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## **IRU Position on managing the transition to autonomous vehicles**

*Adopted unanimously by the IRU General Assembly in Geneva on 4 May 2018.*

### **3 “s” strategy for managing the transition to autonomous vehicles.**

#### **I. ANALYSIS**

The digitalisation of transport operations and the introduction of autonomous vehicles constitute a dramatic shift in paradigm and provide challenges but also opportunities for a variety of policy objectives and transport operational issues. As technology and innovation advance, and systems are implemented and tested on a wider scale, one thing becomes clear: the transition phase needs to be proactively managed, including guaranteeing equal chances for all and preserving the key role and place of private transport operators, and the data they possess, in the future of an increasingly autonomous mobility chain.

Cities are increasingly promoting the real-life testing and operation of autonomous vehicles. Vehicle manufactures are investing heavily in vehicle automation. Indeed, self-driving vehicles already operate in controlled environments, such as dedicated lanes in cities and ports, and first pilot projects with self-driving commercial vehicles - trucks, buses and taxis - are already underway in advanced economies. Other mobility sub-sectors such as metros, have already accumulated a considerable amount of experience and know-how in running automated operations. According to scientific studies and information from vehicle manufactures, the number of driverless commercial vehicles will increase considerably over the next 10-20 years, becoming a permanent feature on our roads.

While vehicle manufacturers are working on vehicle automation, other closely related complementary technological developments, such as the development of electronic transport and control documents (e-CMR, eTIR) and transport network platforms, aggregators and Mobility-as-a-Service initiatives further increase the speed of technological developments in road transport, logistics and individual and collective passenger mobility. In addition, the digitalisation of documents and processes will further reduce the necessity for humans to be present during transport operations, and the further market penetration of autonomous vehicles will force the abandonment of the use of paper documentation for transport operations.

Indeed, autonomous vehicles are already high on political agendas, and governments and international institutions such as the United Nations, the International Transport Forum and European Union are currently actively reviewing their regulations to understand what changes would be required to allow self-driving vehicles on public roads.

It is clear that automated commercial vehicles have certain advantages such as:

- Improving road safety.
- Increasing transport efficiency.
- Decreasing transport costs.
- Reducing emissions.

- Potential to bridge the gap in driver shortage by making the job of the driver more attractive.

However, the transition to autonomous vehicles is also expected to:

- Trigger potential impacts resulting in jobs shifting increasingly away from driving to service-based jobs, and job losses.
- Face challenges related to acceptability, in particular by passengers and other road users.
- Raise questions of data security and data ownership, including questions related to data protection both for businesses, owning valuable customer data bases, and customers themselves.
- Raise legal and operational questions regarding type approval and technical controls of autonomous vehicles to ensure their roadworthiness at all times.
- Provide considerable challenges to transport operators, including their role and relevance in future transport operations.
- Challenge established relationships and trust within the mobility chain for both the general public and passengers.
- Raise specific customer-related issues, in particular in passenger transport, related to the use of services provided by increasingly automated passenger vehicles in terms of safety and service provision.
- Trigger the need for a review of transport policies with the objective to reduce automated vehicle congestion and optimise allocation of public space by giving priority to collective passenger and freight transport solutions within the framework of the door-to-door mobility of people and goods.

## **II. IRU POSITION**

The road transport industry embraces innovation and is in favour of a transition which allows for the **safe, secure and sustainable** (3 “s” strategy) operation of autonomous vehicles. Regarding:

### **Safety**

- Technical standards to operate autonomous vehicles need to be harmonised and interoperable. Technology must be proven and solid to ensure functioning without any problems in various climates and traffic conditions.
- During the transition phase, trials in a controlled or specific area and at specific times should be encouraged, and involve professional transport operators.
- Further work is needed on a system of technical controls, including roadside checks.

### **Security**

- The risk of cyber-attacks on autonomous vehicles need to be minimised, data security needs to be ensured and privacy legislation must be respected. Ultimately, the ownership of data related to transport operations should stay with the transport operators.
- Ethical questions of road safety crash avoidance systems must be addressed, as well as questions related to passengers’ perception of automated mobility.

### **Sustainability**

- As the job may change, drivers will not become superfluous and professional drivers should be encouraged to enter the transport industry, and as such address the ongoing driver shortage. The sector will need a clear vision for the future of its human resources, and transport workers and operators must be properly trained and fit for the new digital challenges.

- A connection between new technological developments with labour law and specific, flexible conditions of the driver should be established.
- Governments need to provide real business incentives to expedite the penetration of latest technologies and practices.
- Policies incentivising the use of collective passenger transport and freight delivery must be put in place to promote efficient use of scarce public space and prevent autonomous vehicle congestion.
- As higher levels of autonomy are commercially introduced, the balance of liability shifts from driver liability to owner/product liability, ultimately leading to complete liability resting with vehicle manufactures and technology providers. Therefore, governments, insurance companies and technology providers need to evolve existing liability laws in order to provide legal certainty and identify appropriate solutions for damage and injury.
- Support businesses, in particular small and medium-sized enterprises, to better understand and face challenges, including business challenges, related to automated mobility, and promote exchange of best practices with mobility sectors with already advanced automation of their services.
- Ensure an equal and fair playing field and prevent monopolies within the automated transport industry.

Given the importance and size of this technological change, and the transition to autonomous vehicles, the road transport industry is ready to engage in constructive dialogue with all stakeholders and supports governments, local authorities and legal experts in choosing the right policy/fiscal mix and best practices to be applied to all players in the transport sector, whilst at the same time joining forces to carry out studies and public campaigns to address questions related to the perception of automated vehicles/users.

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