

Future of transport regulatory review: zero emissions vehicles and modernising vehicle standards

RoSPA's response to Department for Transport's consultation



Response to Department for Transport's consultation: Future of transport regulatory review: zero emissions vehicles and modernising vehicle standards

Introduction

This is the response of The Royal Society for the Prevention of Accidents (RoSPA) to the Department for Transport's consultation, Future of transport regulatory review on zero emissions vehicles and modernising vehicle standards. It has been produced following consultation with RoSPA's National Road Safety Committee. We have no objection to our response being reproduced or attributed.

The consultation seeks views on zero emissions vehicles and modernising vehicle standards, including on areas of transport regulation that are outdated, a barrier to innovation or not designed with new technologies and business models in mind.



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Your details

Your name:

Rebecca Needham.

Your email:

rneedham@rospa.com

Are you responding as an individual or on behalf of an organisation?

On behalf of an organisation.

What is the name of your organisation?

The Royal Society for the Prevention of Accidents (RoSPA).

Your organisation is:

A charity.

How many people does your organisation represent?

101 to 1,000 people.



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Zero emission vehicles

We have committed to phasing out the sales of new petrol and diesel cars and vans by 2030 so that all new cars and vans will be fully zero emission at the tailpipe from 2035.

The rollout of charging infrastructure is critical to achieving this ambition.

We are seeking views on new primary legislation that would give us powers to introduce requirements in 4 areas to ensure that there is:

1. a sufficient charging infrastructure
2. appropriate consumer protections in place to meet the needs of electric vehicle (EV) drivers

We would consult on the detail of any secondary legislation to use these powers.

The 4 areas are:

1. local authorities and charging infrastructure
2. chargepoints in non-residential car parks
3. supporting the delivery of the Rapid Charging Fund
4. improving the experience for electric vehicle consumers

A statutory obligation to plan for and create charging infrastructure

Planning and delivering EV infrastructure that meets the current and future needs of residents, businesses, and visitors is critical to making the government's 2030 and 2035 phase out dates and levelling up across the country. EV infrastructure is particularly important for the [8 million households](#) who cannot install a home chargepoint, as well as businesses and visitors need access to chargepoint infrastructure while travelling.

Currently, local charging infrastructure provision (on-street and rapid hubs) is installed at the discretion of local authorities (LAs). Many LAs have taken positive steps towards planning for this infrastructure provision. However, others are yet to begin identifying what is needed and many risk not meeting the current and future needs of their communities. LAs primarily deliver charging infrastructure where it is expected that private chargepoint operators may not invest due to current low demand and a lack of commercial viability. Delivery is particularly focussed on on-street locations. However, as the EV transition accelerates it is expected that there will be increasing viability for chargepoint operators to deliver at these locations. In this scenario, we expect there would be an important role for LAs to plan for the best locations for chargepoint operators to install, to support their residents.

Due to varying population densities, the mixture of urban and rural areas, and the nature of local economies, there is unlikely to be a single chargepoint provision solution that meets the needs of every LA area. Further, local communities will rightly expect to be closely involved in the planning and delivery of EV infrastructure in their areas. As the pace of the transition to EVs increases, charging infrastructure provision needs to be available, affordable, and secure, right across the country. Doing so will reduce the country's impact on climate change, improve air quality and create economic opportunities.



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What requirements are we consulting on for England and Wales?

We are seeking views on introducing a statutory duty to plan for and provide EV infrastructure. Ahead of any secondary legislation to introduce the statutory requirement, we will consult on the duty, including any relevant definitions, metrics, and other measures applicable.

One option is to place this duty on the LAs in England and Wales. This would help ensure that measures align with wider local transport planning and that local resident and stakeholder views are embedded in the process. Other options include placing the duty on chargepoint operators themselves, or energy companies.

Do you agree or disagree that there should be a statutory duty to plan for sufficient provision of electric vehicle chargepoints to meet the needs of:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Residents in a given geographical area?	X					
Businesses in a given geographical area?	X					
Visitors in a given geographical area?	X					

Do you agree or disagree that there should be a statutory duty to provide sufficient electric vehicle chargepoints to meet the needs of:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Residents in a given geographical area?	X					
Businesses in a given geographical area?	X					
Visitors in a	X					



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given geographical area?						
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Who, in your view, should be legally responsible for planning sufficient provision of electric vehicle chargepoints to meet the needs of residents in a given geographical area?

RoSPA response

RoSPA believes that local authorities will be best suited. This would help ensure that measures align with wider local transport planning and that local resident and stakeholder views are embedded in the process.

However, as the number of EVs increases, there is a growing risk that the supply and/or cabling from power stations and wind farms might not be sufficient to cope with chargepoint demand at peak points in the day. Local authorities will need to factor this into their local plans including when they are considering plans from housebuilders wanting to build new homes.

Although RoSPA agrees that sufficient provision of vehicle charging should be available, it is important that we encourage safe active travel options, such as walking, running (on well-lit pavements) and cycling (on dedicated cycle lanes), with all of the health and environmental benefits offered, where possible.

Who, in your view, should be legally responsible for planning sufficient provision of electric vehicle chargepoints to meet the needs of businesses in a given geographical area?

RoSPA response

As above, RoSPA believes that local authorities will be best suited.

Who, in your view, should be legally responsible for planning sufficient provision of electric vehicle chargepoints to meet the needs of visitors in a given geographical area?

RoSPA response

As above, RoSPA believes that local authorities will be best suited.

Who, in your view, should be legally responsible for providing sufficient electric vehicle chargepoints to meet the needs of residents in a given geographical area?



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RoSPA response

RoSPA believes that chargepoint operators will be best suited to this role. Although local authorities have been delivering charging infrastructure in areas where there is lower demand, as the paper states, as the transition to electric vehicles accelerates, it is expected that there will be increasing viability for chargepoint operators to deliver at these locations.

Who, in your view, should be legally responsible for providing sufficient electric vehicle chargepoints to meet the needs of businesses in a given geographical area?

RoSPA response

As above, RoSPA believes that chargepoint operators will be best suited to this role.

Who, in your view, should be legally responsible for providing sufficient electric vehicle chargepoints to meet the needs of visitors in a given geographical area?

RoSPA response

As above, RoSPA believes that chargepoint operators will be best suited to this role.

How might placing this statutory requirement on the organisations you've selected affect:

- **Provision of chargepoints**
- **Chargepoint investment?**

RoSPA response

RoSPA would hope that placing a statutory requirement on organisations would encourage better provision of chargepoints and an increase in chargepoint investment.

What views do you have on how the statutory duty to:

- **Plan for sufficient chargepoints should be enforced?**
- **Provide sufficient chargepoints should be enforced?**



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RoSPA response

RoSPA has no comment on how this can be enforced, it may be that a new body could be created to enforce this, or an existing body such as LA building control bodies may have the ability to enforce this.

In your view do other obligations placed on the organisations you've selected complement or conflict with the other duties?

RoSPA response

RoSPA believes assigning the role of planning for sufficient chargepoints to local authorities would complement their other roles, as this aligns with wider local transport planning and ensures that local resident and stakeholder views are embedded in the process.

Providing sufficient chargepoints would complement chargepoint operators' other activities as it is expected that there will be increasing viability for chargepoint operators to deliver at locations.

RoSPA also believes that chargepoint operators should be encouraged to standardise their design and processes, in order to allow interoperability which in turn would make it easier for drivers of electric vehicles to use any chargepoint and pay using their credit card. Competition between chargepoint operators should focus on pricing and availability rather than on the charging and payment process.

RoSPA does not foresee any conflicts.



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What, in your view, are the costs expected as a result of getting powers to:

- **mandate more competition between chargepoint operators at service areas?**
- **mandate more competition between chargepoint operators at large fuel retailers?**
- **remove existing exclusivity clauses between chargepoint operators and service area operators?**
- **remove existing exclusivity clauses between chargepoint operators?**
- **remove existing exclusivity clauses between large fuel retailers?**
- **require a progressive increase the number of chargepoints provided at service areas?**
- **require a progressive increase the number of chargepoints provided at large fuel retailers?**
- **require chargepoint operators to offer open access charging at service areas?**
- **require chargepoint operators to offer open access charging at large fuel retailers?**

RoSPA response

RoSPA has no further comment.

What do you think are the benefits expected as a result of getting powers to:



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- **mandate more competition between chargepoint operators at service areas?**
- **mandate more competition between chargepoint operators at large fuel retailers?**
- **remove existing exclusivity clauses between chargepoint operators and service area operators?**
- **remove existing exclusivity clauses between chargepoint operators?**
- **remove existing exclusivity clauses between large fuel retailers?**
- **require a progressive increase the number of chargepoints provided at service areas?**
- **require a progressive increase the number of chargepoints provided at large fuel retailers?**
- **require chargepoint operators to offer open access charging at service areas?**
- **require chargepoint operators to offer open access charging at large fuel retailers?**

RoSPA response

RoSPA would expect that requiring an increase in the number of chargepoints at service areas and large fuel retailers would encourage the uptake of zero emission vehicles by the public and commercial operators. By requiring a minimum number of chargepoints in car parks, this will help create certainty for drivers that they will be able to charge at or on route to their destination.

Having two or more providers of chargepoints at these services may also be beneficial to consumers, and it is important to encourage competition. The first developer will not necessarily be the best. If the first one or two operators flood the market, having less providers could prevent another competitor from entering the market. This is true even if the new providers are able to offer a better, safer or more innovative service.

What in your view are the costs, including operator costs, of implementing open access charging at service areas and large fuel retailers?

RoSPA response

RoSPA is not in a position to comment.

What, in your view, are the likely costs that will be incurred by mandating 2 or more open access chargepoint operators at large fuel retailers and service areas?

RoSPA response

RoSPA is not in a position to comment.



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What, in your view, are the likely consumer price impacts that will be incurred by mandating 2 or more open access chargepoint operators at large fuel retailers and service areas?

RoSPA response

RoSPA is not in a position to comment.

Improving the experience for electric vehicle consumers

We propose to improve EV consumers' experience and ensure there are appropriate consumer protections for users of public charging infrastructure. It is essential that as the charging network expands and evolves, consumer needs are kept central.

We know from the [consumer experience at public chargepoints consultation](#) that there are emerging issues which can negatively affect consumers. We are already introducing regulations to improve reliability and ease of payment on the public charging network. However, current legislation does not allow us to cover the full spectrum of EV consumer needs and we are proposing new primary powers to ensure that:

- inclusively designed public chargepoints are available for all
- consumers feel safe when charging on-route
- consumers have rights to redress if something goes wrong

Our starting assumption is that these powers are needed for UK public chargepoints, but we also see a case for strengthening provisions for private charging and welcome views on this.

A chargepoint is a "public chargepoint" if it is provided for use by members of the general public, as per the Alternative Fuel Infrastructure Regulations 2017.

Ahead of introducing secondary legislation, we would consult on any proposed approaches, including provisions relating to:



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- standardised definitions and specifications
- any exemptions

We hope these provisions will improve the individual user's experience and increase wider public engagement with EV charging.

What requirements are we proposing?

We are seeking primary powers to:

- ensure adequate consumer protections when encountering issues using public chargepoints
- set accessibility (inclusive design) and safety requirements at public chargepoints
- mandate aspects of chargepoint design such as familiarity, look and feel, and which will include accessibility and safety features

Ensure adequate consumer protections when using public chargepoints

We would take powers to require financial redress for consumers and penalties if bodies breach requirements. When developing supporting secondary legislation we will consult on arrangements for complaints and redress management. These arrangements would include a mechanism for an enforcement body to impose penalties and sanctions on industry participants for poor consumer service. The energy market is a useful comparison of where consumers can escalate complaints to an independent body able to require financial redress. In the energy market a regulated body found in breach can be penalised.

Setting accessibility and safety standards at public chargepoints

We would take primary powers to require operators and installers to mandate accessibility (inclusive design) and safety standards for UK public chargepoints, including around the parked vehicles and chargepoints. This includes the requirement that:



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- adequate, accessible, standardised signage and information is provided at all public chargepoints
- chargepoints are situated in safe locations and/or that mitigations are provided, such as adequate lighting and weatherproofing

Mandating aspects of chargepoint design

To ensure chargepoints are easy to use, recognisable and provide a consistent consumer experience, we propose taking a primary power to mandate certain aspects of chargepoint design.

Consumer protections

Consumers should be able to contact a complaints service easily if something goes wrong while using public charging infrastructure. The current legislative framework does not allow us to ensure that EV consumers have adequate rights to redress when experiencing issues charging their vehicle. We are therefore seeking views on how we might strengthen protections for consumers of public charging infrastructure.

Do you agree or disagree that we should implement a consumer protection service, including the option of financial redress to consumers?

RoSPA response

RoSPA strongly agrees that a consumer protection service should be implemented, with financial redress for consumers. Recharging an electric vehicle takes longer than refilling a petrol or diesel tank. It is therefore important for drivers and passengers of electric vehicles to feel safe and enjoy some shelter while their vehicle is recharging. Adequate lighting, emergency alarms, shelter from wind/rain and toilets should all be provided. Chargepoint user instructions and payment processes should be easy to understand. All instructions and chargepoint equipment should be accessible for all, including wheelchair users. Ideally, there should be somewhere warm, and comfortable where consumers have access to refreshments 24/7. Consumers should also have a right to financial redress when things go wrong (such as incorrect financial transactions or damage to the electric vehicle due to incorrect electrical charging and or damaged equipment. This may also encourage bodies involved in the provision of chargepoint delivery to ensure that the best service is delivered to consumers.

Should, in your view, there be a mechanism for an enforcement body to impose penalties and sanctions on chargepoint operators for a poor consumer service?



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RoSPA response

RoSPA agrees that penalties and sanctions should be imposed on chargepoint operators that breach requirements and offer poor consumer service. However, we are not in a position to comment on what these sanctions and penalties might be.

As the paper states, the energy market is a useful comparison of where consumers can escalate complaints to an independent body able to require financial redress. In the energy market a regulated body found in breach can be penalised.

What, in your view, are the cost implications of establishing a new consumer protections system, including complaints and redressing services (whether government-led or an independent entity)?

RoSPA response

RoSPA is not in a position to comment.

What, in your view, do you think will be the financial cost to the consumer of these consumer protection powers?

RoSPA response

RoSPA is not in a position to comment.

Accessible, inclusively designed chargepoints

We want all EV consumers to be able to easily locate and use public charging infrastructure. We are therefore seeking views on how to ensure that inclusively designed chargepoints are available so that all consumers, including those with visible and non-visible disabilities, can easily charge their vehicle. This could take into account aspects such as height of chargepoint, kerb height, cable weight and space between bollards.

Do you agree or disagree that we should mandate accessibility standards for public chargepoints that includes the area around the parked car and the chargepoint?

RoSPA response

RoSPA agrees that the Department should mandate accessibility and safety standards for public chargepoints that includes the area around the parked car and chargepoint. Considerations, such as those described above must be implemented to ensure that those with disabilities are able to easily charge their vehicle.



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What, in your view, are the benefits to mandating accessibility standards?

RoSPA response

RoSPA believes that the benefits of mandating these standards would be that all consumers would be able to charge their vehicle easily.

In your view, what are the costs of mandating accessibility standards?

RoSPA response

RoSPA recognises that there may be some financial costs involved in adapting existing chargepoints that do not meet any future mandatory accessible designs. However, the benefits of all users being able to charge their vehicle easily far outweigh these costs. Feeling unable to access public charging infrastructure would be likely to deter uptake of zero emissions vehicles amongst those with disabilities.

To what extent do you agree that we should mandate accessibility standards for private residential chargepoints?

RoSPA response

RoSPA agrees that it will also be important to mandate accessibility standards for private residential chargepoints. Although some of the considerations are likely to be different to public chargepoints, we would expect considerations of weight of the cable and the height the point is installed at would apply to private residential chargepoints.

The department must consult with consumers with visible and invisible disabilities and organisations supporting these individuals to understand what would be required.

Personal safety at chargepoints

We want all consumers to feel safe when using public charging infrastructure. We are therefore seeking views on how we might ensure that consumers do not feel their personal safety is at risk while charging their vehicle. This would include considerations as to where chargepoints should be situated and the provision of mitigations such as adequate lighting and weatherproofing.



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Do you agree or disagree that we should mandate industry participants to provide a safe charging experience at public chargepoints?

RoSPA response

RoSPA agrees that the department should mandate industry participants to provide a safe charging experience at public chargepoints. Measures such as adequate lighting and weatherproofing and careful consideration of where chargepoints are situated could help to make consumers feel safer and more comfortable when charging their vehicle. These considerations are important, as charging a vehicle could be particularly unpleasant and potentially dangerous in dark, cold, windy and isolated places, because it exposes drivers of electric vehicles and could make them feel unsafe or at risk of robbery, for example.

Chargepoints should be well lit, with clear instructions. There ought to be somewhere weatherproof for vehicle occupants to shelter while recharging and some means of raising the alarm in the event of an attack or an accidental fire/explosion.

What, in your view, are the benefits to mandating industry participants to provide a safe charging experience?

RoSPA response

The benefit of mandating a safe charging experience for consumers is that consumers are more likely to feel safe when charging their vehicle.

In your view, what are the costs to implementing any mandatory requirements on industry participants to provide a safe public charging experience?

RoSPA response

As would be the case with mandating accessibility standards, there may be some financial costs involved in introducing any measures agreed to pre-existing chargepoints. However, providing a safe experience far outweighs any financial cost.

What, if any, measures do you think we should introduce to make people feel safe while charging their vehicle?



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RoSPA response

RoSPA believes that the key considerations would be to think carefully about where chargepoints are situated and to ensure that there is adequate lighting for when individuals need to charge their vehicle in the dark.

To what extent do you agree that we should take the powers to mandate requirements on industry participants to provide a safe charging experience for private residential chargepoints?

RoSPA response

RoSPA would agree that measures such as adequate lighting would also be necessary for private residential chargepoints.

Recognisable chargepoint design

Consumers should be able to easily recognise public EV chargepoints and have a consistent experience when using the public charging infrastructure. To ensure chargepoints are easy to use, recognisable and provide a consistent consumer experience, we would take a primary power to mandate aspects of chargepoint design.

Do you agree or disagree that we should have the power to mandate the entirety of, or defined aspects of, the recognisable design of public chargepoints?

RoSPA response

RoSPA agrees that there should be recognisable design of public chargepoints. Having to negotiate chargepoints with different designs and instructions could be confusing for users and even make some drivers feel apprehensive about having to charge their vehicle on route.

There should be straightforward signage showing the power and expected time to recharge. Lower power ratings ought to be limited to residential areas, whilst only 'superchargers' should be provided at service areas on motorways and trunk roads. Credit card payment should be universally enabled across the whole UK network, with discounted pricing available to people who sign up for any form of membership and are able to pre-plan their journey. A universal experience would be beneficial in terms of convenience to the motorist, as it could be confusing to have to download a variety of smartphone apps and have to set up mobile phone payment dependent on location.

This could be compared to fuel stations, where there are recognisable features (signage with the cost of each type of fuel and coloured pumps and descriptions for types of fuel) that motorists expect to see at each fuel station they visit.



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Which, if any, aspects of the design should we be able to set (for example size, colour, form and shape)?

RoSPA response

RoSPA would expect there to be some aspects of design that are the same at each chargepoint, for example, signage and instructions in an accessible format for the motorist. Size and shape could also be standardised. RoSPA has no strong feelings on whether the colour of chargepoints should be standardised.

What, in your view, are the benefits to mandating a recognisable design?

RoSPA response

The benefit of this approach would be that motorists feel comfortable and know what to expect at each charging point they visit.

In your view, what are the costs to implementing any recognisable design?

RoSPA response

RoSPA recognises that there will be some financial costs for existing chargepoints to conform to standardised design, however, consistently designed, safe, accessible chargepoints outweigh financial cost.

Do you agree that the mandated recognisable design should apply to all public chargepoints in all locations or only specific locations?

RoSPA response

RoSPA believes that the consumer's experience should be consistent, and these standards should therefore apply to all public chargepoints.

Further comments

The main advantages of electric vehicles are that they emit zero emissions, are less likely to harm the environment and can be cheaper than petrol or diesel cars to run and maintain. However, despite their environmental benefits, electric vehicles bring a new set of road safety challenges. These include silent running at low speeds, which can be dangerous for nearby vulnerable road users, particularly where no noise-emitting device is installed. These vehicles can also accelerate very quickly and are very quiet when travelling at high



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speeds, which may reduce the sensation of speed for the driver, inadvertently leading to excessive speed. As drivers begin to make the switch to electric vehicles, they should be encouraged to go on specialist training courses and gain qualifications such as RoSPA's new Level 2 defensive driving for electric vehicles to improve their awareness and help them adapt their behaviour to remain safe in these new types of vehicles. As electric vehicles begin to be introduced in the workplace, we will need to encourage employers to invest in banksman training. It becomes even more important for pedestrians to be aware of moving vehicles, for drivers to be aware that pedestrians might not hear them approaching and for banksmen to support safe manoeuvring.

Although we recognise the importance of a regulatory framework allowing for sufficient, accessible and safe chargepoint infrastructure, to achieve our ambitious carbon reduction targets, we will also need to encourage commuters to leave their cars at home and opt for different modes of transport. A reduction in the number of cars being used on our roads will reduce urban pollution and congestion. Instead, commuters will need to consider using low or zero emissions public transport, active travel modes, such as walking and cycling, or micromobility devices, such as electric scooters. RoSPA believes that electric bikes and scooters will have a big role to play in modal shift, as they will allow riders to reach their destination relatively quickly. RoSPA encourages those opting for micromobility modes to seek training, such as that offered by some e-scooter providers.



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Modernising vehicle standards

We intend to develop a national framework allowing us to adapt the regulation of vehicles. This is essential for the safe deployment of automated and other innovative vehicles. We will also implement improved environmental standards and enforcement to better meet current and future challenges.

There are 4 areas where we are proposing to make changes. We are seeking views on:

- providing a modern framework for modern vehicles – regulating safety, security and environmental performance
- establishing a flexible, proportionate, and responsive approach to regulating safety, security and environmental performance of vehicles
- tackling tampering
- improving compliance, safety and security

Do you agree or disagree with our overall intention relating to modernising vehicle standards?

RoSPA response

RoSPA agrees with the overall intention relating to modernising vehicle standards, as this will be essential for the safe deployment of automated and other innovative vehicles. RoSPA also welcomes the implementation of improved environmental standards and enforcement to better meet current and future challenges.

However, RoSPA is concerned that the paper does not refer to improved safety standards. Considering current challenges, additionally, RoSPA calls on the government to adopt the measures outlined in the EU General Road Safety Regulation, to ensure that the UK remains a leader in vehicle safety.



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In 2018, TRL published the "Cost-effectiveness analysis of Policy Options for the mandatory implementation of different sets of vehicle safety measures – Review of the General Safety and Pedestrian Safety Regulations"¹. They predicted the casualty and cost benefits for the simultaneous introduction of the 17 different measures. The introduction of the new measures was compared with a predicted future where current trends of voluntary fitment continue. The cost-effectiveness analysis indicated a positive benefit cost ratio and predictions of around 25,000 fatalities prevented over a 16-year period on EU roads. As of 2022, new safety technologies will become mandatory for new EU approved types of vehicles to protect passengers, pedestrians and cyclists.

The new national type-approval scheme must commit to the continuing adoption of best practice vehicle safety standards being implemented at European level from July 2022. These measures align well with the connected autonomous vehicles and net zero emissions agendas and adoption of these measures means that Britain can remain on the leading-edge of vehicle safety standards development.

¹ TRL (2018) 'Cost-effectiveness analysis of Policy Options for the mandatory implementation of different sets of vehicle safety measures – Review of the General Safety and Pedestrian Safety Regulations'

https://clepa.eu/wp-content/uploads/2018/05/2018_TRL_cost-effectiveness-analysis_for-GSR_March2018_ET0217486ENN.en-1.pdf

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A modern framework for tomorrow's vehicles – regulating safety, security and environmental performance

We are seeking powers to amend (or repeal and replace) retained relevant sections of EU law. This would allow such legislation to be updated to reflect technological changes and ensure GB law continues to be fit for purpose. This would enable us to make regulations on the approval of the design, construction, marking and labelling of:

- vehicles
- vehicle parts and equipment
- engines for non-road mobile machinery

In this context, the term 'vehicle' includes not only passenger and goods vehicles but trailers, 2 and 3 wheeled vehicles and quadricycles, agricultural and forestry tractors and their equipment.

We need the requirements and powers to be wider than those in the Road Traffic Act 1988 to reflect the rapidly developing technological landscape which was not envisaged when the legislation was enacted

We want to ensure we have powers to introduce provisions to permit the safe introduction of new technologies and new vehicle categories that do not meet existing approval requirements.

We also want to develop consumer information schemes such as tyre labelling.

We propose to create:

- an approval scheme for automated vehicles to set requirements for safety, security and in-use monitoring – this will cover systems, sub-systems and manufacturers' processes across the vehicle lifecycle (design, development, manufacturing and in-use operation)
- new technical regulations for road vehicles, such as approval and in-use obligations for software and cyber-security requirements over vehicle life – this will include the ability to direct vehicle manufacturers and suppliers of replacement parts to act where needed
- powers to ensure the correct maintenance and use requirements, most notably for connected and automated vehicles



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- improved powers for monitoring and enforcement of in-use compliance and market surveillance activities – this will include requirements for manufacturers to provide information (such as technical specifications, performance data and access to embedded software)
- powers for the Secretary of State for Transport to amend, by statutory instrument, retained EU legislation on the type-approval of vehicles and non-road mobile machinery – for example, the EU type-approval framework regulations and regulations covering engine pollutants and emissions

Overall, do you agree or disagree with the package of proposals stated?

RoSPA response

RoSPA agrees with the above measures, as they will be essential for the safe deployment of automated and other innovative vehicles.

However, we additionally call on the Government to adopt the measures outlined in the EU General Safety Regulation. RoSPA believes that by adopting these measures, alongside consumer information and industry innovation, that Britain can improve the safety of all road users.

Adopting these measures would considerably improve the safety equipment currently fitted to light commercial vehicles. Motorists driving these vehicles are involved in similar collisions to passenger cars, but to date have been much more lightly regulated, lacking key passive and active safety equipment. Recent tests by Euro NCAP of the top 30 vans showed that few have any of the standard safety equipment fitted to passenger cars from the same manufacturer. This must be considered against the backdrop of van sales and mileage growing. Over the period 2017-2019, light commercial vehicles were involved in almost 9% of Great Britain's road fatalities². The measures outlined in the revised EU General Safety Regulation represent a substantial improvement in van safety and should be fully adopted within the national approval regime.

Heavy Goods Vehicles represent 1.3% of licensed vehicles in the UK but are responsible for 5.8% of all traffic and they are involved in collisions responsible for more than 14% of all fatalities from collisions involving no more than two vehicles. Vision zero cannot be achieved without tackling the number of HGV collisions resulting in serious and fatal collisions. The measures mandated under the General Safety Regulation, including requirements

²DfT (2021) 'Final Van Statistics April 2019 - March 2020'

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/978087/van-statistics-2019-to-2020.pdf

Date accessed: 18/11/2021.



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for direct vision and close proximity warning systems could help to address collisions involving vulnerable road users. The ambition with commercial vehicles is to match the safety of passenger cars.

What aspects or potential applications of the proposed powers do you think:

- **Are particularly important for us to take forward and why?**
- **Could create difficulties and why?**
- **Could be excessively costly for the industry to meet and why?**

RoSPA response

RoSPA believes that all of these measures are important to take forward, as they are all key components for safely deploying autonomous and connected vehicles. A clear and appropriate approval scheme for automated vehicles would allow Great Britain to take a leading role in development of global regulatory requirements at UN level.

Technical requirements and powers to ensure that future vehicles are correctly maintained will also be key. Additional statutory responsibilities and powers should be developed to assure the ongoing safety of automated driving systems. Safety assurance will be required on an ongoing basis, because automated vehicles are likely to develop as their software is updated. These vehicles are also likely to have a relatively long lifespan, and although they may comply with driving rules at the time of development, this is not a guarantee that the same can be said, for example, a decade later.

The relevant regulatory body should also have the power to require to update software where an update is needed to ensure safety and continued compliance with the law. Although potentially out of scope of this consultation, the importance of installing software updates promptly after their release will also need to be communicated with the owner or operator of the vehicle, as these updates are likely to be crucial to safe operation of the vehicle. Although it may be relatively simple to implement a process for the update of vehicle software by an operator, the challenge will be communicating this need with users who privately own an automated vehicle.

Improved powers for monitoring and enforcement of in-use compliance and market surveillance activities will also be important. The collection of data, to allow the regulator and manufacturer to act quickly if things go wrong, will be vital. This should include collecting data on lagging and leading measures. While lagging measures (such as counting casualties) provide the most accurate reflections of safety, they are rare events and, by definition, have resulted in harm. By contrast, leading measures (such as failures to follow road rules or "near-miss" events) can act as warnings. This measure will be particularly important from a safety perspective, and will help improve public confidence in increasing autonomous vehicles.

RoSPA is not in a position to comment on what could be excessively costly or difficult for the industry to meet and why.



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What data or evidence can you provide, or direct us to, that would allow us to assess the potential costs and benefits of the proposals put forward?

RoSPA response

RoSPA does not have the data or evidence available to comment.

Are any of the proposed requirements expected to:

- Give rise to challenges and why?
- Be excessively costly to comply with and why?

RoSPA response

RoSPA is not in a position to comment.



Response to Department for Transport's consultation: Future of transport regulatory review: zero emissions vehicles and modernising vehicle standards

A flexible, proportionate, and responsive approach to regulating safety, security, and environmental performance of vehicles

We anticipate a greater range of new and innovative road vehicle designs and associated technologies.

We propose a flexible, proportionate and responsive approach to allow safe, secure and environmentally friendly vehicles to come to market. These vehicles need to be registered for use on our roads without undue delay.

At the same time, we want to ensure that we can respond quickly to address any new and emerging security threats and safety risks. Flexibility will enable us to be responsive to developments and learn from the deployment of new technologies such as vehicle automation. This may be important for maintaining safety where new and previously unforeseen risks arise.

We propose to:

- revise the existing provisions around prototype vehicles and vehicle orders to better accommodate the registration and use of innovative vehicle designs
- create a power for the Secretary of State for Transport to issue guidance covering matters which may not be suitable for secondary legislation

Proposed revisions regarding vehicle orders include:

- enabling orders to apply to vehicles operated on behalf of specified persons
- applying order-making powers to retained EU approval legislation
- extending order-making powers to allow the registration and use of small volumes/small series innovative vehicles that do not comply with all type approval requirements subject to alternative safety/environmental/security measures being included

Such provisions should allow manufacturers and system suppliers to easily place new vehicles and technologies produced in limited numbers on the market. This will be subject to controls and conditions which maintain safety, security and environmental performance.

We propose giving power to the Secretary of State for Transport to issue guidance, supplementing vehicle approval regulations. This power is considered necessary to enable the regulator to respond appropriately and in a timely manner to:



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- emerging technologies undergoing rapid advancements
- the latest knowledge and best-practice
- the latest methodologies for assessing vehicle safety and security

Example applications of this power could include:

- interpreting existing technical requirements and test procedures to enable application to new technologies
- best-practice for the use of virtual testing (for example, the validation of simulation-based testing)
- ensuring consistent and safe behaviours of automated vehicles under certain scenarios

We anticipate establishing appropriate consultation procedures to ensure the measures are proportionate and balanced.

Overall, do you agree or disagree with the package of proposals stated?

RoSPA response

RoSPA agrees with the described approach and recognises that flexibility will be key to ensure that the government can respond quickly to address any new and emerging security threats and safety risks with these vehicles.

RoSPA also agrees that there may be a need to allow the Secretary of State to have powers to make special orders for highly automated vehicles. This is because design changes in some new vehicles could breach the Construction and Use Regulations. For example, an automated driving system may not comply with the regulation "not leaving the vehicle unattended".

However, RoSPA still believes that in line with the Construction and Use Regulations:

"A motor vehicle... and all parts and accessories of such vehicle... shall at all times be in such condition... that no danger is caused or is likely to be caused to any person in or on the vehicle... or on a road."



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Therefore, this should be negotiated with sufficient care, with safety being the overriding consideration. We believe that a detailed safety case for any trials should be prepared.

What further provisions, beyond those proposed, relating to prototype vehicles or vehicle orders would better-enable the registration and use of innovative vehicles?

RoSPA response

RoSPA is concerned that the preparation of a safety case for vehicles is not mentioned within the paper. As part of any testing or trials by members of the public, including when they are the driver, it is vital that a detailed safety case is provided ahead of the trial to reduce the chances of a serious injury or fatality occurring. Vehicles without type approval must prepare a safety case that can be assessed before being able to be used on our roads.

The UK should continue its existing practice of not permitting tests of prototype or per-production systems and technologies on public roads without a documented approval process.

Are there any areas of type approval where you think it may be appropriate to issue technical guidance in place of, or to supplement, secondary legislation?

RoSPA response

RoSPA is not in a position to comment.

What data or evidence can you provide, or direct us to, that would allow us to assess the potential costs and benefits of the proposals put forward?

RoSPA response

RoSPA is not in a position to comment.

Are any of the proposed requirements expected to:

- **Give rise to challenges and why?**
- **Be excessively costly to comply with and why?**

RoSPA response

RoSPA is not in a position to comment.



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Tackling tampering

We will create new offences for tampering with a system, part or component of a vehicle intended or adapted to be used on a road. This will enable us to address existing gaps in the legislation, ensuring cleaner and safer vehicles. We will also create new offences for tampering with non-road mobile machinery (NRMM), and for advertising 'tampering' services or products.

This will strengthen our ability to enforce compliance in this area.

Specifically, we would look to create:

- a specific offence for supplying, installing and/or advertising, a 'tampering product' for a vehicle or NRMM – this would apply where a principal effect of the product is to bypass, defeat, reduce the effectiveness of or render inoperative a system, part or component (the product may be physical part or component, hardware and/or software)
- a specific offence for removing, reducing the effectiveness of, or rendering inoperative a system, part or component for a vehicle, NRMM and advertising such services
- a specific offence for using, allowing for use or providing a vehicle or NRMM that has had the operations described in the previous 2 points performed on it
- a new power to require economic operators to provide information, where a service/product they have supplied amounts to or enables 'tampering' with a vehicle or NRMM – this would apply in any of the above senses and include requirements to provide relevant information on the quantities of products sold or modified

Overall, do you agree or disagree with the package of proposals stated?

RoSPA response

RoSPA agrees with the package of proposals stated. Automated vehicles may introduce new vulnerabilities. New forms of crime and mischief may be formed, such as standing in front of automated vehicle to obstruct its movement; spraying paint or mud over its sensors; deliberately obscuring signs or white lines; or hacking into the software to cause it to crash. People may also steal vehicles or take them without consent. RoSPA believes that the Road Traffic Act 1988 includes many of the behaviours thought to be of concern, such as interfering with road signs. Under section 137 of the Highways Act 1980, it is an offence wilfully to obstruct free passage along a highway. Convictions are frequently made for acts of protest, and include blocking traffic flow by standing on a crossing. It seems this obstruction offence would cover deliberately blocking the progress of an automated



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vehicle by standing in front of it. However, it would not necessarily cover stepping out in front of a vehicle, requiring it to stop temporarily. Therefore, changes in the law may be necessary to cover this act.

New legislation is also likely to be needed to cover the acts above, such as advertising or installing a device to tamper with the vehicles sensors or software, or knowingly using a vehicle which has been tampered with. However, RoSPA does seek clarification on who this legislation will be enforced by and how.

We define a system, part or component as:

"software and/or hardware that impacts on:

- **the environment;**
- **road safety; or**
- **security"**

This would include examples such as those which assist or fulfil the driving task, control power, speed or emissions, protects road users or protects the vehicle from tampering.

Do you agree or disagree with this definition?

RoSPA response

RoSPA neither agrees nor disagrees. We believe that this definition may cover almost all components of a vehicle and does not necessarily consider beneficial impacts. Therefore, it may be more suitable to provide a more detailed definition, which defines which components are included.

Provide any information on how widespread tampering is.

RoSPA response

RoSPA is not in a position to comment.



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What, if any, other:

- **Services could be inadvertently affected by the proposals on tampering?**
- **Products could be inadvertently affected by the proposals on tampering?**
- **Exemptions should be consider on tampering?**

RoSPA response

RoSPA is not in a position to comment.

What data or evidence can you provide, or direct us to, that would allow us to assess the potential costs and benefits of the proposals put forward?

RoSPA response

RoSPA is not in a position to comment.

Are any of the proposed requirements expected to:

- **Give rise to challenges and why?**
- **Be excessively costly to comply with and why?**

RoSPA response

RoSPA is not in a position to comment.



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Improving compliance, safety and security

We are seeking powers to enable the Secretary of State for Transport to set out in secondary legislation a new automotive recall regime.

This will mean we can require a manufacturer or supplier to recall and/or remove from sale, vehicles and other automotive products.

This will apply when the vehicle or product is found not to comply with type approval, safety or security standards.

The regime will require manufacturers to identify and report any vehicles that do not meet safety or cyber-security standards. The Secretary of State for Transport would have the power to issue a recall notice.

The manufacturer would be required to achieve a minimum recall rate in respect of any unsafe vehicles or components. They might also be required to compensate vehicle owners.

Failure to comply with such a notice, including a failure to achieve the minimum recall rate, would be enforced through civil penalties.

We propose a power for the Secretary of State for Transport to direct vehicle manufacturers and system suppliers to address urgent safety, security, or environmental issues.

Overall, do you agree or disagree with the package of proposals stated?

RoSPA response

RoSPA strongly agrees with the package of measures proposed, particularly the powers to require a manufacturer or supplier to recall and/or remove from sale any vehicle that is found not to comply with type approval, safety or security standards. This is vital to ensure that vehicles operate safely, and that there are processes in place when things go wrong. The manufacturer may also need to compensate vehicle owners where necessary.

What, if any, barriers or reasons exist which prevent manufacturers from recalling certain vehicles and which we should consider when setting minimum recall rates?

RoSPA response

RoSPA is not in a position to comment.



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What data or evidence can you provide, or direct us to, that would allow us to assess the potential costs and benefits of the proposals put forward?

RoSPA response

RoSPA is not in a position to comment.

Are any of the proposed requirements expected to:

- **Give rise to challenges and why?**
- **Be excessively costly to comply with and why?**

RoSPA response

RoSPA recognises that any recall of vehicles is likely to be costly to the manufacturer and or supplier, however, these recalls are a necessary measure to ensure that vehicles operate safely, which far outweighs any financial cost.

Any other comments?

RoSPA response

RoSPA has no further comments to make on the consultation process, other than to thank Department for Transport for the opportunity to comment. We have no objection to our response being reproduced or attributed.

