safety is concerned.

We will also place the expertise acquired at the disposal of others sectors, such as safety and inter-and multimodality. The BRSI will have to take up big challenges. At the moment you read this annual report, the rebranding of the BRSI is actually ready. We look forward to presenting the new name and the new logo that will materialize the change, the renewal we realised with the whole team of the BRSI during the last years.



Luc Vermeulen, President Management Board

Karin Genoe, Managing Director BRSI

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## Colofon

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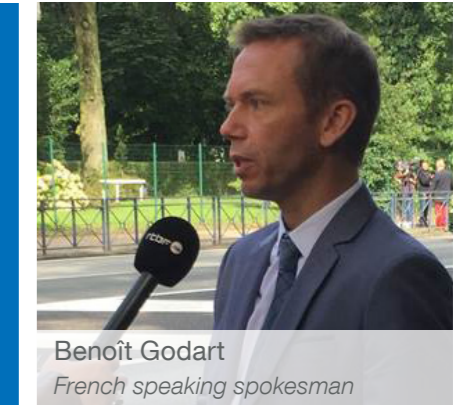
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# Communication



8.950 likes

2.950 followers



In 2016, the BRSI was again omnipresent in the press. Through smaller and large press actions, the BRSI communicated both actively and reactively. Knowledge around traffic safety, whether or not on the basis of own scientific research, was shared. We did that through traditional media such as radio, TV and the newspapers. The BRSI was mentioned about 1.200 times in national newspapers articles in 2016.

Through social media such as Facebook (8950 likes) and Twitter (2950 followers) we also communicated our message to the world.

## Wide range of themes

In addition to the previous classical themes such as alcohol, speeding, seat belt use and distraction, we communicated more broadly in 2016 about a very wide range of themes such as Pokémon Go, truck accidents, impact of matches of the Red Devils on number of traffic accidents, LED advertising along roads, electric bicycles, test with connected trucks, a study on the “zipper principle” on motorways, etc. The list is almost endless.





## Road safety afternoons

BRSI's mission is among other things to share knowledge on road safety in a reactive but also in a proactive way. Since 2012, we have organised Road safety afternoons during which interesting and/or topical road safety theme were commented and discussed. At this occasion, politicians and practitioners are confronted with some experts who present their research or their vision for discussion. In 2016, after the sixth State reform, the BRSI resumed the initiative that was suspended for a while. The Flemish Parliament first gave the go-ahead for the new 'Road Safety Afternoons' which took place on 23 June in one of the committee rooms. The theme of that afternoon was 'driver education'.

The Flemish members of parliament present were given three short presentations. The BRSI presented its new study on the effects of the 'Graduated Driver Licensing' systems and projected a perfect image for training in our country.

On Monday 17 October the BRSI organised its 2nd Traffic Safety Afternoon, this time in the Brussels

Parliament. In consultation with the Cabinet of State Secretary Debaets, the topic of 'traffic aggression' was chosen.

The BRSI spoke, among others, about the phenomena of 'driver stress' and 'driving stress' and illustrated this with several familiar examples. In addition we presented a number of possible measures that a government can take to steer this discourteous traffic behaviour in the right direction. The afternoon was concluded with a lively discussion.

## "Smart Phones, Smart Drivers" Campaign

At the end of June 2016, the BRSI launched a major campaign together with Telenet. In a BRSI survey, it was found that 1 out of 5 young people uses his smartphone every time he gets behind the wheel. This campaign wanted to raise the awareness of young people on these issues. Young people could send in their own playful slogan and win a prize. The action was present at festivals and there were also radio spots and an online campaign.



## A week without any hit-and-run offences together with VZW Rondpunt

On 26 September, the action 'Week without hit-and-run offences' was presented as a collaborative effort between VZW Rondpunt and the BRSI.

The issue of hit-and-run offences was highlighted. One accident in 10 involves someone getting injured or dying as a result of a hit-and-run offence.

People were encouraged by the campaign to change their profile photo via Facebook and to express their commitment to the action.



For this occasion, the BRSI specifically carried out experimental research with eye-track glasses to demonstrate that hands-free calling also has effects on driving behaviour.

## Seminar "Why do we drive too fast?"

On 1 December in Antwerp, Politeia Publishers organised a seminar in cooperation with the BRSI on speed with the slogan "Why do we drive too fast?". This seminar focused on police, justice and on local authorities.

Our Knowledge Centre opened the day by presenting a succinct overview of all the numerical data we collected about speed behaviour and attitude. Our Centre for Technology and Innovation made a presentation about the extent to which technical interventions in a vehicle can influence speed behaviour positively. A panel discussion between representatives of FEBIAC, Touring, Assuralia and magistrates concluded the morning. During the afternoon, possible solutions were discussed in different workshops. The 65 participants or so had sufficient material for discussion.



## Week of distraction

Together with the media partners Radio2 and the newspaper "La Dernière Heure", a whole week in November was dedicated to the problems of 'distractions behind the wheel'. All possible aspects were discussed.





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# The BOB-brand

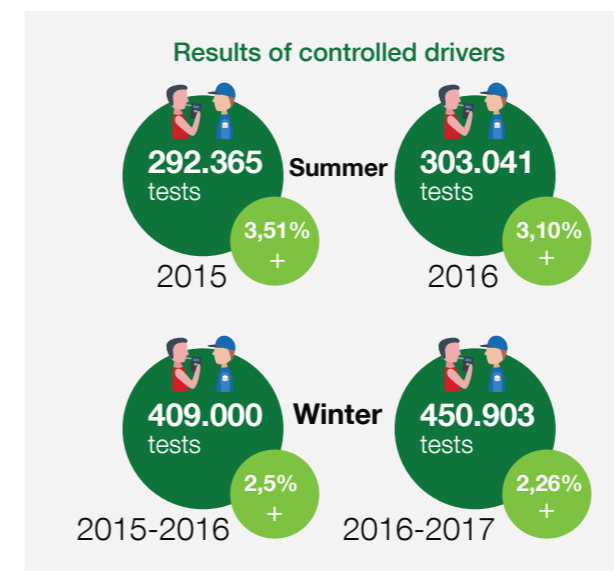
There was also an intensive BOB campaign in the summer and winter of 2016. The BRSI, Assuralia and the Belgian Brewers have been striving for more than 20 years to inculcate responsible BOB behaviour among all Belgians. Since 2015, we have been organising the campaigns in close collaboration with the three Regions. The BOB campaign remains a topical subject because almost 200 people die yearly as a result of road accidents involving alcohol.

This year also saw an integrated approach where awareness and control actions were combined. Both in summer and in winter there was 'a weekend without alcohol behind the wheel', in cooperation with the police. The fact that such an approach works can be proven once again by the results: the number of drivers tested that drive under the influence of alcohol is reducing from year to year! 313.041 tests were performed in the summer campaign of which 3.10% had a positive result. The year before that, positive tests still stood at 3.51% for the

same period. The same trend can be applied to the winter campaign. In the 2016-2017 winter period, the police carried out 450.903 tests with 2.26% of the drivers testing positive. During the 2015-2016 BOB-winter campaign, 2.5% of the controlled drivers tested positive.

## Thank you BOB

BOB has zero drinks. Even during fun barbecue parties, when celebrating a victory at the European Championship football or at great end-of-year celebrations. He makes sure that everyone gets home safely. For this purpose he agrees before the time to be BOB or finds an alternative such as overnight accommodation, transport by taxi or public transport. And that deserves a big thank you! 'Thank you BOB' was the perfect theme of both the 2016-2017 summer and winter campaign.





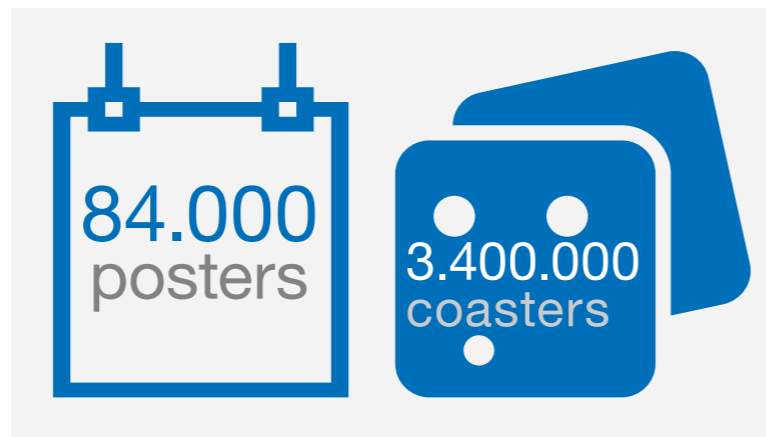


Rien bu !  
Merci  
**BOB**

### Widespread dissemination of the 'Go for Zero' message

A close cooperation with the local authorities, hospitality sector, taxi federation GTL Taxi, public transport companies, amateur football clubs, Christmas markets, breweries, etc. generated huge visibility for the 'Go for Zero' message by having posters along the roads, and also in many public places by the widespread circulation of coasters in the hospitality sector and the special recipes folder "It's a feast when BOB cooks" with alcohol-free beers, and so much more!

In total, more than 84 000 posters and 3.4 million coasters were distributed as part of the winter campaign.



### Many BOBs are put in the spotlight

In summer both individual and local organizations could compete for a BOB Award by making their BOB commitment known on [jebobbe.be](http://jebobbe.be) through an original initiative.

### 'Who is BOB of the week?'

You could nominate your favourite BOB from 25 November up to and including 31 January 2017. 1655 participants cast 49 430 votes for their favourite BOB. 32 winners received a voucher "Bongo thanks BOB" for one night's accommodation



Rien bu ?  
Merci  
**BOB**

**BOB**

**BOB**



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# Road Safety Knowledge Centre



In 2016, the multidisciplinary team of our Knowledge Centre carried out qualitative scientific research on traffic safety. Research projects were spread over a large number of areas of accident analysis, implications of accidents, depth research, behaviour in traffic, attitudes of road users, driver training to victims of traffic injuries.

We made use of new and innovative research tools such as glasses with a built-in eye-tracker, Virtual Reality Simulators, floating car data, drones and a 3D laser scanner.

In addition, there was a gradual broadening of the research scope by giving increased attention to mobility, safety and education. The team of researchers was strengthened with the addition of colleagues with expertise in the area of data analysis, infrastructure and enforcement.

Internationally, we participated in various Europe-

an research projects such as SafetyCube, ISAAC, Skillful, MyLAC and ESRA<sup>1</sup> and had bilateral projects with renowned sister organizations abroad (BASt, KfV, SWOV).

#### Some of the most important accomplishments in 2016

- Completion of 16 national studies, 7 ESRA reports and 5 SafetyCube Deliverables
- Dozens of presentations at conferences, seminars, workshops, etc. on road safety in Belgium.
- The release of the RECOVER database with information about traffic victims based on hospital data.
- Completion of the 3-year national behavioural measurements (driving under the influence of alcohol, speed and seat belt use) and the 3-year attitude measurement.

<sup>1</sup> SafetyCube is a project for the creation of an international Decision Support System for policymakers in the field of road safety. ISAAC is a project the purpose of which is to develop a tool for the cities in order to promote the multimodality. Skillful identifies the changing needs of training sessions because of the evolution of the transport sector. MyLAC analysed the impact of the road accidents on road victim's life. ESRA is an international comparative study on the road users' attitudes concerning road safety on 25 countries.





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# Centre for Technology and Innovation

The main task of the Centre for Technology and Innovation is to build a bridge between the scientific knowledge and expertise on road safety and the possible practical applications on the ground.

**Here are some of the projects in which the Centre for Technology and Innovation was involved in 2016.**

## New Urban Mobility

A study was launched in 2016 on the safety of new electric propulsion devices under the name 'New Urban Mobility'. Segways, monowheels, hoverboards and the electric scooter were tested for stability, manoeuvrability and braking capacity. It was also examined as to how quickly people can acquire the necessary skills to operate these devices safely.

## Transport of people with disabilities

We were tasked by the Brussels Region to assess to what extent the Brussels taxis still meet the requirements for transporting persons with disabilities. Consideration was given to what recommendations could be given based, inter alia, on foreign experiences, in terms of the taxis themselves and the logistics aspect (accessibility, reservation...). Based on these results, the regulations could possibly be adjusted.

## VEBIMOBIE

The BRSI worked together with other partners on VEBIMOBIE. The aim of VEBIMOBIE is to create a traffic signs data bank in ITS applications. To do this, the BRSI investigated the conditions which have to be met by traffic signs in order to be detected by traffic sign recognition systems in vehicles.

## Brussels, Smart City

The BRSI was one of the six winners of the "Brussels, smart city" project that was initiated at the end of March 2016 by the city of Brussels. The project of the BRSI was to develop a smartphone app that can locate open parking bays in real time, that are intended for people with limited mobility. For the pilot phase, some twenty bays near the tourist area were equipped with intelligent sensors that operate via LoRa technology.

At the presentation of the winners on 19 October 2016, the BRSI received a € 5 000 grant to further develop the project.





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# Centre for Fitness to Drive

The Centre for Fitness to Drive consists of the “Centre for Fitness to Drive Adaptations of Vehicles” (CARA), the Reintegration Exams Division, the alcohol ignition interlock device programme and the Driver Improvement training courses.

## CARA

A medical disorder can cause some drivers to behave unsafely in traffic. The CARA evaluates their fitness to drive with a multidisciplinary team of doctors, psychologists and driving experts. After an examination, the possible restrictions and/or adjustments to the vehicle are fixed so that the people examined can take part in traffic.

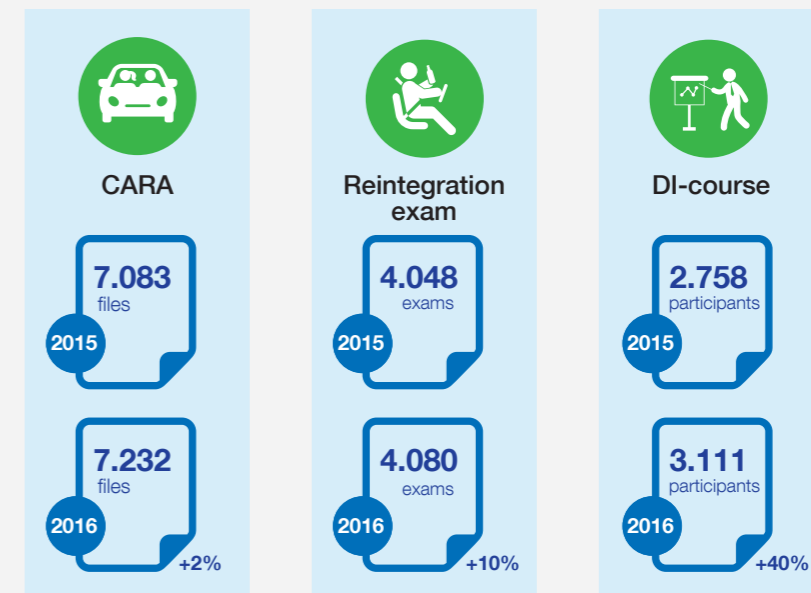
CARA has only seen a very slight increase of about 2% in the number of cases opened compared to 2015. This indicates that the demand for evaluations

regarding the fitness to drive is still very high.

Only people for whom it is necessary to evaluate their fitness to drive are referred to the CARA. In the next few years, we will focus on an even more efficient referral policy that will enable us to concentrate on the difficult and special cases.

CARA would also like to expand its activities to support driving lessons for persons with disabilities, initiatives that are committed to maintaining driving skills such as for the elderly, and advice in the area of (para)medical mobility, for example the transport of persons with disabilities.

In 2016, CARA prepared the Belgian implementation of the new European fitness to drive codes that would have been used from 1 Jan 2017 onwards. Our experts also collaborated on the rules to enable doctors and specialists to assess (or have as-





sessed) correctly and efficiently the fitness to drive of persons with dementia. These rules will be made available in the course of this year.

### Reintegration exam

If the magistrate or criminal court imposes a driving ban on someone, he can also impose a medical and/or psychological examination as a condition on the convicted person in order to get the licence back.

The magistrate is obliged to do so in the event of infringements due to intoxication and repeated infringements. Until a few years ago, offenders who

had drunken too much or taken drugs were mainly controlled.

The legislation was amended on 1 July 2014: the candidates are also considered as recidivists when they have committed different offences (e.g. a speed infringement and an offence due to intoxication).

The purpose of a reintegration exam is to ascertain whether the candidate meets the medical and psychological standards of the fitness to drive.

### Driver Improvement

Driver Improvement (DI) offers sensitization courses for traffic offenders since 1994. The courses are a kind of alternative measures intended for people who are punishable for a severe traffic offence, “repeat offenders” or people with inappropriate behaviour. Following a judicial action, the offender may attend a training course in the framework of mediation in penal matters (BIS), probation (postponement and suspension) or provisional release (VOV).

The BRSI works in a differentiated manner by aligning the sensitization courses as closely as possible with the infringements of the participants.

An increase was noticeable in the Driver Improvement division especially in Wallonia with a 38% increase in cases. In Flanders, the number of referrals to DI remains stable, but a slight increase was noticed in the number of cases related to speeding, namely 40%.

In the next few years, the Driver Improvement division will focus more closely on courses related to drugs and speed and the use of technology.





## Alcohol ignition interlock device

The magistrates can impose the use of an alcohol ignition interlock device on drivers with an alcohol concentration of more than 0.8 per mille, on intoxicated drivers or on repeat offenders for a period of 1 year at least or even permanently.

If such an alcohol ignition interlock device is imposed, the candidate may only drive vehicles that are equipped with an alcohol ignition interlock device and he will also have to attend a supervised training programme. 13 alcolocks were installed in 2016.

The alcolock is first and foremost a prevention and monitoring system. It prevents people from driving when they have had too much to drink. One can start the car but not when one is drunk. Fitting the car with the alcolock ensures continuous monitoring. Each attempt is recorded and checked. The

mandatory nature of the device causes the habitual behaviour (namely by associating driving and drinking) to be broken.

Furthermore, the programme also has a remedial effect. To have a permanent impact on the behaviour, the alcolock is combined with an individual training program. The ultimate goal is for the person concerned to not drive under the influence any longer even after the alcolock has been removed.

In addition, the alcolock offers the candidate the opportunity to continue driving in traffic, unlike a forfeiture of the right to drive.

The alcolock is especially useful for those candidates who have already committed several offences due to driving under the influence and for whom the separation between alcohol and traffic is difficult.



Alcohol ignition interlock devices installed







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# Technical labs

The BRSI has 5 technical labs that work in different fields. The number of checks carried out at most labs increased last year.

## ALC LAB

This lab is ISO17025 accredited and doing preparatory research for approval as well as the verification of breath analysis equipment used by the police.

The laboratory is also accredited for alcolocks, the breath analysis devices used by the police, the devices sold to the general public and the chemical single-use alcohol testers.

In 2015, the accreditation was extended to alcohol testers for the general public and in particular the maximum flow rate of the universal simulators.

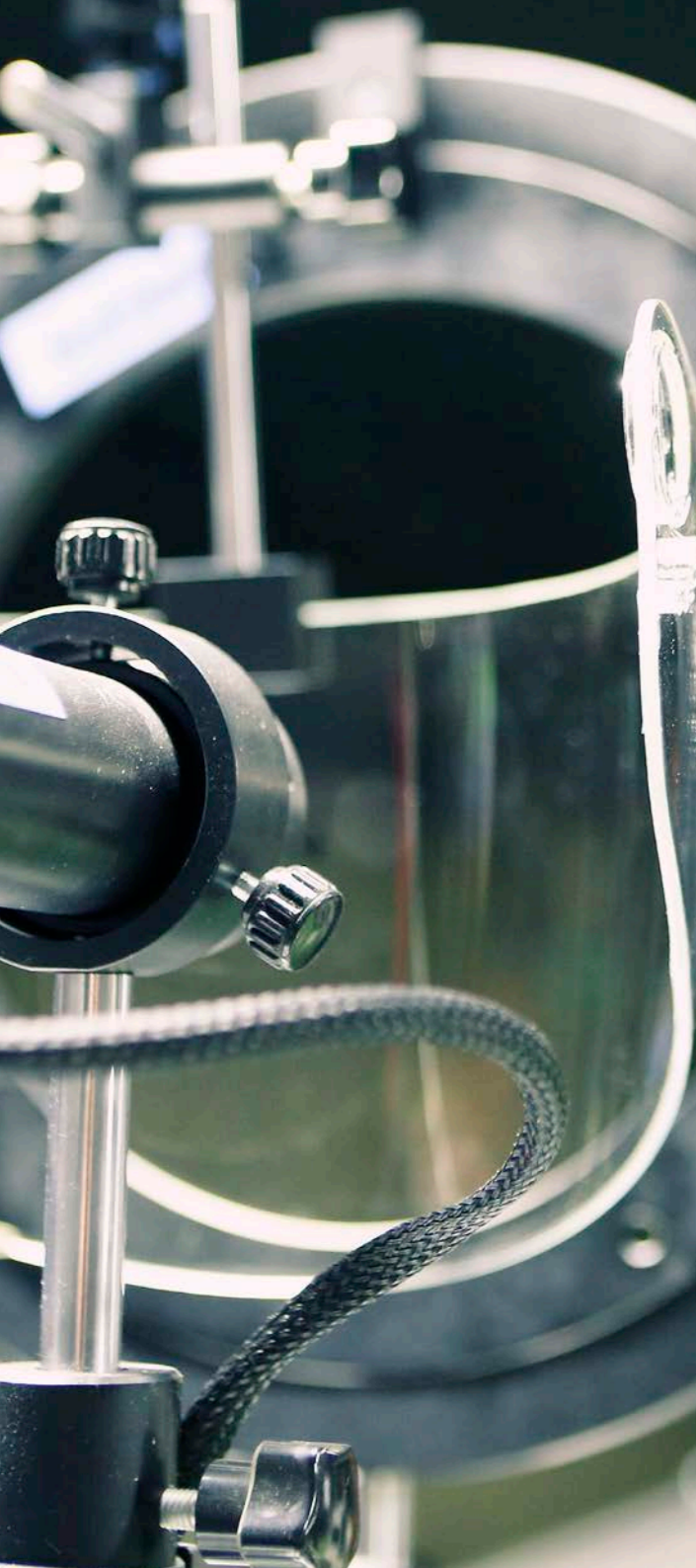
In 2016, the ALC lab saw strong growth in the number of calibrations. In 2016, 43% more reports were delivered. This is due to the replacement of the breath analysis apparatus used by the police by a new kind.

## CAV LAB

The core task of the CAV laboratory consists of the periodic and initial verification of the equipment of vehicle testing centres in Belgium and has been reporting on the inspections carried out to the 3 regions since January 2015.

On 22 November 2016, the lab obtained the ISO17025 standard for the light adjustment devices. Thanks to this accreditation, the CAV lab is now accredited for all important general inspection devices.





### ATP LAB

This lab is responsible for the testing of refrigerated vehicles used for international transportation of perishable foodstuffs.

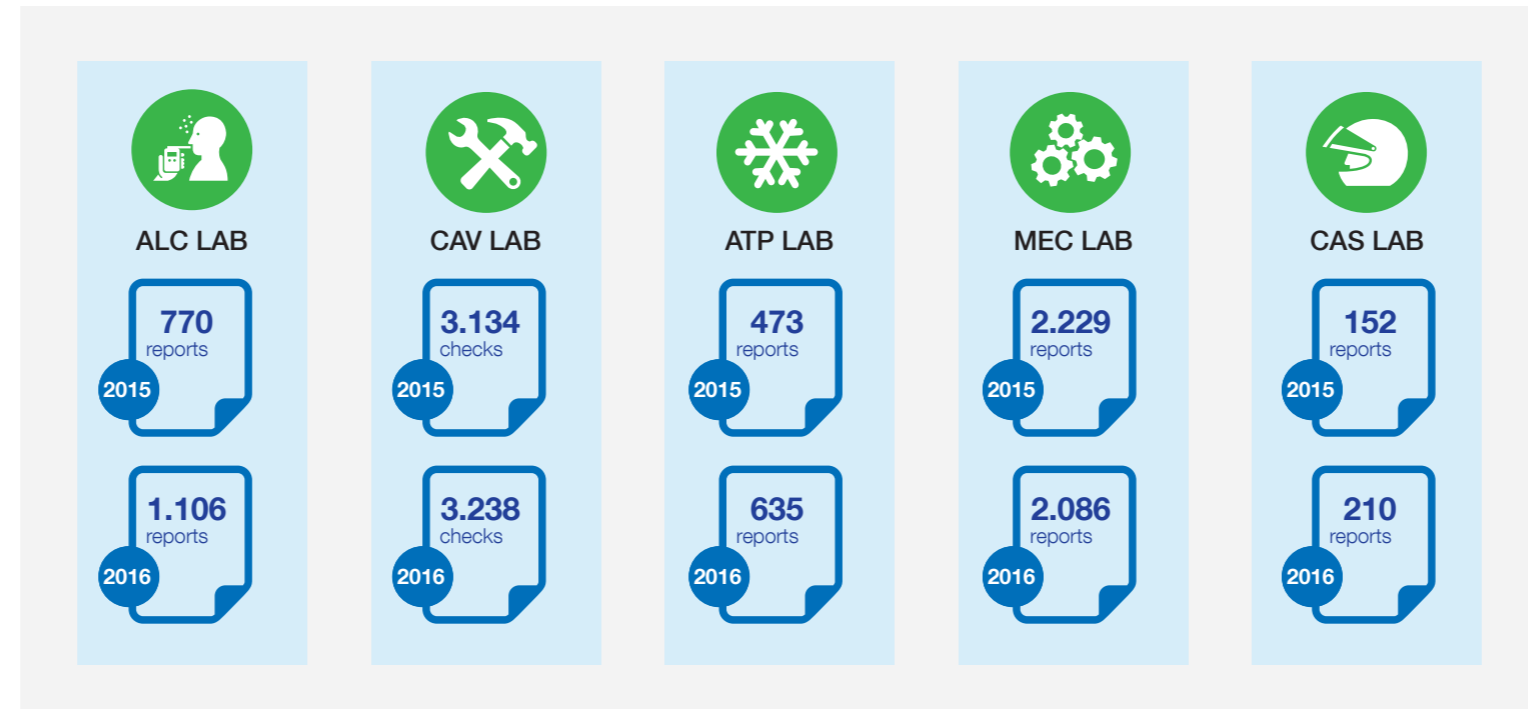
The ATP lab is accredited since 30 September 2016 according to the ISO17020 standard. The number of controlled ATP vehicles has increased dramatically (2015: 473 reports; 2016: 635 reports).

### MEC LAB

This lab approves and calibrates the devices used by installers of tachographs and speed limiters. The laboratory is ISO17025 accredited.

### CAS LAB (HELMETS)

The helmet lab is responsible for the testing of crash helmets and corresponding visors, as well as bicycle helmets. In 2016, the CAS lab contributed to developing the new Dutch standard for bicycle helmets for riders of speed pedelecs (NTA 8776 standard). The BRSI helmet lab is also one of the two labs that may certify these helmets.





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# Consulting

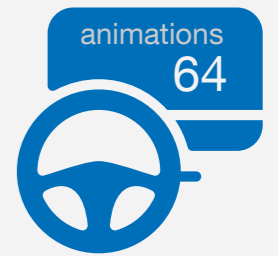
Companies and authorities can turn to our “Consulting” division. We like to share our knowledge about road safety. We do not only do this on the basis of theory, as was previously the case in classic workshops, but we also increasingly include very practical aspects. Our tumbling car demonstrations are a good example of this. However, we also offer smaller and extensive assessments.

In 2016, the workforce of our “Consulting” division was further strengthened and our range of services to companies and authorities extended.

## Road Safety Assessment

A “Road Safety Assessment” is new in our offer. We do a complete check of the road safety of a company. We also formulate concrete proposals to improve the existing situation.

First of all, we carry out a thorough analysis: what does the company do around road safety? How are mobility and road safety managed? What is good? And what can be still improved?



We examine how the staff members move and what kind of means of transport they use. We look at how traffic safety is integrated in the HR policies and scan the infrastructure of the company premises.

In addition we also analyse all available data including the offences and accidents. We meticulously map out all the risk factors.

This detailed analysis provides us with an overall picture of the situation. It enables us to identify the problems and to propose appropriate improved





solutions. We opt for an integral approach so that we can make concrete proposal in any domain.

With a Road Safety Assessment, companies gain an insight on their policy round road safety and can also really improve it. This exercise helps to reduce the costs.

### Interactive theatre

“A lucky fish” is a play in which various traffic safety themes are integrated. The four major killers in traffic are dealt with: speed, distraction, not wearing the seat belt and driving under the influence. The play can be staged in three languages. Two professional actors offer an entertaining and engaging play

### Ernst and Young (EY)

Every year, EY welcomes many new, young employees who often have to take to the road. Because they noticed that their staff members were often

getting fines and were involved in accidents, they turned to the BRSI. They decided to run different activities over a two year period together with the BRSI to increase awareness among their employees. We organized info sessions on the various killers in traffic and subsequently worked on each theme in more detail by using posters, totems, barrier signs, newsletters, ... Under the motto ‘EY cares’ we want to jointly bring about an attitude and behaviour change in the staff and reduce the number of accidents.



### Willemen Groep

The biggest Belgian familial construction group decided in 2016 to carry out a large-scale awareness-raising campaign around road safety under the motto “Safe Forward”. In November, their fellow workers had to fill in an anonymous questionnaire regarding their attitude in traffic. The results enabled the BRSI and Willemen Groep to elaborate a biennial plan. The package contains more than 50 workshops over the great killers in traffic, newsletters, communication material, and so on... in short, a series of measures to make staff members aware of their safety in traffic. The kick-off of the Safe Forward campaign was given at (alcohol-free) receptions of different companies in the group, during which the Willemen Groep signed the Safe Forward charter.

Dat je als bedrijfsleider een belangrijke voorbeeldfunctie hebt, heeft men bij Willemen Groep goed begrepen. In deze video wordt dat nog eens benadrukt.



### Our 4 members

Members are companies that associate themselves with the BRSI for a period of 2 years with one single purpose: improve road safety. Every associated company in their line business is strongly involved in traffic safety.

As members of the BRSI Membership Programme they can benefit from the BRSI know-how and network. A company can become a member by entering a commitment for a period of 2 years and by paying membership fees. The company can invest in studies, campaigns, training, awareness raising actions, audits, etc.



### These are our members







# 8

# International

The BRSI is also especially active at the international level. We are members of various international working groups in which one resorts to our knowledge and expertise. So we became in 2016 members of the United Nations Road Safety Collaboration (UNRSC), a joint initiative of the World Health Organisation (WHO) and the United Nations (UN)

## ESRA

The results of the first ESRA study were presented on 20 June 2016 with widespread interest from the media.

The ESRA project (E-Survey of Road User Attitudes) is a united initiative of research centres and traffic safety institutes from the 17 countries initially in-

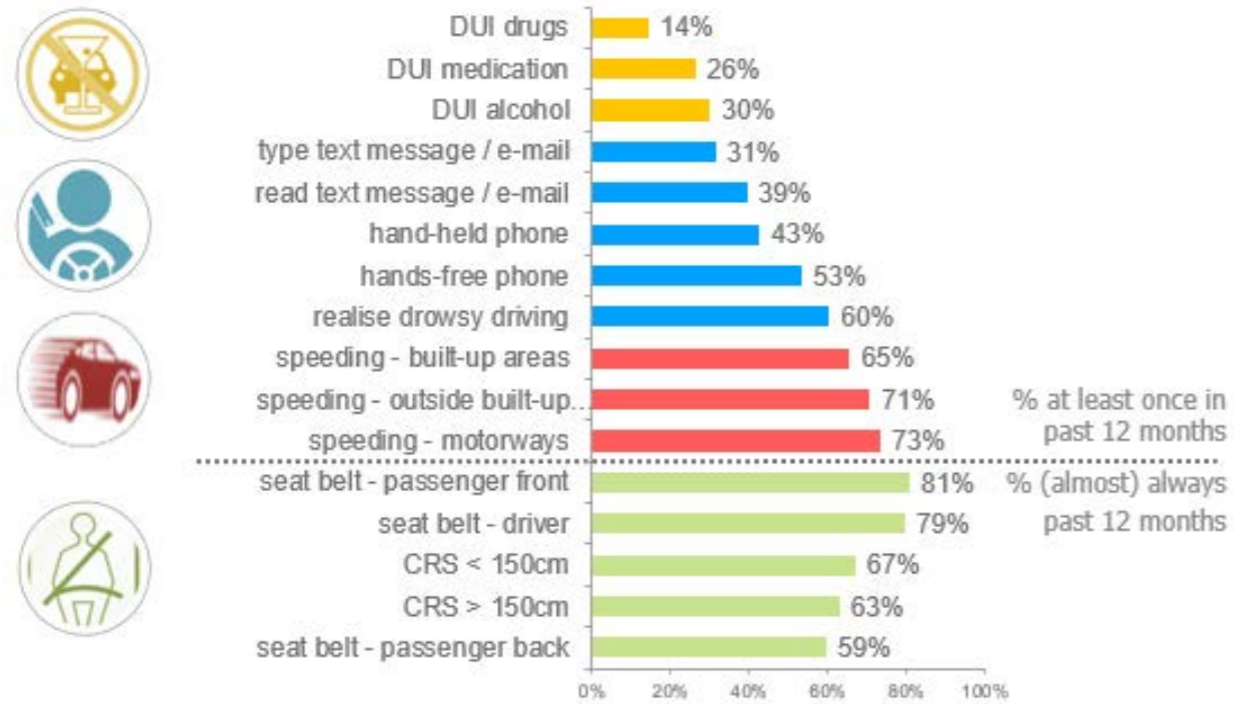
involved and extended to a second phase involving 25 countries. The purpose of this study is to collect similar (inter-)national data on the opinions, attitudes and behaviour of road users with regard to road safety and to support the national and international road safety policy. Information from a total of 27 000 respondents was collected for the ESRA study. The next edition is scheduled for 2018. More information and all the results of ESRA1 (2015/2016) can be found at: [www.esranet.eu](http://www.esranet.eu)

Below you see the geographical coverage of the first ESRA survey and the participating partner organizations





## Self-reported behaviour (un-safe) behaviour in traffic.



## Handicap International

In the framework of international projects, the PAIR team did an assessment of the road safety programme of Handicap International in the Democratic Republic of Congo (DRC). Thanks to the mission in the Congo we not only met the various stakeholders, but also the representatives of Belgian authori-

ties present in that country. This mission has shown that there are quite a few synergies between the BRSI and Handicap International. The foundations were laid for a closer cooperation between the two organizations.





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# Facts & Figures

## Organisation

In 2016, 20 staff members were recruited in the various teams.

Regardless of their position, all new BRSI employees attend a training course in traffic safety and psychology. In this way, they are all road safety ambassadors.

Working conditions of employees are flexible either at the head office, satellite offices or mobile antennas, at home through telework and away when calling on clients. A new intranet was set up in order to optimise internal communication. This is the start of a project on organisational culture that will be rolled out further in 2017.

