Automated Vehicles Bill
Introduction and overview

Disclaimer: The Automated Vehicles Bill was introduced to the UK Parliament on 8 November. These slides offer a high-level overview of the policy context and key provisions of the Automated Vehicles Bill. The provisions are subject to change and will only become UK Law if approved by parliament.
Background

• Law Commissions’ joint report published 2022, recommending new legislation for AVs

• Brought together four years of legal review, three public consultations, which received hundreds of responses from individuals and organisations

• 75 recommendations setting out shape of new legal framework to enable safe deployment of self-driving vehicles

• Government’s CAM2025 report accepted and committed to future legislation

• Lessons learnt also from Law Commission Remote Driving Report

• Legislation is supported by industry, stakeholder groups, and Transport Select Committee
The Policy Framework for the Bill

Core Themes in the AV Bill

The proposed clauses of the Bill are largely based on the review of automated vehicle legislation undertaken by the Law Commissions. There are 99 clauses and 6 Schedules which cover 7 core themes.

The 7 core themes:

1. National Safety Principles
2. Authorisation and Authorised Self-Driving Entity (ASDE)
3. New Legal Actor – ‘User-in-Charge’
4. New Legal Entity – ‘No User-in-Charge Operator’
5. In Use Safety
6. Incident investigation
7. Marketing of Driving Automation

There were also minor amendments to the GB Type Approval regime and associated offences, and provisions to support digitisation of road traffic legislation.
1. Statement of Safety Principles/self-driving vehicle

- The Bill defines a self-driving vehicle and sets a requirement for a Statement of Safety Principles to be laid in Parliament, to provide further detail on the safety expectations. This expands on the high-level safety ambition for self-driving vehicles, **proposed to be equivalent in safety to a careful and competent human driver.**

- The distinction between **driver assistance** technology and **self-driving** technology is a fundamental principle of the safety framework. For driver assistance technology a driver is responsible at all times. For self-driving technology, responsibility shifts to the authorised self-driving entity.

- To meet 'the self-driving test' test, a vehicle must:
  - be designed or adapted to *'travel autonomously'* , which means without human control or monitoring
  - travel **safely** and **legally**

- Only vehicles that meet the self-driving test can be authorised for use as self-driving. This is assessed in respect of specified locations and circumstances.

- The clauses also require that the principles are framed with a view to securing that **road safety in GB will be better because of the use of self-driving vehicles.** This fixes this safety improvement aim in primary legislation and as such shapes future secondary safety regulation related to self-driving vehicles.
2. Authorisation and Authorised Self-Driving Entity (ASDE) (1/2)

- Authorisation determines whether a vehicle meets the self-driving test, taking into consideration the Statement of Safety Principles. Authorisation will run alongside existing vehicle type approval requirements and enables the delegation of responsibilities from a human driver to an automated driving system.

- Authorisation will identify the organisation, the authorised self-driving entity (ASDE), **which will be responsible for the way a vehicle drives throughout its lifetime.** A key part is assigning overall responsibility for the dynamic driving task to the ASDE.

- An ASDE is defined as the organisation which puts a vehicle forward for authorisation with self-driving features. The ASDE will have to comply with authorisation requirements (e.g. on data) and can be **subject to regulatory sanctions** if the vehicle does not drive safely and legally.

- Vehicle approval cover technical issues (verifying and validating systems against specifications). Authorisation will look at and approve aspects specific to self-driving vehicles including its Automated Driving System (ADS) features, the operational design domain (the conditions in which any automated driving system or feature is designed to function), and the suitability of the potential ASDE.
2. Authorisation and Authorised Self-Driving Entity (ASDE) (2/2)

- Authorisation will need to identify the specific self-driving feature or features which meet the self-driving test and the authorisation authority will consider:
  - the mode of operation of the feature (whether user-in-charge, or no user-in-charge),
  - how the feature is engaged and disengaged, and
  - the locations and circumstances under which the feature can drive safely and legally.

Specific authorisation requirements will apply to features which issue transition demands.

- The authorisation process will draw on vehicle type approval standards and processes (where applicable) when determining whether a feature can drive safely and legally.

- Once a suitable entity has become an ASDE, they will be under an ongoing duty to inform the authorisation authority of any changes which affect the authorisation e.g. if there are any updates to their vehicle software which might need a variation of the authorisation.

- The regulator will have the powers to vary, suspend or withdraw authorisations – either if requested by the ASDE or if specific conditions are met.

- The authorisation authority will be required to publish a register of authorisations, which must identify the ASDEs.
3. New Legal Actor – ‘User-in-Charge’

• An authorised self-driving feature may require a responsible human inside the vehicle to deal with certain situations (including driving) when prompted by the vehicle. When such a feature is engaged, the human driver becomes a ‘user-in-charge’ (UIC), who is not responsible for dynamic driving and has express immunity from the most serious road traffic offences. The immunity ensures that the user-in-charge cannot be held liable for criminal offences which arise from how a vehicle drives itself.

• However, a user-in-charge does retain other driver responsibilities not linked to the manner of driving. For example: to hold appropriate insurance, check that any load is secure, ensure roadworthiness, and ensure that any children in the vehicle are wearing their seatbelts or restraints. The UIC is also responsible for parking offences, tolls and road charges.

• A UIC should remain able to retake dynamic driving control, for example they must be awake and in the driving seat. The UIC must therefore be qualified and fit to drive, and in a position to exercise control of the vehicle at all times. Authorisation requirements will ensure that a human knows at any time if they are a driver or a UIC and can demonstrate if they are immune from a specific offence.

• The UIC will be prohibited from using a handheld mobile phone – we are carrying out research on what activities pose a risk to performance of a competent take over.
4. New Legal Entity – ‘No User-in-Charge Operator’ / Passenger Licensing

• If a self-driving feature can operate without the need for a responsible human inside, it is referred to as a 'no user-in-charge' (NUIC) feature. For example, a vehicle with a NUIC feature could travel empty or with only freight or passengers.

• When a NUIC feature is engaged, the vehicle must be overseen by a licensed NUIC operator (NUICO) – which is an organisation rather than an individual. Oversight involves knowing where the vehicles are, and duties regarding maintenance, insurance and safe operations. NUICO staff will be expected to respond to alerts from the vehicle if it encounters a problem it cannot deal with, or if it is involved in a collision. The NUICO may also need to communicate with enforcement officers or emergency services.

• The Bill clauses enable the establishment of a NUICO licensing scheme to regulate its "oversight" of NUIC operation. The vehicles will still need an ASDE, although the same entity may perform both roles.

• The NUICO function is designed to ensure the safe operation of the vehicles however there are licensing requirements for provision of passenger and freight services using NUICs. In the UK, licensing is centralised for freight and bus operators but devolved to local government for taxis and private hire vehicles (PHV). To learn about how to ensure passenger safety and accessibility, and ensure consistency in approaches, the Bill creates a central permitting scheme which disapplies taxi/PHV licensing (although local government will be asked for consent on individual decisions). This will allow central learning about how to ensure passenger safety and accessibility.
5. In Use Safety and 6. Incident Investigation

- Two types of investigations:
  - In-Use Regulatory Scheme (IURS) investigations to determine whether or not to issue an enforcement action, and which enforcement action is most appropriate and proportional
  - AV safety investigation capability (AVSIC) to make recommendations that would make the development and deployment of self-driving vehicles safer

- IURS will investigate circumstances where there are grounds to suspect that an authorised automated vehicle has committed a traffic infraction or breached its authorisation or NUICO licensing requirements.

- The IURS will analyse data reported by the ASDE, NUICO, traffic authorities and any other parties to carry out its investigations. The data may be supplied as authorisation requirements or other regulatory requirements, or in response to a specific request.

- The Bill provides powers for a range of enforcement actions (sanctions) available to the IURS to enforce authorisation and licensing requirements during use, make sure that safety issues are identified and corrected and that lessons can be learnt to improve overall safety.

- AVSIC will be carried out by appointed inspectors whose investigations will not be used in civil or criminal enforcement proceedings

- The Bill includes a duty to monitor and report periodically on the performance of self-driving vehicles.
7. Marketing of Driving Automation

• These provisions are designed to ensure that only authorised vehicles can be marketed as self-driving. This will ensure the distinction between driver-assist technology and self-driving vehicles. This will in turn ensure public safety and the safe use of vehicles.

• Our concern is to prevent the public from being confused by words or images that suggest drivers do not need to pay attention to the road when using technology that is not authorised as self-driving.

• These clauses set out two offences: a restricted terms offence and a general confusion offence. They enable creating a list of restricted terms in regulations that may only be used in the marketing of an authorised self-driving vehicle. This list may be updated to reflect usage over time.

• These clauses are essential to the framework because without them end users could be misled into thinking they don’t need to be engaged and paying attention to the driving task when in the vehicle has not been authorised as self-driving. This could endanger the occupants of the vehicle, other road users and the public.
GB type approval

- Updating certain offences to accommodate self-driving vehicles – to ensure that:
  - The offence of vehicle tampering expressly covers interference with equipment (which includes associated software and electronic information) used by vehicles to self-drive.
  - The offence of fitting and supplying defective or unsuitable vehicle parts also includes reference to software.
- Power to amend type approval legislation where appropriate so that it enables the approval of self-driving vehicles. This will enable:
  - Introduction of new definitions and vehicle categories into type approval.
  - Amendment of technical subjects that currently apply to vehicles to enable their application to self-driving vehicles which may not have a driver’s seating position or driver’s controls.
  - Application of new technical subjects to self-driving vehicles (for example, covering the technologies on the vehicle which enable self-driving, or cyber-security).
  - The ability to impose such requirements on persons other than the manufacturer (e.g. ASDEs and NUIC operators) to facilitate continued compliance with type approval.
Traffic Regulation Orders

• Traffic Regulation Orders (TROs) are the legal orders made by traffic regulation authorities to e.g. set speed limits, close roads and designate parking bays or bus lanes. They contain a valuable data set. Most TROs are made using paper-based systems or basic software products, using different formats, and are all stored locally in a variety of systems/filing cabinets.

• This clause will allow the SoS to make regulations to require all authorities to send copies of all the TROs they make on the public road network in a digital format to a central publication platform. They must be sent in line with a data model and standards that will be updated from time to time. The data can then be shared and used by AVs as well as other 'electronic equipment designed to undertake or facilitate the driving of vehicles on a road'. DfT is developing the data publication platform.
Key documents

- AV Bill text and Explanatory Notes
  https://bills.parliament.uk/publications/52908/documents/3984
  https://bills.parliament.uk/publications/52900/documents/3973

- CAM25 Policy paper

- Law Commission Automated Vehicles joint report and consultations
  https://lawcom.gov.uk/project/automated-vehicles/

- Law Commission Report Driving report and consultation
  https://lawcom.gov.uk/project/remote-driving/#:~:text=Beyond%20line%2Dof%20sight%20remote,which%20developers%20highlighted%20as%20problematic.

- Safe use of Automated Lane Keeping System on GB Motorways: Call for evidence
Thank you

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