Welcome to the International Congress on

Autonomous Driving and the Impact on Traffic Safety

13-14th October 2016 In "Salón de Actos de Caja Rural Castilla-La Mancha" – Toledo – Spain

Annual Conference of La Prevention Routière Internationale – PRI

The International Congress on Autonomous driving and the Impact on Traffic safety will be held in Toledo at Salón de Actos de Caja Rural Castilla-La Mancha in 13-14th of October 2016. This great event will be organized in collaboration with the very appreciated contribution of DGT-Spain. We are now pleased to invite prospective conference speakers and presenters to submit their abstracts for consideration by the Program Committee.

This topic, is one of the main concern at global level now and by choosing this theme, PRI will contribute for the improvement of recent issues related to road safety among international community. The International Congress will bring together leading professionals, experts, academia and stakeholders from different areas to discuss autonomous driving and all related issues.
Researchers, academics, policy makers and road safety practitioners are encouraged to submit their abstracts.
We look forward to your involvement in what promises to be a rich and rewarding road safety conference experience.

La Prevention Routière Internationale - PRI
Benacer BOULAAJOUL
President

Call of abstracts

Most of automotive companies and technology companies have already demonstrated autonomous driving through working prototypes and pilots. Several advanced driver assistance systems such as Automated Emergency Braking (AEB), Intelligent Speed Assistance (ISA), adaptive cruise control, self-parking and lanekeeping systems are already available as combined functions on current generation cars. Additional functionality is expected to be rolled out in the next few years. Furthermore, significant efforts are being made to advance existing technology and to address cost-side challenges. Therefore, both the availability and affordability of key technologies to enable autonomous driving is expected to greatly increase in the coming years.

Autonomous Driving has been said to be the next big disruptive innovation in the years to come. Although considered as being predominantly technology driven, it is supposed to have massive societal impact beyond the automotive industry in fields such as mobility, transportation, insurance, logistics, law and regulations. Additionally to the enormous environmental and economic effect it has the promise of saving millions of lives worldwide.

Automated driving technologies are already preventing collisions and deaths on our roads. All these systems use technology to compensate, to some extent, for human error, taking some control away from the driver under certain circumstances. But we now stand on the verge of something much bigger. Fully autonomous vehicles may, in the near future, transform our world. Cars that drive themselves could bring dramatic shifts in car ownership, public transport, employment patterns, business and urban development. The theoretical safety benefits are huge. Autonomous vehicles won't drink and drive or get distracted by telephone calls, facebook posts, or children in the back. They will be programmed to drive at appropriate and legal speeds, and will pay attention to their environment in 360 degrees at millions of times every second.

These technologies will clearly mitigate some risks; but they may also create new ones. Our world will face a medium to long-term scenario where autonomous vehicles will interact with large numbers of non-automated vehicles. In terms of Safety, many questions will arise-up and need proactive approach to avoid the desaster. What will the impact be on safety? Other road users such as cyclists and pedestrians will not become automated – how will they manage in a world where they can no longer establish eye contact with drivers before crossing the road? How will regulators ensure autonomous systems are tested and approved to common standards, especially in a world where cars are already receiving over-the-air software updates that affect safety performance?

The aim of the International Congress is to engage a real debate on this issue among high level experts from different sectors arround the world. Its purpose is to give an overview of automated driving, identify the main safety benefits and offer some key recommendations for all stackholders.

Many sub-topics are proposed for development in this Conference :

1. **State of art**

The purpose of this axis is to define first what autonomous driving means and then to present an overview of the recent developpment and last experiences for smart devices and technology used or could be used to improve the quality and the safety of driving. Some examples of smart cars could be presented. The perspective and the expectation for the next coming years in this field will give an idea

about the near and middle future of our society. The contributions of car companies and Laboratories research are very appreciated.

2. **Autonomous driving Vs Traffic safety**

This topic aim to present the outcome of autonomous driving in terms of reduction of risks related to crashes and fatalities. Some studies have shown that fatalities will be decreased by 80% between 2040 and 2050. Result of studies undertaken in this area are expected to be presented to discover multiple faces of this issue.

3. **Autonomous driving and the impact on road safety system**

What is sure, is that With autonomous driving, all the road safety system will be impacted and some of them are very positive.

Individual benefits : Several studies highlight the commute burden that people face today. in addition to long daily commutes to and from work, which take the average 48 minutes per day (Amercican case study). A large portion of this traffic in major cities constitutes drivers cruising in circles looking for parking. autonomous driving addresses these and other driving pain points by reducing the commute burden in several ways.

Societal benefits : Autonomous driving could provide three major transportation-related benefits to society — decreased traffic congestion, improved road safety and reduced carbon emissions.

In the meantime, the use in the near futur of smart and autonomous cars will raise lot of questions about training, driver licences, point system, infrastructure, signals, forces, etc. What is the real impact on all these issues ? What is the level of changes are expected to be introduced on each item ?

The role of all kind of Road users in the new system must be redefined. They will be responsible for what in the transition period and then in the full autonomous driving system. Is there some Psychological impact on road users by categories and which kind of behavior will be on the road ?

4. **Autonomous driving vs Regulation**

The use of Smart cars implies new role of road users inside or outside the car. Regulatory bodies across the globe are starting to pave the way for autonomous vehicles by developing the appropriate legal framework for vehicle testing and operation. So, the regulation law must be adapted to the new responsibility of road users and offenders in the future autonomous driving system. What is the most changes expected to be introduced in the legislation ?

5. **Related topics**

When it comes to autonomous driving it's a matter of technology, recent technology which only high income countries concern. Before to have a democracy of access to this system beteween countries, may developping countries will continue facing huge desaster because the high level risk of traffic accidents and death.

The gap between high income countries and developing countries will be wider and wider. So, for many years, developping countries will continue dealing with this crisis situation. Affordability of this new technolgy for developping countries will still remain for many years.

Other topics could be interesting for discussion and comment among participants. E-bike could be one of them.

Oral Presentation

Oral presentations will be 15 minutes in length and may be supported by an audio-visual aid; an additional five minutes will be allowed.

Full papers will be published in the conference proceedings.

Languages

Abstracts should be submitted in one of the three languages i.e. English, French and Spanish.

Method of Submission

Authors interested should submit their abstract to Scientific Committee for consideration. Abstracts should be sent to one of the following mail adresses :

- boulaajoul@lapri.info
- secretariat@lapri.info
- contact@lapri.info
- adominguez@dgt.es
- mcgiron@dgt.es

Acknowledgement of the receipt of your Abstract will be emailed to you at the time of submission. A reference number will be assigned to each submitted abstract. Please quote this number in all correspondence with the Congress Secretariat.

Abstracts submitted should be in Word for Windows PC software.

If you have any queries, please contact the Congress secretariat at : +212 6 69 58 14 40.

Abstracts for all presentations

Abstract submissions must consist of the entire abstract including title, author(s), affiliation and text must not exceed 250 words. The program committee will evaluate all abstracts for inclusion in the conference program. All submissions should be thoroughly checked for spelling and grammar before submission.

Compulsory fields when you submit an abstract will include:

- ✓ Abstract title – a brief, interesting and explicit description of the presentation in less than 15 words
- ✓ Name and contact details of corresponding author
- ✓ Proposed presentation type and paper format
- ✓ Authors' names - indicate presenting author
- ✓ Authors' affiliations
- ✓ Keywords
- ✓ Abstract
- ✓ Audio visual requirements

Short biography of presenter (maximum 30 words). This information will be used by the session chair for introduction purposes or could possibly be published in conference literature.

Hotels :

Offers will be available in the next coming weeks. Negotiation for better rates is under process.