# IBERIAN LAWYER

# Autonomous Cars: The Legal Challenges
## Vieira de Almeida

**The Web Summit held in Lisbon in November 2016 brought together a large number of experts in the car industry, including specialists in autonomous car technology, in a clear demonstration of the expected revolution in the automotive industry.**

Indeed, a new mobile world is beginning to emerge from the intersection of the technology, electronic communications and automotive sectors. This new world is connected, shared and autonomous, and makes use of digital technologies, Big Data and the Internet of Things to bring new market opportunities, as well as social and environmental benefits. These range from new opportunities for the automotive industry to opportunities for ICT start-ups and companies, as well as for services in areas such as entertainment, e-commerce and spatial data.

In addition, there are also opportunities to add value for consumers, for example, time savings while commuting, better traffic management, increased road safety and less carbon emissions. What is more, autonomous cars throw open the door for mobility-on-demand and shared mobility.

It is not expected, however, that fully autonomous vehicles will be commercially available until at least 2020. In fact, there are still a number of challenges that need to be addressed, both from a technology and legal/regulatory point of view. These include, first of all, requirements relating to driving and vehicle compliance with road traffic rules. Compliance with safety and environmental standards, as well as with vehicle roadworthiness requirements, also need to be tackled, due to the specificities of autonomous cars. Other relevant issues relate to the allocation of liability between user/driver/owner and manufacturer. In this scope, insurance requirements may have to be revisited for users of fully autonomous cars as well as for their manufacturers. Data protection and privacy issues are one of the most central issues in light of the fact that autonomous cars are able to collect large amounts of data. Cyberthreats and security need to be addressed too. Another very important issue relates to vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications and the need for coverage and bandwidth for this purpose, as well as their impact on the interoperability of systems and services. Finally, standardisation needs to be addressed as well, with a view to promoting the worldwide and coordinated development of autonomous vehicles.

In addition, it is also vital to ensure consumer awareness and understanding of the benefits and requirements of autonomous cars, thus assuring its effective uptake in society. In this scope, it is important to note that advanced driver assistance systems and testing projects for autonomous vehicles will play a central role in helping to define the rules applicable to autonomous cars, in a "learning by experience" approach.

Countries around the world are increasingly aware of the impacts and challenges brought by autonomous cars and have been developing frameworks for their testing and use. At international level, the Vienna Convention on Road Traffic has been recently amended to open the door to autonomous cars, provided certain requirements are met. In the European Union, in addition to the work of the Cooperative Intelligent Transport Systems (C-ITS) platform, the Roundtable on Connected and Automated Driving and the Gear 2030 initiative, the Declaration of Amsterdam on cooperation in the field of connected and automated driving - which sets out a joint agenda for this area - was signed on 14 April 2016. Meanwhile, the Commission Staff Working Document on Advancing the Internet of Things in Europe also addresses autonomous and connected vehicles.

Autonomous cars stand out as perhaps the most important single innovation that will fundamentally change the automotive industry and contribute to the development of a full mobile society. Their successful implementation will depend however upon the effectiveness and appropriateness of the laws and regulations in place. An approach that guarantees a suitable balance between the need for safety and the use of autonomous cars is essential to avoid hindering innovation in this area, as well as to keep encouraging investment by non-traditional players in this sector.

**Helena Correia Mendonça is a consultant at Vieira de Almeida. She can be contacted at hcm@vda.pt**