



## ADAPTING ROAD LAW TO NEW MOBILITY TRENDS

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### **Main part**

Setting up new rules requires a deep knowledge of the reality being addressed; legislators need to understand what is subjacent to their work in order to have a broad view and clear understanding of the different possible approaches, especially of those that are truly viable, sustainable and achievable. When success of political options depends greatly on technical issues a close cooperation between specialists of the different matters involved is an essential part of the legislative procedure. Such a methodology enables the participants, from an early stage, to have access to different sources of information and perspectives, and therefore perceive how their proposals and objectives are viewed by others according to their specialized knowledge and experience.

The present introduction of electric, connected and shared mobility viewed as part of the solution for environmental, congestion and road safety problems caused by the intensive use of motor cars will require important changes in the existing infrastructures, built to respond to different needs and uses. Therefore, the electrification of road transport, understood as the use of electricity to power engines that propel vehicles, is presently an issue of enormous importance. It is achievable by several means; static or dynamic electric charging systems. The adoption of these technologies was the subject of a technical study conducted by the World Road Association, entitled “Electric Road Systems: a solution for the future”.

The present article, based on the mentioned study, focus on the legislation in force and the rules that may have to be adopted in Portugal, in order to regulate the use of public road domain areas to install charging systems, especially dynamic charging systems; air conductive (catenary), ground conductive (rail) and inductive (wireless).

The conclusions refer to the possible use of many rules presently in force together with the need to go forward adopting rules that envisage to regulate new realities. In the present stage of many uncertainties the industry must work closely with legislators in procedures that have to be based on mutual confidence, in order to set up, in due course, internationally recognized standards that have to accommodate not only different natural conditions, cultures and stages of development, but also specific national legal requirements.

The vision of the Portuguese Government on this matter, according to Cabinet Resolution number 29/2020, of the 22nd April, is not far from our conclusions. This normative act that “lays down the general principles for the creation and regulation of Technological Free Zones” recognizes the need of a new legislative framework in Portugal that promotes and facilitates the realization of research, demonstration and testing activities, in a real environment, of technologies, products, services, processes and innovative models. The new rules that are envisaged are due to create adequate conditions for taking advantage of the opportunities generated by current developments of science and technology; “from artificial intelligence to Blockchain, through bio and nanotechnology, 3D printing, virtual reality, robotics and the Internet of Things, including Big Data and the 5G network”. Some areas and sectors of the economy are particularly envisaged, namely mobility, transport and logistics, including autonomous and connected vehicles, drones and vertical mobility, non-pollutant sources of energy, smart cities, financial products, etc.

The Government set up a methodology based on a flexible and innovative approach in order to ensure the continuous maintenance of conditions that may guarantee not only an attractive environment for testing and experiencing in Portugal, but also a safe and protective one for the people directly or indirectly involved. The methodology, as drawn up in the said Cabinet Resolution, starts with a reflection on the political, legal and regulatory framework, considering the diverse sectorial legislation currently in force, enacted in different times, according to specific interests and establishing its own procedures and requirements. After this stage has been carried out it will be possible to identify which principles

and rules are best suited to rule the present realities in order to handle a holistic approach towards the scientific and technological procedures that shall be carried out in Portugal.

The expected legislative work is intended to be supported, from the beginning, during the different stages of the legislative procedure, by an integral vision, framed by the different interests in presence, and according to science of Law best practices, in order to achieve a new harmonized and simplified legal framework that rules research, demonstration and testing activities in different areas and economic sectors. In a short time, Portuguese Law on Technological Free Zones will set up especially attractive conditions to carry out work related to testing and developing new technologies and products in Portugal.