

Public Consultation

Remote Control Parking:
Proposals to amend domestic
legislation and the Highway Code
for Northern Ireland

Glossary of Terms

This consultation document uses some terms which might not be readily understood by every reader. In most cases, the terms are explained when they are used, and this glossary below is intended to assist any reader who is new to the broader issues associated with advanced driver assistance systems.

Term	Meaning
ACC	Adaptive Cruise Control
ADAS	Advanced Driver Assistance Systems - in-car systems designed to help the driver in the driving process. When designed with a safe human-machine interface, car safety and road safety in general should increase.
AEBS	Advanced Emergency Braking Systems
Automated Vehicle	Means any vehicle equipped with technology that has the capability of operating or driving the vehicle for all or part of the journey without the active physical control or monitoring of a natural person, whether or not the technology is engaged.
Construction and Use Regulations	NI Regulations that govern the construction, use and maintenance of vehicles.
DVLA	Driver Vehicle and Licensing Agency which is responsible for licensing and registering motor vehicles which are used on the road
In-the-loop driving	Where the driver retains responsibility for the monitoring and execution of the overall driving task, even if they are assisted by ADAS so that they

	might not be in direct physical
	control
MIB	Motor Insurers' Bureau
Motorway Assist system	Motorway Assist, in its different forms, builds on existing systems such as ACC, AEBS and Active Lane Keeping Assist (LKA) to take control of the vehicle's position and speed while driving along a high-speed road, such as a motorway.
Road Traffic Order 1995	A key piece of legislation in Northern Ireland that sets out the rules and requirements for road traffic laws.
UNECE	United Nations Economic Commission for Europe – encourages economic cooperation among Member States. It is the body bringing forward international standards that facilitates the type approval of remote control parking
Type approval	Official confirmation from a government or other body that a manufactured item meets required specifications.
V2V	Vehicle to Vehicle

Executive summary

- 1. Automated vehicle technology (AVT) will profoundly change the way people travel, making road transport safer, smoother, and smarter. The development and advancement of driverless cars has commenced, where fully automated vehicles will transport people and goods to their destination without any need for a driver. The Department for Infrastructure wants to secure the Northern Ireland's position at the forefront of this change for the development, construction, and use of automated vehicle technologies.
- 2. In 2015, the Centre for Connected and Autonomous Vehicles (CCAV), part of the Department for Transport (DfT), undertook a regulatory review which demonstrated that testing AVT in the UK is already possible. CCAV, in conjunction with the then Department of the Environment (DoE), then published a Code of Practice to help testers understand how to comply with UK laws.
- 3. Following this, in July 2016, CCAV launched a consultation on a series of proposals to support advanced driver assistance systems (ADAS) and AVT. Responses to the consultation, entitled "the Pathway to Driverless Cars: Proposals to support advanced driver assistance systems and automated vehicle technologies"¹, showed strong support from stakeholders to the approach to regulating for connected and autonomous vehicles². In particular, they supported the focus on facilitating near to market technologies.
- 4. There will be a transitional period in the arrival of new vehicle technology where there will be a shifting mixture of conventional cars, cars with increasingly sophisticated ADAS such as adaptive cruise control, and ultimately, fully automated vehicles. Therefore, it is important that the Department continues developing policy and making appropriate regulatory changes to facilitate the safe use of this technology in a responsive and evidence-based manner.

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536365/driverless-cars-proposals-for-adas-and_avts.pdf

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/581577/pathway-to-driverless-cars-consultation-response.pdf

- 5. Remote control parking (RCP) is a type of ADAS that allows the driver to carry out a parking manoeuvre from either inside or outside the vehicle, by issuing a command from an external device. The device may either be one supplied with the vehicle, or through a manufacturer-endorsed application installed on a device such as a smartphone.
- 6. The United Nations Economic Commission for Europe (UNECE) will include provisions in Regulation 79 that enable the use of automatically commanded steering functions (ACSF) at speeds above 10kmph (6.2mph), and will facilitate both motorway pilot and RCP systems. With these new international regulations for RCP coming in to force in October 2017, the Department wants people and businesses who buy vehicles fitted with RCP and motorway assist technologies to use them in a safe, legally compliant manner.
- 7. The current wording within Regulation 125A of the Construction and Use Regulations prohibits the use of a hand-held mobile communications device (such as a phone, tablet) while driving. The use of a hand-held device to park the vehicle therefore lends uncertainty as to whether enforcement authorities or the Court could interpret this as being in contravention of this regulation.
- 8. This consultation seeks agreement to making changes to NI legislation, to facilitate the use of remote parking. Draft amendments to the Highway Code for Northern Ireland, specifically rules 149, 150, 160 and 239, have also been included to reflect this regulatory change and provide clarity to drivers within Northern Ireland.
- 9. The draft Northern Ireland legislation and changes to the Highway Code for Northern Ireland are intended to provide certainty that the driver of the vehicle will not be in contravention of the law when performing a type approved remote control parking manoeuvre. This change will remove the barrier to uptake of these innovative, internationally approved new vehicle technologies.

How to respond

The Department for Infrastructure has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the Department's website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats.

The consultation period began on 7 March 2018. Please ensure that your response reaches us before the closing date. If you would like further copies of this consultation document, it can be found at https://www.infrastructure-ni.gov.uk/consultations or you can contact the Department if you would like alternative formats (Braille, audio CD, etc).

The consultation period will close on **Wednesday**, **2 May 2018**. Responses to this consultation should be forwarded to reach the Department on or before that date, and should be sent to by post to:

Vehicle Standards Team
Safe and Sustainable Travel Division
Clarence Court
10-18 Adelaide Street
Town Parks
BELFAST
BT2 8GB

Or by e-mail to:

safeandsustainabletravel@infrastructure-ni.gov.uk

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

Confidentiality & Data Protection

Your response may be made public by Dfl. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'. Any confidentiality disclaimer that may be generated by your organisations IT system or included as a general statement in your fax cover sheet will be taken to apply only to information in your response for which confidentiality has been specifically requested.

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 1998 (DPA)). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

Freedom of Information Act 2000 – confidentiality of consultation responses

As indicated above, the Department will publish a summary of responses following completion of the consultation process. Your response, and all other responses to the consultation, may be disclosed on request. The Department can only refuse to disclose information in exceptional circumstances. Before you submit your response, please read the paragraphs below on the confidentiality of consultations and they will give you guidance on the legal position about any information given by you in response to this consultation.

The Freedom of Information Act 2000 gives the public a right of access to any information held by a public authority, namely, the Department in this case. This right of access to information includes information provided in

response to a consultation. The Department cannot automatically consider as confidential information supplied to it in response to a consultation. However, it does have the responsibility to decide whether any information provided by you in response to this consultation, including information about your identity, should be made public or treated as confidential.

Proposal

Overview of the advanced driver assistance systems (ADAS)

- 1.1 All vehicle technology can be sold and used in this country if the vehicle complies with our road traffic laws, has received type approval, and that the driver uses it in a safe, legal manner.
- 1.2 Remote control parking enables the driver to get out of the vehicle and, using a mobile device (such as a dedicated remote control, a smart phone, or even a smart watch), command it to automatically drive itself into, or out of, a parking space. While the control button on the device is activated, the vehicle will manoeuvre automatically at very low speed while monitoring its surroundings for pedestrians, other road users or any other hazards.
- 1.3 If a person or hazard is detected, or if the remote control button is accidentally or intentionally deactivated, the vehicle will come to an immediate stop. Equally, to ensure that the driver can exert control at all times, the system will not function if the driver is outside a certain range.
- 1.4 Motorway Assist systems builds on existing systems such as Adaptive Cruise control (ACC), Advanced Emergency Braking System (AEBS) and Active Lane Keeping Assist (LKA) to take full control of the vehicle's position and speed while driving along a highspeed road, such as a motorway.
- 1.5 Manufacturers are already producing low-speed variants of this system for use in start-stop traffic situations (sometimes known as Traffic Jam Assist), providing assisted steering to maintain lane position and speed control up to 40mph. The EU proposals currently being consulted on are for ADAS that can operate at speeds of up to 81mph. The driver must continue to monitor the system and confirm this through regular interaction with it.

1.6 The United Nations Economic Commission for Europe (UNECE) Regulation 79 (as amended by the 02 series of amendments)³ contains provisions for construction, fitting and performance requirements of automatically commanded steering function (ACSF) technology, including remote control parking function and its control device. With these regulations, due to come into force in October 2017, vehicles type approved after 1 April 2018 will have to comply with these new standards set out in Regulation 79.02.

Safety

- 1.7 The Department is clear in its message regarding mobile phone use when driving. They can distract drivers, as highlighted in the 2016 Dfl campaign, entitled 'Missing', which challenges a driver's decision to lift a mobile phone while driving. The Department recognises that over 95% of crashes where someone is killed or seriously injured are due to human error.
- 1.8 The Department has developed a second campaign which launched in February 2018. Entitled 'Interview Shame', this follow-on campaign will engage with the target audience to build on the message communicated by the 'Missing' and move the audience from the position of questioning their behaviour to realising their behaviour is shameful.
- 1.9 The Department is also very conscious of the damage that can be caused by those who use a mobile phone whilst driving and has been actively considering the corresponding provisions in both Britain and Ireland. A review of the existing mobile phone offence and associated penalties which apply in Northern Ireland is currently in progress. The review and any subsequent consultation paper is independent to this consultation exercise and will consider the advances in autonomous vehicle technology including the use of a mobile phone in remote control parking. Decisions on proposed policy direction and on any subsequent policy consultation emanating from that review will be taken by an incoming Minister.

³ https://circabc.europa.eu/sd/a/b6f6de76-184e-4967-93dd-9d7f1e1e3984/item%204-2017-01%20Commission%20study%20on%20vehicle%20certification.pdf

1.10 However, when used appropriately and safely to facilitate a controlled manoeuvre such as parking, there is scope for legitimate use of such a device. The policy intent of this consultation and the proposed legislative amendment is to provide clarity on the appropriate use of this technology, rather than to water down existing offences to use a mobile phone whilst driving. These two topics should be viewed as wholly separate.

Benefits of remote control parking and motorway assist

- 1.11The Department is committed to CAV technology, and supports its use in Northern Ireland. Therefore, domestic law needs to be maintained and updated to enable the use of such technologies. There are many benefits for facilitating safe, appropriate use of remote control parking technology.
- 1.12Due to the increased size of automotive vehicles in recent years, coupled with the rising number of vehicles on our roads, it is believed that adequate space to exit, enter and manoeuvre is fast becoming an issue. Remotely parking a vehicle offers a convenient alternative way of being able to park in confined spaces, potentially reducing the time needed to find a suitable spot.
- 1.13From a safety perspective, using a remote control to park may reduce the likelihood of accidental contact of other vehicles, both when carrying out the manoeuvre itself, and when opening the door upon exit in tight spaces. This convenience is further recognised for inexperienced drivers, or those drivers with young families.
- 1.14Benefits could also potentially be realised for people with mobility impairments or drivers of Motability-equipped vehicles. These vehicles are specially adapted for drivers with disabilities. Whilst these vehicles enable people to drive, parking remotely would result in greater flexibility for drivers when accessing suitable parking.
- 1.15 The potential benefits of motorway assistance technology include fuel efficiency (smoother and more precise use of throttle to maintain a given speed than a human driver is capable of), safety (with insurers already recognising that cars equipped with AEBS are less prone to collisions than ones without, we can expect the same kinds of benefits for ADAS), and traffic flow, as well as potential economic and social benefits.

Changes to mobile phone offences

- 1.16 Regulation 125A of the Motor Vehicles (Construction and Use) Regulations 1999 currently states that a person shall not drive a motor vehicle on a road if he or she is using a hand-held mobile phone or device, other than a two-way radio, which performs an interactive communication function by transmitting and receiving data.' Using a 'remote control device', such as a mobile phone, during a parking task lends uncertainty as to whether enforcement authorities or the Court could interpret this as being in contravention of this regulation.
- 1.17To facilitate the introduction of approved remote control parking systems, an amendment has been drafted to the Construction and Use Regulations. This inserts a new paragraph (5A) after paragraph (5) of Regulation 125A of the Construction and Use Regulations. This provides an exemption into this Regulation to permit the use of handheld and mobile communications devices as a means of performing remote control parking manoeuvres.
- 1.18The amended Regulations will impose a limit on the device only operating if a command is activated within 6 metres of the vehicle, established in the UNECE Regulations as the distance from which a manoeuvre can be safely performed. This serves as a clear performance limitation and will be useful in informing the public of the safe use parameters in line with international rules.
- 1.19A further requirement imposed upon the use of the device, is that it will only operate when continuously activated throughout the full manoeuvre (for example, it is required to have a 'dead man's switch'). It will serve to reassure the public that this kind of system will not be abused.
- 1.20It is intended that amending this legislation will remove the barrier to uptake of an innovative, internationally approved new vehicle technology; going no further than is necessary to meet the requirements to allow this to happen. It will provide clarity for manufacturers intending to utilise the remote control parking function for cars that are type approved for sale in Northern Ireland.

Exemption to Regulation 110 of the Construction and Use Regulations

1.21 To ensure that remote control parking can be used in compliance with the law, we are proposing to amend Regulation 125A of the Construction and Use Regulations to insert a new paragraph (5A) after paragraph (5) to create additional exemptions as follows:

Mobile Phones

- (5) A person does not contravene a provision of this regulation if, at the time of the alleged contravention—
 - (a) he is using the telephone or other device to call the police, fire, ambulance or other emergency service on 112 or 999;
 - (b) he is acting in response to a genuine emergency; and
 - (c) it is unsafe or impracticable for him to cease driving in order to make the call (or, in the case of an alleged contravention of paragraph (3)(b), for the provisional licence holder to cease driving while the call was being made).
- (5A) A person does not contravene a provision of this regulation if, at the time of the alleged contravention—
 - (a) the person is using a hand-held mobile telephone or other handheld device only to perform a remote controlled parking function of the vehicle; and
 - (b) the hand-held device only enables the car to move if:
 - (i) there is continuous activation of the device's remote control application by the driver;
 - (ii) the signal between the vehicle and device is maintained; and
 - (iii) the distance' between the vehicle and device is not more than 6 metres.

Amendments to the Rules of the Highway Code

- 1.22The Highway Code for Northern Ireland is an essential guide for all road users, summarising key road traffic law and providing further guidance about desirable and appropriate behaviours for drivers and other road users. It is based on several pieces of legislation (including, amongst others, the Motor Vehicles (Construction and Use) Regulations (Northern Ireland) 1999 (CUR), Road Vehicle Lighting Regulations (Northern Ireland) 2000 (RVLR) and the Road Traffic (Northern Ireland) Order 1995 (RTO).
- 1.23Many of the rules in the Code are legal requirements. Although failure to comply with the other rules of the Code will not, in itself, cause a person to be liable to criminal or civil proceedings. The Highway Code for Northern Ireland may be used in evidence in court proceedings under the Road Traffic Orders to establish liability. This is stated in Article 51(6) of the Road Traffic (Northern Ireland) Order 1995 as follows:
 - "A failure on the part of any person to observe any provision of the Highway Code shall not of itself render that person liable to criminal proceedings of any kind, but any such failure may in any proceedings (whether civil or criminal, and including proceedings for an offence under the Road Traffic Orders) be relied upon by any party to the proceedings as tending to establish or to negative any liability which is in question in those proceedings."
- 1.24It is important, therefore, that as well as reflecting legislative changes, the guidance in the Code reflects any implications of new technologies for drivers, their behaviour and other road users. A range of amendments are covered in relation to the Highway Code for Northern Ireland. Each item is relevant and has implications for the safe deployment of ADAS and automated vehicle technology.
- 1.25The Department wishes to clarify the Rules to make it clearer how drivers can safely and legally use these systems. This clarity will aid both the manufacturers of these systems and their customers.
- 1.26In addition to amending the above Rules, we are also seeking agreement about including in the Highway Code for Northern Ireland a recommendation that vehicle operators confirm with the

manufacturer if the device/app they plan to use is compatible with the international standard.

Mobile phones and in-vehicle technology

1.27The Highway Code for Northern Ireland addresses the use of a mobile phone and in-vehicle technology in Rule 149. It is proposed to include a new sentence with the aim of providing clarity on the blanket rule of not using a mobile phone when driving (except in a genuine emergency). The proposed amendment is highlighted in red text below:

Highway Code for Northern Ireland Rule 149

You **MUST** exercise proper control of your vehicle at all times. You **MUST NOT** use a hand-held mobile phone, or similar device, when driving or when supervising a learner driver, except to call 999 or 112 in a genuine emergency when it is unsafe or impractical to stop. Never use a hand-held microphone when driving. Using hands-free equipment is also likely to distract your attention from the road. It is far safer not to use any telephone while you are driving or riding - find a safe place to stop first or use the voicemail facility and listen to messages later.

You can park your vehicle via remote control, using a legally compliant parking application or device in an appropriate way which does not endanger others.

(Laws RTO 1995 Arts 10, 12 & 56A, & CUR regs 120 & 125A)

- 1.28This amendment makes a clear distinction when it would be appropriate to use a device, which could include a communication device such as a mobile phone.
- 1.29The Highway Code for Northern Ireland currently addresses the use of driver assist technology in the context of driver distraction in Rule 150. The proposed amendment is highlighted in red text below:

Highway Code for Northern Ireland Rule 150

There is a danger of driver distraction being caused by in-vehicle systems such as satellite navigation systems, congestion warning systems, PCs, multimedia, etc. You **MUST** exercise proper control of your vehicle at all times. Do not rely on driver assistance programs such as cruise control or lane departure warnings. They are available to assist but you should not reduce your concentration levels. Do not be distracted by maps or screen-based information (such as navigation or vehicle management systems) while driving or riding. If necessary find a safe place to stop.

If you are using advanced driver assistance systems, like motorway assist, or a remote control parking application or device, then you as the driver are still responsible for the vehicle and **MUST** exercise full control over these system at all times.

(Laws RTO 1995 Arts 10 & 12, & CUR reg 120)

- 1.30The proposal to update this rule, as set out above, is to clarify the appropriate use of driver assist functions, including remote control parking and motorway assist. It is important that drivers use these systems responsibly, and that they do not attempt to use driver assist technology beyond what it is designed for, so that they can contribute to improving road safety.
- 1.31 More advanced automated systems, which allow the driver to be outof-the-loop and divert their attention away from driving and where the vehicle actively monitors the driving for parts of the journey, will become available in due course. When these are approved and available we will aim to expand on this section of the Highway Code for Northern Ireland and provide more comprehensive advice for drivers of automated cars and other road users.

Driving with both hands on the wheel where possible

1.32 Rule 160 of the Highway Code for Northern Ireland, which states 'drive with both hands on the wheel where possible', makes it challenging to clarify the position for those using in-the-loop

motorway assist and remote control or automated parking. We are proposing the following amendment (highlighted in red text):

Highway Code for Northern Ireland Rule 160

Once moving, drive with both hands on the wheel, where possible. This will help you to remain in full control of the vehicle at all times. You may use advanced driver assistance systems, if used in accordance with the manufacturer's or developer's instructions.

1.33A statement has been added to provide clarification to cater for situations where technology may mean that hands may be taken off the wheel when providing driver assistance, for example where the driver is outside the vehicle and can control the vehicle through a hand-held device. While this is an important piece of road safety regulation, it would be impossible to have one's hands on the wheel when outside the vehicle for remote parking.

Parking

1.34The Highway Code at Rule 239 currently sets out driving behaviours expected of someone when parking their vehicle. The proposed change is highlighted in red text:

Highway Code for Northern Ireland Rule 239

Use off-street parking areas, or bays marked out with white lines on the road as parking places, wherever possible. If you have to stop on the road side

- do not park facing against the traffic flow
- stop as close as you can to the side
- do not stop too close to a vehicle displaying a Blue Badge, remember, the occupant may need more room to get in or out
- you MUST switch off the engine, headlights and fog lights
- you MUST apply the handbrake before leaving the vehicle
- you MUST ensure you do not hit anyone when you open your door. Check for cyclists or other traffic
- it is safer for your passengers (especially children) to get out of the vehicle on the side next to the kerb
- lock your vehicle.

If you are using a handheld device to carry out a parking manoeuvre, then you must ensure that it is safe to do so before beginning the manoeuvre, and should try to carry out the manoeuvre in the shortest, safest route possible.

When parking, as the driver you **MUST** remain in control of the vehicle at all times, you must not use the device for other functions or in such a way that would cause danger to other road users. You should act in accordance with the manufacturer's or developer's instructions.

(Laws CUR regs 113, 121 & 123, RVLR reg 30, RTO 1995 Art 58 & R(RW)O)

1.35The extra paragraph above is designed to capture the necessary steps needed to be followed in order to park a remote control-enabled vehicle safely.