

EU Development Strategy and Legal Control of Automated Vehicles

Der-Chin Horng

Institute of European and American Studies, Academia Sinica

E-mail: dchorng@sinica.edu.tw

Abstract

Automated vehicles (AVs) have been an emerging industry in line with the development of artificial intelligence (AI), digital technology, and connected mobility since 2010. These technologies arrived suddenly on the market, and their future development is expected to accelerate. AVs promise many opportunities and benefits, but also pose many challenges regarding their social impact and the transport system. Regulation plays a key role in the development of AVs in the EU, ensuring AV safety, delineating legal responsibilities, privacy and consumer protection, risk control, fair competition, market access, public confidence, etc. The EU has paid a great deal of attention to AV because the automobile industry is crucially important to the European economy. This paper examines the development strategy and legal framework for AV in the EU, particularly focusing on the following core issues: the concept of AV, development, strategy, safety requirements, opportunities and challenges of the AV, the formation of Intelligent Transport System, the specific features of the EU's AV regulation and policies, the significance and impact of the same, and any implications for Taiwan.

Key Words: automated vehicle (AV), safety requirements, EU, connected mobility, Intelligent Transport System (ITS)