

Unlocking the UK CAM Opportunity

Overcoming the Commercial and Regulatory Obstacles

August 2024



The Automated Vehicles Act (the AV Act) came into force on 20th May 2024. This important piece of legislation signals a major step towards the widescale adoption and use of Connected and Automated Mobility (CAM) within the UK. As Primary Legislation, the Act provides the overarching framework needed to accelerate the development and commercialisation of CAM: the race is now on to establish the secondary legislation and business models to deliver this technology.

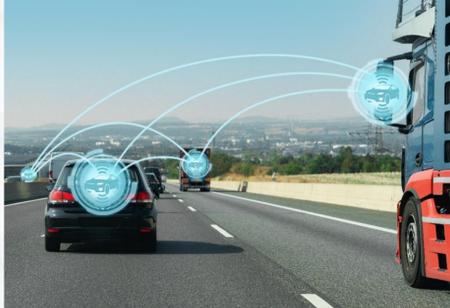
In this article, KPMG and Shoosmiths explore some of the key policy and business implications of the evolving regulatory landscape, and the implications for organisations deploying CAM in the UK market.

The CAM Opportunity

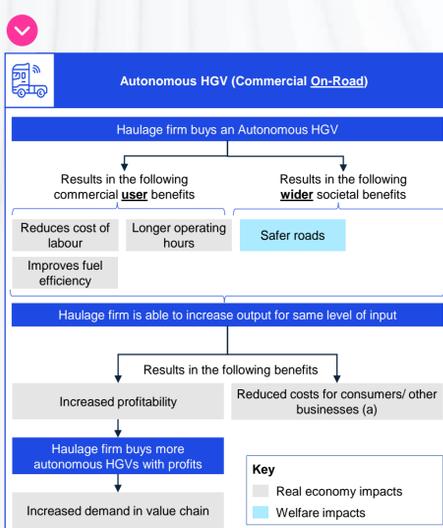
First, let's take a step back and consider why the AV Act has been passed.

The benefits and opportunities of widescale CAM adoption are significant and far reaching. A recent Society of Motor Manufacturers and Traders (SMMT) study underpinned by KPMG analysis, identified an estimated annual economic benefit of £66bn from the adoption of CAM technology in the UK by 2040. This spans a wide range of use cases and CAM technologies from 'robo-taxis' and autonomous buses to automated mining vehicles and tractors.

These benefits range from cashable cost savings and revenue generating opportunities, to wider social benefits such as improved accessibility [\[click here\]](#).



Understanding the potential benefits and what is needed to unlock them will be crucial in enabling market participants to develop their investment plans and strategies, as illustrated below for autonomous HGVs:



The CAM Policy Context

Defining the CAM investment case is not the only factor to consider when looking to accelerate widescale CAM adoption. There are several CAM enablers required to assist in an economy's adoption pathway: one major enabler being the regulatory landscape.

It could be argued that the previous UK regulatory framework hindered CAM development due to diverging regulatory barriers which were unable to keep pace with a disruptor technology of this kind. This resulted in the legal landscape containing gaps, inconsistencies, and grey areas in respect of the development and deployment of CAM products and services in the UK.

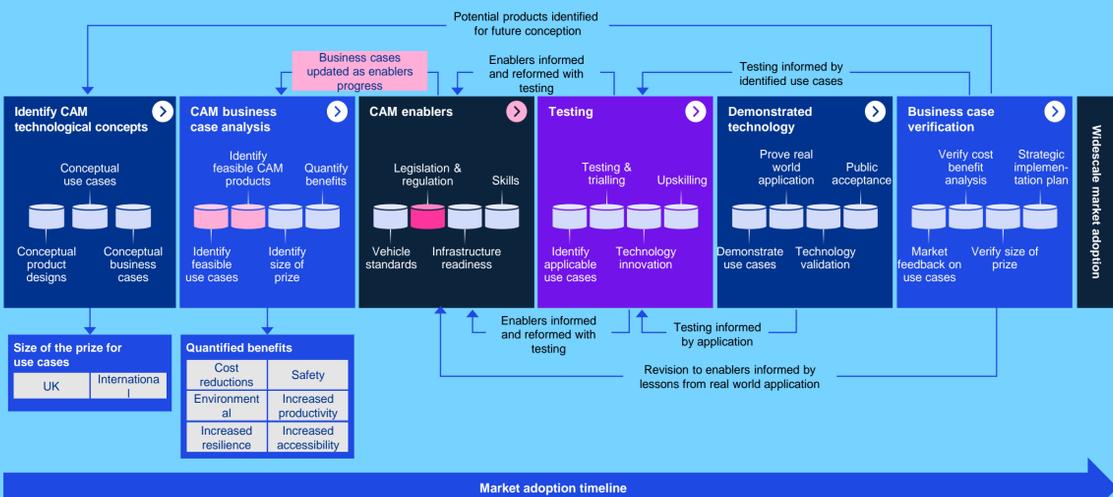
This, in turn, created a degree of uncertainty for businesses and impacted on the attractiveness of the UK as a location for pursuing the many opportunities that CAM presents.

The AV Act aims to address many of the perceived legal obstacles by providing a means to introduce new regimes, concepts, and amendments for matters that the current legal landscape does not cover.

Stages of CAM adoption

The AV Act is a significant milestone in the UK's advance towards developing and deploying CAM but there are a multitude of other factors required to unlock widescale market adoption, as illustrated below.

The driving force behind future CAM investment, and the location of that future investment, is the ability to deploy this technology within businesses and within society. This will, in turn, inform CAM technological concepts and use cases. Where and when CAM can be deployed will be determined by the maturity of an economy's key "CAM enablers," such as the foundational vehicle standards, physical and digital infrastructure readiness, the skill levels of the workforce, and the regulatory environment supporting deployment.



Regulatory Obstacles and Uncertainty

Although the AV Act is a positive step towards removing current legal obstacles to CAM deployment on UK roads, it is largely a framework that sets out a wide range of overarching principles that require detailed and technical regulations to be created at a later stage. It is these regulations that will provide the legal certainty that is needed.

As such, off road use cases will continue to be the most straightforward means of offering CAM products and services. For on road use cases there are no quick fixes for commercial deployment at scale, but the Centre for Connected and Autonomous Vehicles is intending to provide guidance and an updated code of practice which will support advanced trialling.



The rationale for positioning the AV Act as a framework piece of legislation is that the automated vehicle industry is highly technical and fast changing. This would make the creation of a comprehensive and definitive set of laws in one sitting impractical, time consuming, and unlikely to move the UK forward in terms of realising the CAM opportunity.

The overarching principles within the AV Act are therefore largely aimed at either introducing new regimes and legal concepts for previously uncovered matters, or assisting in the amendment of existing laws to remove obstacles, grey areas, and uncertainty.

To achieve this the government will need to lean on the findings of UK trials and the views of industry, academia, and other stakeholders. The previous government had stated that it would be issuing multiple consultations throughout 2024 to 2025, with the required regulations being laid in 2025 to 2026. This consultation phase would provide organisations operating in the CAM sector with the opportunity to inform and influence the regulatory regime content.

The aforementioned timescales for the required regulations are subject to government priorities, and with a new government now in power, this could impact on what is already a challenging timetable. That said, the AV Act received cross-party support, suggesting a commitment to the regime outlined in the AV Act, which may mitigate delays.



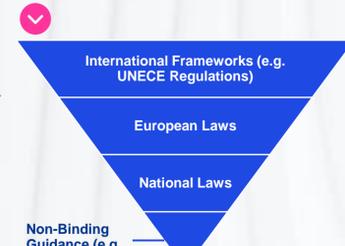
International regulations

Alongside the local regulatory climate, CCAV will need to consider the interaction of UK regulations with work that is already being undertaken at an International and European level.

By way of example, the UK is a signatory to United Nations Economic Commission for Europe (UNECE) which is beginning to develop its own regulatory approach to automated vehicles (such as UNECE Regulation 157 which applies to automated lane keeping systems). The European Union is also considering its regulatory approach, as are several of its member states.



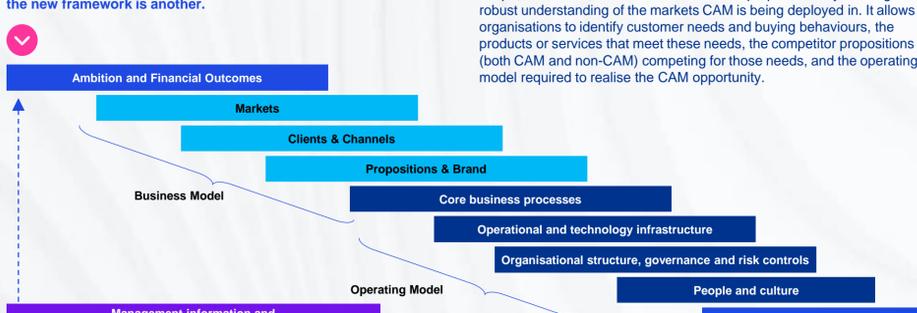
Current sources of Vehicle and Transport Laws impacting CAM



Therefore, the UK Government, through its interactions with international markets and innovators in the CAM sector, must ensure there is a degree of harmonisation between its laws and those of its trading partners.

Accelerating the deployment of CAM

Regulatory consistency will help businesses and public sector organisations quantify the potential CAM opportunity within its operations. However, regulatory frameworks are only one part of the puzzle: building successful business models to operate within the new framework is another.



KPMG has an established framework to help organisations identify and achieve the different value-add areas when implementing innovative technologies of this kind. Our '9 Levers of Value' framework can help shape, accelerate, and execute future CAM propositions by building a robust understanding of the markets CAM is being deployed in. It allows organisations to identify customer needs and buying behaviours, the products or services that meet these needs, the competitor propositions (both CAM and non-CAM) competing for those needs, and the operating model required to realise the CAM opportunity.

The UK's suitability

There is no doubt CAM can deliver value, as it possesses the potential to reshape our society, save lives, and increase the accessibility of those in the population who are most vulnerable.

But it also promises to have significant benefits for businesses through decreased costs, increased productivity, and increased resilience to operational risks. Therefore, ultimately reducing the impact of operating disrupters to an organisation.

This places the UK in a prime position to realise these benefits, building on its strong automotive heritage, a skilled workforce backed by world-leading universities, and a developed nascent technology sector with expertise in automation, 5G and cyber security.

When combined with an advanced open market economy and a trusted legal and court system which is looking to ease CAM implementation, the UK's operating environment is arguable one of the best in the world for CAM investment and adoption.

Our support

KPMG's Future Mobility practice and Shoosmiths' Mobility team are here to help navigate the challenges of CAM's implementation through supporting the interpretation of the AV Act and advising on future CAM strategies and its value to adopters.



KPMG has worked with companies across the CAM value chain from start-ups through to national governments to advise on a range of propositions such as, developing national CAM strategies, supporting the establishment of automotive test beds, securing public and private funding for automotive innovation, and assisting in the design and implementation of new operating models to enable the transition to CAM.

Shoosmiths is a full-service law firm which has provided legal advice into all parts of the CAM ecosystem, from global OEMs and the supply chain through to blue chip technology providers and disruptive start-ups. Shoosmiths has been at the cutting edge supporting clients on strategic joint ventures and collaborations, as well as cross-border supply of goods and services arrangements, technology procurements, intellectual property licensing, and global data strategies. Having been involved in the development of the AV Act Shoosmiths is also perfectly positioned to advise on its application to your products and services, as well as other regulatory issues such as advanced trialling, road traffic, and cyber security laws.

Through our experience we can help you to not only identify the potential value of CAM in your organisation and customer propositions, but also assist in navigating the hurdles to widescale deployment and adoption. If you have any questions on this article or how either of our organisations can support you in your CAM journey, please get in touch with:

Ben Foulser
Partner
ben.foulser@kpmg.co.uk

Ben Gardner
Partner
ben.gardner@shoosmiths.com
[Click here to visit the Shoosmiths website](#)