

# AUTOMATED AND ELECTRIC VEHICLES BILL

## EXPLANATORY NOTES

### What these notes do

1. These Explanatory Notes relate to the Automated and Electric Vehicles Bill 2017 as introduced in the House of Commons on 18 October 2017 (Bill 112).
  - These Explanatory Notes have been prepared by the Department for Transport to assist the reader of the Bill and to help inform debate on it. They do not form part of the Bill and have not been endorsed by Parliament.
  - These Explanatory Notes explain what each part of the Bill will mean in practice; provide background information on the development of policy; and provide additional information on how the Bill will affect existing legislation in this area.
  - These Explanatory Notes might best be read alongside the Bill. They are not, and are not intended to be, a comprehensive description of the Bill.

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## Overview of the Bill

- 1 The Automated and Electric Vehicles Bill 2017 is intended to enable consumers in the United Kingdom to be amongst the first in the world to reap the rewards that improved transport technology will bring. The Bill will set the regulatory framework to enable the next wave of transport technology to be invented, designed, made and used in the United Kingdom.

## Policy background

- 2 The policy background is explained separately in the commentary relating to each Part of the Bill.

## Summary

- 3 The Bill comprises three Parts and contains one Schedule.
- 4 Part 1 makes provision in relation to automated vehicles.
- 5 Part 2 makes provision in relation to charging electric vehicles.
- 6 Part 3 makes general provision in respect of the Bill as a whole.
- 7 The Schedule contains minor and consequential amendments.

## Legal background

- 8 The legal background is explained (where relevant) in the policy background sections of these Notes.

## Territorial extent and application

- 9 Clause 18 makes provision for extent.
- 10 For the provisions in Part 2, a legislative consent motion is being sought from the Northern Ireland Assembly in respect of the application of these provisions in Northern Ireland.
- 11 See the table in Annex A for a summary of the position regarding territorial extent and application in the United Kingdom. The table also summarises the position regarding legislative consent motions.

# Commentary on provisions of Bill

## Part 1: Automated vehicles: Liability of insurers etc.

### Chapter 1: Policy Background

- 12 Automated vehicles are those that have the capability of driving themselves without human oversight or intervention for some, or all, of the journey. In an automated vehicle the driver can hand all control and responsibility to the vehicle and become a passenger, using it in automated mode for some or all of the journey. United Kingdom law on compulsory motor insurance has focused historically on ensuring that victims of road traffic collisions are compensated quickly and fairly. In the case of an automated vehicle being operated in automated mode, however, accidents could take place not as a result of human fault, but because of a failure in the vehicle itself, for which the only recourse available to an otherwise uninsured victim might be to sue the manufacturer through the courts. This Part extends compulsory motor vehicle insurance to cover the use of automated vehicles in automated mode, so that victims (including the ‘driver’) of an accident caused by a fault in the automated vehicle itself will be covered by compulsory insurance in place on the vehicle. The insurer would be initially liable to pay compensation to any victim, including to the driver who had legitimately handed control to the vehicle. The insurer then has the right to recover costs from the liable party under existing common and product law.
- 13 On 11 July 2016 the DfT published a consultation document Pathway to driverless cars: proposals to support advanced driver assistance systems and automated vehicle technologies which is available at: <https://www.gov.uk/government/consultations/advanced-driver-assistance-systems-and-automated-vehicle-technologies-supporting-their-use-in-the-uk>. The consultation put forward proposals for the extension of the compulsory insurance requirement as set out above, so that victims have a direct route of recovery through the insurer in the same way as they would if involved in a conventional collision where the driver is at fault.
- 14 The Government published its response on 6 January 2017 and confirmed its intention to bring forward its proposals. The response is also available at: <https://www.gov.uk/government/consultations/advanced-driver-assistance-systems-and-automated-vehicle-technologies-supporting-their-use-in-the-uk>.

### Clause 1: Listing of automated vehicles by the Secretary of State

- 15 This clause contains a mechanism to allow for manufacturers, owners of vehicles and insurers to know if the scope of this legislation applies to their vehicle. The definition in subsection 1(1)(b), combined with clause 7(1)(a), includes any vehicle that is designed to be capable of safely driving itself for some or part of the journey, without needing to be monitored by an individual.
- 16 Subsection (2) requires the Secretary of State to list vehicles, identified by type or in some other way, that are automated.

### Clause 2: Liability of insurers etc. where accident caused by automated vehicle

- 17 Clause 2 places first instance liability on the insurer for an accident caused by an automated vehicle if the vehicle is insured. Clause 2 also places the same liability on certain types of owners where the vehicle is not insured due to being exempt from compulsory 3rd party insurance under s. 144 of the Road Traffic Act 1988 (such as in the case of vehicles owned by a local authority, a police body, a health authority or NHS trust). As compared with the compulsory insurance cover for conventional vehicles under section 145 of the Road Traffic Act 1988, the insurer’s liability here

is widened to include damage (as defined in subsection (3)) to the driver where the automated vehicle is driving itself.

- 18 Subsection (7) ensures that the liability imposed on the insurer by this clause does not undermine their right of recovery from parties who are responsible for an accident.

### Clause 3: Contributory negligence etc.

- 19 This clause applies contributory negligence principles to the apportioning of liability in relation to accidents involving automated vehicles.

### Clause 4: Accident resulting from unauthorised alterations or failure to update software

- 20 This clause ensures that insurers should not have to bear liability to the insured person for accidents caused by the vehicle's software being altered in breach of the insurance policy, or by safety-critical updates not being applied. This applies subject to various conditions regarding the level of knowledge of the insured person or policyholder about the need for updates or about the insurance policy requirements.

### Clause 5: Right of insurer etc. to claim against person responsible for accident

- 21 Where clause 3 imposes an initial liability on the insurer or owner of the automated vehicle in respect of the accident, clause 5 provides that the person liable to the injured party in respect of the accident is under the same liability to the insurer or vehicle owner. This clause defines when and how the amount of the person's liability is settled and when their right of action accrues. It also sets out arrangements and limits on the amounts they can recover.

### Clause 6: Application of enactments

- 22 This clause has the purpose of preserving the various forms of liability in measures such as the Fatal Accidents Act 1976, the Damages (Scotland) Act 2011, and all the other Acts to which this clause refers, and ensuring that the new system of liability being created by this Act is joined up with them. For example, the Fatal Accidents Act 1976 provides for a victim's dependents to be able to recover damages where the victim's death was caused by "wrongful act, neglect or default". This form of liability from the Fatal Accidents Act 1976, by means of this clause, is being preserved and linked to the system of liability being created by this Act, such that where an accident involving an automated vehicle causes death, it will be deemed to be due to the liable person's "wrongful act, neglect or default" within the meaning of the Fatal Accidents Act 1976, so that the provisions of that Act are brought to bear. The effect of the other provisions is being similarly linked to the relevant provisions of this Bill.
- 23 Subsection (4) clarifies that the liability being created in clause 2 is liability in tort, as opposed to liability in contract or criminal law.

### Clause 7: Interpretation

- 24 This clause defines terms used in Part 1.

## Schedule: Minor and consequential amendments

- 25 This Schedule makes several minor and consequential amendments.
- 26 Paragraphs 1 to 7 make amendments to the Prescription and Limitation (Scotland) Act 1973 to make a similar regime of limitation on actions for automated vehicles as the one in the Limitation Act for England and Wales, but specific to Scottish law.
- 27 Paragraphs 8 to 16 insert provisions into the Limitation Act 1980 to establish a regime of limitation on actions regarding automated vehicle accidents, both under clause 2 and under clause 5. The purpose of these paragraphs is to provide for a clear time limit which avoids uncertainty arising from differences between existing limitation periods relating to product liability and personal injury.
- 28 Paragraphs 17 to 21 insert provisions into Part VI of the Road Traffic Act 1988 which extend the compulsory insurance requirement in respect of third party risks to cover automated vehicles in an adapted manner. For example, the compulsory insurance for an automated vehicle will include more than just third party victims and is extended to cover the disengaged driver where the accident takes place when the vehicle is in automated mode (see paragraph 18(2) which inserts subsection (3A) into section 145 of the Road Traffic Act 1988). The option which currently exists for conventional vehicles, as an alternative to holding a third-party insurance policy, of depositing a security with the Accountant General of the senior courts, will not be available for automated vehicles.

## Part 2: Electric Vehicles: Charging

### Chapter 2: Policy Background

- 29 The Government has stated that by 2050 nearly all cars and vans should be zero emission vehicles (zero carbon dioxide and other harmful tailpipe emissions). Government funding and private investment have already spurred the development of more than 11,000 public charge points, and an initial network of hydrogen refuelling stations. Significantly increased provision of infrastructure will be required to support mass market uptake of electric vehicles.
- 30 At present, in the early market, there are multiple networks with different offers to consumers. The accessibility and convenience of vehicle charging is frequently raised by consumers as a key concern in choosing an electric vehicle.
- 31 Electric vehicle charging has the potential to avoid network pressures and capitalise on cheaper off peak electricity generation by modulating or delaying charging. The use of 'smart' charge points will help enable these services, and could provide savings to electric vehicle owners and energy bill payers.
- 32 On 24 October 2016 the DfT and Office for Low Emission Vehicles published a consultation document proposing ultra-low emission vehicles measures for inclusion in the Modern Transport Bill which is available at: [www.gov.uk/government/consultations/proposed-ulev-measures-for-inclusion-in-the-modern-transport-bill](http://www.gov.uk/government/consultations/proposed-ulev-measures-for-inclusion-in-the-modern-transport-bill). The consultation put forward proposals for new legislative powers which would allow Government to introduce regulations to address these priorities for electric vehicle infrastructure.
- 33 The Government published its response on 9 February 2017 and confirmed its intention to bring forward its proposals, with the detail informed by consultation input from stakeholders and members of the public. The response document is also available at: [www.gov.uk/government/consultations/proposed-ulev-measures-for-inclusion-in-the-modern-transport-bill](http://www.gov.uk/government/consultations/proposed-ulev-measures-for-inclusion-in-the-modern-transport-bill).

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## Clause 8: Definitions

34 This clause provides definitions of the nomenclature used in Part 2.

## Clause 9: Public charging points: access and connection

35 Clause 9 provides a power for the Secretary of State to make Regulations which address a current problem with the diversity of different means of accessing public charging point services. Regulations could require operators to provide an appropriate uniform method of accessing public charging points (charge points and refuelling points). The clause also enables Regulations which could address any lack of interoperability between public charging point connectors on electric vehicles and the charge points themselves. This would ensure that an electric vehicle could charge at any charge (or refuelling) point.

## Clause 10: Large fuel retailers etc.: provision of public charging points

36 This clause provides the Secretary of State with the power to make regulations requiring large fuel retailers and service area operators to provide public charging points and to ensure that public charging points are maintained and easily accessible to the public. For example, regulations could provide that public charge points are available 24 hours a day, and supported by a maintenance service.

## Clause 11: Information about public charging points

37 Clause 11 provides a power for the Secretary of State to make regulations which address the lack of consistency in the content and format of publicly available information on public charging points. It is currently open to each charge point operator to decide what information it makes available in relation to its charge points. The Secretary of State will be able to make regulations to place an obligation on charge point operators to make certain types of information (including real-time data comprising a live feed of current availability) publicly available in an open and transparent format thus providing certainty to the consumer.

## Clause 12: Smart charge points

38 This clause provides the Secretary of State with the power to introduce regulations prohibiting the sale or installation of charge points in the United Kingdom, unless they can meet certain requirements, which will be prescribed in regulations. This includes charge points that may be given away for free or on hire (for example, as part of the sale of a vehicle).

39 Subsection (2) provides that the prescribed requirements relate to the “smart” functionality of the charge point and can include (but are not limited to) provision about the ability of the charge point to: send and receive electronic communications to and from a third party; react to the information sent or received from the third party and adjust the charge points charging (or discharging) rate; monitor and record the charge point’s own energy usage; contain sufficient security software to ensure that it is resilient to a cyber-attack; work towards energy efficiency standards; and require any protocols to be open.

## Clause 13: Enforcement

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- 40 This clause confers power on the Secretary of State to make regulations so as to enforce compliance with the requirements in this Part. These regulations may set out a civil penalty regime and the process for determining whether there has been a failure to comply with any of the requirements. If it is found by the enforcement authority that there has been a failure to comply, the enforcement authority will be able to issue a financial penalty that is payable into the consolidated fund.

#### Clause 14: Exceptions

- 41 This clause allows the regulations to create exceptions from the requirements under this Part. The exceptions can apply to persons or devices. This ensures that the requirements are not unjust or too onerous.

#### Clause 15: Regulations

- 42 This clause sets out what regulations made under this Part may do and contain, and the Parliamentary procedure to which the power to make any such regulations is subject.

### Part 3: General

#### Clause 16: Minor and consequential amendments

- 43 This clause confers on the Secretary of State a general power to make consequential provision in relation to any provision of the Bill. The power includes power to amend primary legislation passed before the end of the Session in which the Bill is passed. This power is subject to the affirmative resolution procedure in cases in which the power is exercised in relation to primary legislation (subsection (5)) and the negative resolution procedure in all other cases (subsection(6)).

## Commencement

44 Clause 17 provides for commencement of the provisions in the Bill. With the exception of clauses 16(2) to (7) and 17 to 19, the provisions of this Bill come into force on the days appointed by the Secretary of State by regulations. Clauses 17 to 19 will come into force on the day on which the Bill is passed.

## Financial implications of the Bill

45 Full details of the financial implications of the Bill are set out in the summary Cover Impact Assessment. The cumulative net present value of the policies contained in the Bill is not quantifiable. Further details of the costs and benefits of individual provisions are set out in more detail in the published impact assessments. The summary Impact Assessment for the Bill and individual Impact Assessments can be found at <https://www.gov.uk/government/publications>.

## Parliamentary approval for financial costs or for charges imposed

46 There are no provisions in the Bill that have tax implications.

## Compatibility with the European Convention on Human Rights

47 The Government considers that the Automated and Electric Vehicles Bill is compatible with the European Convention on Human Rights ("ECHR"). Accordingly, the Right Honourable Chris Grayling MP, Secretary of State for Transport, has made a statement under section 19(1)(a) of the Human Rights Act 1998 to this effect. Further explanation of key human rights issues is provided below. References to articles are to articles of the ECHR.

## Part 2: Electric vehicles: Charging

48 The provisions in Part 2 raise a number of issues which engage Article 1 of Protocol 1 ("A1P1"), by imposing requirements on persons which could interfere with their commercial decisions, their infrastructure and products and their business goodwill. The Government, however, considers in each case that any potential interference is justified on public interest grounds, as expressly permitted by A1P1.

### Public charging points: access and connection

49 Clause 9 confers power on the Secretary of State to make regulations which require operators of publically accessible charge points and hydrogen refuelling stations and networks to ensure consumers can use them without the need to utilise many different methods of access, such as smart phone, SMS text, subscription and card payment ("access"). This clause also introduces the

power to specify minimum standards of design and functionality to achieve a uniform standard means of access. Moreover, there is a power to specify minimum standards of design and functionality to secure physical interoperability between electric and hydrogen vehicles and charge points (“connection”). The access provisions could interfere with current network access practice and affect business goodwill as currently operators can choose how to permit access to the services of its own charge points. The connection provisions would affect the sale and installation of certain types of infrastructure that did not meet those standards and commercial decisions on choice of infrastructure.

- 50 It is necessary to ensure that all publicly accessible charge points are accessed by the widest section of the population. Recent EU legislation<sup>1</sup> has mandated simple ad hoc access to public charge points and introduced some interoperability for connection by mandating as a minimum specific connectors for charge points. This provision will build on that simple ad hoc access by potentially mandating the most suitable type of access, which benefits both consumer and operator. There are currently several connectors serving several different vehicle types. This creates a disjointed national charge point network. A fully interoperable national network where all Ultra Low Emissions Vehicles (“ULEV”) can access charge points irrespective of make, would improve network efficiency and boost consumer confidence.
- 51 Accordingly, any interference with A1P1 rights would be a proportionate means of achieving these aims.

### Large fuel retailers etc.: provision of public charging points

- 52 Clause 10 confers power on the Secretary of State to make regulations which require the minimum provision of charge points and hydrogen refuelling stations at motorway service areas and large fuel retailers. This will have some impact on the actual motorway service areas (“MSAs”) and large fuel retailers as well as commercial decisions regarding what services to provide and may affect commercial relations between MSAs and infrastructure operators. This could have financial implications and affect business goodwill.
- 53 “Range anxiety” is a real constraint to the purchase of ULEV. Whilst almost all MSAs have at least one rapid EV charge point, there is a very real need to ensure that the number increases so the growth of ULEV is not constrained. Currently, commercial interests have acted to constrain growth of the long distance infrastructure network and without legislation the position may not improve.
- 54 The provision of ULEV infrastructure at fuel retailers is at an embryonic stage. A highly visible network of infrastructure in fuel retailers would support future ULEV purchasing decisions and help grow sales to meet the Government’s environmental aims. Fuel retailers are an obvious and accessible addition to charging at home and work and would complement the additional capacity to be brought on motorways.
- 55 Therefore, any interference with A1P1 rights would be a proportionate means of achieving these aims.

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<sup>1</sup> Directive 2014/95/EU. Transposed by the Alternative Fuels Infrastructure Regulations 2017.

## Real-time and other information about public charging points

- 56 Clause 11 confers power on the Secretary of State to make regulations which require, in relation to charge points and hydrogen refuelling stations accessible to the public, operators to provide open data in an open source format on the geographical location and live availability of charging and fuelling and refuelling infrastructure and services. This may interfere with the carrying on of business activities by an operator.
- 57 Currently, there is a lack of conformity in the data that is provided informing drivers about the availability and location of charge points. The Government's aim is to ensure the availability of reliable and comprehensive open source data on public charge points and refuelling type, location and access method which could improve the offer to the consumer. On this basis, any interference with A1P1 rights would be a proportionate means of achieving these aims.

## Smart charge points

- 58 Clause 12 confers power on the Secretary of State to make regulations which require infrastructure installed for the purposes of charging an electric vehicles to have 'smart' functionality that enables it to receive, understand and respond to signals sent by energy system participants (e.g. DNOs, Energy Companies, National Grid or other third parties) for the purposes of balancing energy supply and demand. This will require operators to modify their product to ensure "smart" functionality. This may constitute an interference with operators' A1P1 rights.
- 59 Electric vehicles may be plugged in for long periods and therefore hold potential to "smart charge"- not only receiving the necessary amount of electricity required by the user within the time required, but providing balancing services to the electricity system. This could involve reducing or increasing the power of a charge to balance the system's frequency, or timing charging to take advantage of off-peak periods. These functions may benefit a range of parties, including consumers, energy suppliers and network operators. Many of these functions have commercial value and could be transferred to consumers through lower energy bills.
- 60 The infrastructure installed at the present time is likely to last for many years, and if it does not contain the technical capability to communicate and control charging, it will not be possible for any third party to exercise control over the charging pattern, hampering the development of commercial offerings for this service, and risking significant network and generating capacity upgrades for the United Kingdom to meet additional peak demand. Furthermore, by developing an agreed standard with industry, the provision of smart charging infrastructure may itself aid the development of the smart tariff market, providing a base of customers with which to control and provide services to the grid. By ensuring that electric vehicle charging has the technical capability to be responsive to network and system needs, the United Kingdom has the necessary tools to manage electric vehicle load risks, and encourage the market for smart energy tariffs or other consumer propositions.
- 61 Accordingly, any interference with A1P1 rights would be a proportionate means of achieving these aims.

## Related documents

62 The following documents are relevant to the Bill and can be read at the stated locations:

- Cover Impact Assessment
- Individual Policy Impact Assessments:
  - Automated Vehicles:  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/589800/pathway-driverless-cars-impact-assessment.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/589800/pathway-driverless-cars-impact-assessment.pdf)
  - Electric Vehicles:  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/590714/ulev-modern-transport-bill-consultation-impact-assessment.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/590714/ulev-modern-transport-bill-consultation-impact-assessment.pdf)
- Delegated Powers Memorandum

# Annex A - Territorial extent and application in the United Kingdom

1. Apart from 7 clauses, the provisions of the Bill extend and apply to England and Wales, Scotland and Northern Ireland.
2. Clauses 1 to 7 and the Schedule extend and apply only to England and Wales and to Scotland.<sup>2</sup>

Provision	Extends to E&W and applies to England?	Extends to E&W and applies to Wales?	Extends and applies to Scotland?	Extends and applies to Northern Ireland?	Would corresponding provision be within the competence of the National Assembly for Wales?	Would corresponding provision be within the competence of the Scottish Parliament?	Would corresponding provision be within the competence of the Northern Ireland Assembly?	Legislative Consent Motion needed?
<b>Part 1 - Automated Vehicles: Liability of Insurers etc.</b>								
Clauses 1 to-7	Yes	Yes	Yes	No	N/A	N/A	N/A	No
<b>Part 2 – Electric Vehicles: Charging</b>								
Clauses 8 to-15	Yes	Yes	Yes	Yes	N/A	N/A	N/A	Yes (Northern Ireland)
Schedule	Yes	Yes	Yes	No	N/A	N/A	N/A	No

<sup>2</sup> References in this Annex to a provision being within the legislative competence of the Scottish Parliament, the National Assembly for Wales or the Northern Ireland Assembly are to the provision being within the legislative competence of the relevant devolved legislature for the purposes of Standing Order No. 83J of the Standing Orders of the House of Commons relating to Public Business.



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