1. Introduction

1.1 The Metropolitan Police Service (MPS) welcomes this opportunity to provide evidence to inform the work of the Law Commission consultation into automated vehicles.

1.2 The MPS has a long-standing interest in the field of connected and autonomous vehicles (CAVs). It has been closely involved in several on- and off-road trials of the technology. An MPS officer sits on the advisory boards of most major trials and consults with other testing organisations on a regular basis.

1.3 The MPS understands and supports Parliament’s ambition for the United Kingdom to lead the development of CAV technology. MPS involvement is intended to:

- Assist in ensuring the legality and safety of trials.
- Prepare emergency services to respond to any incident occurring during trials.
- Coordinate the planning and response with other police force areas as appropriate.
- Exploit opportunities to develop emergency services’ understanding of CAV technologies, in order to inform future planning.
- Engage with those considering CAV-related policy and law in order to ensure that the views of emergency services are included.

1.4 We would welcome the opportunity to provide oral evidence to the committee if this is deemed appropriate.

1.5 The format of the MPS submission mirrors that of the consultation document:

2. MPS Response

(i) Chapter 3. Human Factors

Consultation Question 1.
Do you agree that:
(1) All vehicles which “drive themselves” within the meaning of the Automated and Electric Vehicles Act 2018 should have a user-in-charge in a position to operate the controls, unless the vehicle is specifically authorised as able to function safely without one?
(2) The user-in-charge:
(a) must be qualified and fit to drive;
(b) would not be a driver for purposes of civil and criminal law while the automated driving system is engaged; but
(c) would assume the responsibilities of a driver after confirming that they are taking over the controls, subject to the exception in (3) below?
(3) If the user-in-charge takes control to mitigate a risk of accident caused by the automated driving system, the vehicle should still be considered to be driving itself if the user-in-charge fails to prevent the accident?

MPS Response
Broadly speaking, the MPS supports this suggestion. It will be important to remove any doubt as to where the legal responsibility lies at any moment in time.

Consultation Question 2.
We seek views on whether the label “user-in-charge” conveys its intended meaning.

MPS Response
The MPS would expect this term to have a legal definition and would therefore satisfy those in law enforcement and litigation. However, unlike those who use cars, CAV users will not be expected to study the Highway Code or pass a driving test. Its meaning may need to be explained to a wider audience.

Consultation Question 3.
We seek views on whether it should be a criminal offence for a user-in-charge who is subjectively aware of a risk of serious injury to fail to take reasonable steps to avert that risk.

MPS Response
Criminally, the user-in-charge should either be driver or not. This would depend on the mode engaged at the relevant time. Any exceptions must be limited to egregious malice or neglect. The MPS is keen to see more efficient use of public road space, which may involve the provision CAV mobility as a service (MaaS). If the vehicle is driving autonomously, then a reasonable person is likely to expect to hold no responsibility as a passenger for its safe progress. Any indication to the contrary may hamper acceptance of this form of transport.

Consultation Question 4.
We seek views on how automated driving systems can operate safely and effectively in the absence of a user-in-charge.
MPS Response
Level 5 autonomy should not only require the vehicle to stop in a minimal risk condition, that risk should present no additional risk for other road users. As described, the risk and responsibility would remain with the automated driving system entity (ADSE).

Consultation Question 5.
Do you agree that powers should be made available to approve automated vehicles as able to operate without a user-in-charge?

MPS Response
The MPS believes that a legal standard should be set for vehicles to operate autonomously, perhaps as part of the Construction and Use regulations.

Consultation Question 6.
Under what circumstances should a driver be permitted to undertake secondary activities when an automated driving system is engaged?

MPS Response
The MPS believes that it would be unrealistic to expect users-in-charge to monitor their automated vehicle with any degree of diligence. The MPS suggests that such users should be permitted to undertake any legal activity which does not affect the automated operation of the vehicle.

Consultation Question 7.
Conditionally automated driving systems require a human driver to act as a fallback when the automated driving system is engaged. If such systems are authorised at an international level:
(1) should the fallback be permitted to undertake other activities?
(2) if so, what should those activities be?

MPS Response
Such fallback systems are designed for trial environments. The MPS believes that they are not suitable for public adoption because research suggests that a user-in-charge would not react to a situation in sufficient time to orientate themselves and assess options.

Consultation Question 8.
Do you agree that:
(1) a new safety assurance scheme should be established to authorise automated driving systems which are installed:
(a) as modifications to registered vehicles; or
(b) in vehicles manufactured in limited numbers (a "small series");
(2) unauthorised automated driving systems should be prohibited;
(3) the safety assurance agency should also have powers to make special vehicle orders for highly automated vehicles, so as to authorise design changes which would otherwise breach construction and use regulations?

MPS Response
The MPS supports this suggestion and would welcome the opportunity to contribute to further work in this area.

Consultation Question 9.
Do you agree that every automated driving system (ADS) should be backed by an entity (ADSE) which takes responsibility for the safety of the system?
MPS Response
The MPS supports this suggestion and would welcome the opportunity to contribute to further work in this area.

Consultation Question 10.
We seek views on how far should a new safety assurance system be based on accrediting the developers’ own systems, and how far should it involve third party testing.

MPS Response
The MPS has no firm view.

Consultation Question 11.
We seek view on how the safety assurance scheme could best work with local agencies to ensure that it is sensitive to local conditions.

MPS Response
The MPS has no firm view but remains keen to engage.

(iii) Chapter 5. Regulating safety on the roads

Consultation Question 12.
If there is to be a new safety assurance scheme to authorise automated driving systems before they are allowed onto the roads, should the agency also have responsibilities for safety of these systems following deployment?
If so, should the organisation have responsibilities for:
(1) regulating consumer and marketing materials?
(2) market surveillance?
(3) roadworthiness tests?
We seek views on whether the agency’s responsibilities in these three areas should extend to advanced driver assistance systems.

MPS Response
The MPS believes that proper checks will be required to ensure the roadworthiness of CAVs.

Consultation Question 13.
Is there a need to provide drivers with additional training on advanced driver assistance systems?
If so, can this be met on a voluntary basis, through incentives offered by insurers?

MPS Response
Advanced driving assistance systems (ADAS) should be included in the driving test and expanded upon in the Highway Code. Potentially fatal public safety matters should remain a matter for public authorities and not commercial initiatives.

Consultation Question 14.
We seek views on how accidents involving driving automation should be investigated. We seek views on whether an Accident Investigation Branch should investigate high profile accidents involving automated vehicles. Alternatively, should specialist expertise be provided to police forces.

MPS Response
Only police forces currently have the resources to attend the scene of all road traffic collisions involving injury. The creation of another agency with national 24/7 coverage would be hugely expensive and involve unnecessary duplication. Collisions are often golden opportunities to identify non-motorising criminality, which would be missed if attended by a non-police agency. However, the MPS is cautiously supportive of a Collision Investigation Board (both the police and road safety groups prefer the term “collision” over “accident”), which focuses on the current gap in technical CAV
expertise. As a parallel, consider the Forensic Science Service, which provides expert independent services to the police.

Consultation Question 15.
(1) Do you agree that the new safety agency should monitor the accident rate of highly automated vehicles which drive themselves, compared with human drivers?
(2) We seek views on whether there is also a need to monitor the accident rates of advanced driver assistance systems.

MPS Response
The MPS supports this suggestion. This may provide an early warning of a systemic problem with a certain component, system or vehicle, or in a certain set of circumstances.

Consultation Question 16.
(1) What are the challenges of comparing the accident rates of automated driving systems with that of human drivers?
(2) Are existing sources of data sufficient to allow meaningful comparisons? Alternatively, are new obligations to report accidents needed?

MPS Response
The MPS makes great use of collision data. Greater use of in-car technology has assisted police to investigate collisions more effectively. It is hoped that CAVs will improve the data available in post-collision investigations. As an enforcement tool, data allows police to deploy resources to the areas of highest risk. In partnership with local authorities, casualty data assists police to improve roads and junctions through engineering interventions. The MPS expects future legislation to continue to place a duty on the driver, user-in-charge or ADSE to report collisions.

(iv) Chapter 6. Civil Liability

Consultation Question 17.
We seek views on whether there is a need for further guidance or clarification on Part 1 of Automated and Electric Vehicles Act 2018 in the following areas:
(1) Are sections 3(1) and 6(3) on contributory negligence sufficiently clear?
(2) Do you agree that the issue of causation can be left to the courts, or is there a need for guidance on the meaning of causation in section 2?
(3) Do any potential problems arise from the need to retain data to deal with insurance claims? If so:
(a) to make a claim against an automated vehicle’s insurer, should the injured person be required to notify the police or the insurer about the alleged incident within a set period, so that data can be preserved?
(b) how long should that period be?

MPS Response
Much of this subject falls outside the remit of policing. However, the MPS is keen that data is retained for a suitable period to secure potential evidence for prosecution and collision investigation and prosecution. The MPS would welcome the opportunity to contribute to further work in this area.

Consultation Question 18.
Is there a need to review the way in which product liability under the Consumer Protection Act 1987 applies to defective software installed into automated vehicles?

MPS Response
This subject is outside the remit of policing.

Consultation Question 19.
Do any other issues concerned with the law of product or retailer liability need to be addressed to ensure the safe deployment of driving automation?
MPS Response
This subject is outside the remit of policing.

(v) Chapter 7. Criminal liability

Consultation Question 20.
We seek views on whether regulation 107 of the Road Vehicles (Construction and Use) Regulations 1986 should be amended, to exempt vehicles which are controlled by an authorised automated driving system.

MPS Response
The MPS suggests that regulation 107 may be redundant if the vehicle has been certified (see question 8.

Consultation Question 21.
Do other offences need amendment because they are incompatible with automated driving?

MPS Response
The MPS suggests that regulations will need regular reviews to ensure that they remain fit for purpose in a fast-changing technological environment. It is conceivable that vehicle lighting will one day be unnecessary, for example.

Consultation Question 22.
Do you agree that where a vehicle is:
(1) listed as capable of driving itself under section 1 of the Automated and Electric Vehicles Act 2018; and
(2) has its automated driving system correctly engaged; the law should provide that the human user is not a driver for the purposes of criminal offences arising from the dynamic driving task?

MPS Response
The MPS believes that this clear distinction is desirable and necessary.

Consultation Question 23.
Do you agree that, rather than being considered to be a driver, a user-in-charge should be subject to specific criminal offences? (These offences might include, for example, the requirement to take reasonable steps to avoid an accident, where the user-in-charge is subjectively aware of the risk of serious injury (as discussed in paragraphs 3.47 to 3.57))

MPS Response
Please see the responses to questions 2, 3 and 7. To prevent confusion, the MPS believes that the existing terms “driver”, “driving” and “use” should be retained where possible.

Consultation Question 24.
Do you agree that:
(1) a registered keeper who receives a notice of intended prosecution should be required to state if the vehicle was driving itself at the time and (if so) to authorise data to be provided to the police?
(2) where the problem appears to lie with the automated driving system (ADS) the police should refer the matter to the regulatory authority for investigation?
(3) where the ADS has acted in a way which would be a criminal offence if done by a human driver, the regulatory authority should be able to apply a range of regulatory sanctions to the entity behind the ADS?
(4) the regulatory sanctions should include improvement notices, fines and suspension or withdrawal of ADS approval?
MPS Response
This area is complex and may raise disputes regarding liability at the material time of an offence. If a registered keeper claims that the vehicle was driving autonomously, then the data should by default be available to the police, who may choose to obtain expert evidence from the data.

Consultation Question 25.
Do you agree that where a vehicle is listed as only safe to drive itself with a user-in-charge, it should be a criminal offence for the person able to operate the controls (“the user-in-charge”):
(1) not to hold a driving licence for the vehicle;
(2) to be disqualified from driving;
(3) to have eyesight which fails to comply with the prescribed requirements for driving;
(4) to hold a licence where the application included a declaration regarding a disability which the user knew to be false;
(5) to be unfit to drive through drink or drugs; or
(6) to have alcohol levels over the prescribed limits?

MPS Response
These offences appear to be a logical extension of existing legislation. In addition, the registered keeper, owner or operator may commit an offence of permitting the above offences.

Consultation Question 26.
Where a vehicle is listed as only safe to drive itself with a user-in-charge, should it be a criminal offence to be carried in the vehicle if there is no person able to operate the controls?

MPS Response
The MPS envisages practical difficulties in establishing the difference between an unwitting passenger and an unqualified user-in-charge. If no-one on board is qualified (or if everyone is intoxicated), how will police officers establish the correct offence? This may require the user-in-charge to sign in to a vehicle of this type.

Consultation Question 27.
Do you agree that legislation should be amended to clarify that users-in-charge: (1) Are “users” for the purposes of insurance and roadworthiness offences; and (2) Are responsible for removing vehicles that are stopped in prohibited places, and would commit a criminal offence if they fail to do so?

MPS Response
These offences appear to be a logical extension of existing legislation. In addition, the registered keeper, owner or operator may commit an offence of permitting the above offences.

Consultation Question 28.
We seek views on whether the offences of driving in a prohibited place should be extended to those who set the controls and thus require an automated vehicle to undertake the route.

MPS Response
This offence would appear to be committed by the ADSE, as the user will usually set the destination. Only if the route was modified would the user have any liability.

Consultation Question 29.
Do you agree that legislation should be amended to state that the user-in-charge is responsible for:
(1) duties following an accident;
(2) complying with the directions of a police or traffic officer; and
(3) ensuring that children wear appropriate restraints?

MPS response
In the short-term, this appears a sensible requirement but the industry should be encouraged to automate this as vehicles adopt greater levels of autonomy.
Consultation Question 30.
In the absence of a user-in-charge, we welcome views on how the following duties might be complied with:
(1) duties following an accident;
(2) complying with the directions of a police or traffic officer; and
(3) ensuring that children wear appropriate restraints.

MPS response
This should be the responsibility of the ADSE or operator. The means by which these requirements are met may need to be agreed.

Consultation Question 31.
We seek views on whether there is a need to reform the law in these areas as part of this review.

MPS response
The requirements are essential for the preservation of order and safety on public roads. This review should aim to ensure 100% compliance for CAVs.

Consultation Question 32.
We seek views on whether there should be a new offence of causing death or serious injury by wrongful interference with vehicles, roads or traffic equipment, contrary to section 22A of the Road Traffic Act 1988, where the chain of causation involves an automated vehicle.

MPS response
The MPS is yet to be persuaded that this requires a separate offence.

Consultation Question 33.
We seek views on whether the Law Commissions should review the possibility of one or more new corporate offences, where wrongs by a developer of automated driving systems result in death or serious injury.

MPS response
The MPS has no firm view.

(vi) Chapter 8. Interfering with automated vehicles

Consultation Question 34.
We seek views on whether the criminal law is adequate to deter interference with automated vehicles. In particular:
(1) Are any new criminal offences required to cover interference with automated vehicles?
(2) Even if behaviours are already criminal, are there any advantages to re-enacting the law, so as to clearly label offences of interfering with automated vehicles?

MPS response
This suggestion appears to introduce unnecessary duplication.

Consultation Question 35.
Under section 25 of the Road Traffic Act 1988, it is an offence to tamper with a vehicle’s brakes “or other mechanism” without lawful authority or reasonable cause. Is it necessary to clarify that “other mechanism” includes sensors?

MPS response
With increasing sophistication in all vehicle parts, we suggest amending “mechanism”, which infers moving parts, to “component”.

Consultation Question 36.
In England and Wales, section 12 of the Theft Act 1968 covers “joyriding” or taking a conveyance without authority, but does not apply to vehicles which cannot carry a person. This contrasts with the law in Scotland, where the offence of taking and driving away without consent applies to any motor vehicle. Should section 12 of the Theft Act 1968 be extended to any motor vehicle, even those without driving seats?

MPS response
The MPS agrees with this suggestion and would like to retain the additional scope of “conveyance” over “motor vehicle”.

Consultation Question 37.
In England and Wales, section 22A(1) of the Road Traffic Act 1988 covers a broad range of interference with vehicles or traffic signs in a way which is obviously dangerous. In Scotland, section 100 of the Roads (Scotland) Act 1984 covers depositing anything on a road, or inscribing or affixing something on a traffic sign. However, it does not cover interfering with other vehicles or moving traffic signs, even if this would raise safety concerns. Should section 22A of the Road Traffic Act 1988 be extended to Scotland?

MPS response
The MPS would naturally defer to Police Scotland but feels that this is a logical extension.

Consultation Question 38.
We seek views on how regulators can best collaborate with developers to create road rules which are sufficiently determinate to be formulated in digital code.

MPS response
The MPS has already engaged with developers on this subject.

Consultation Question 39.
We seek views on whether a highly automated vehicle should be programmed so as to allow it to mount the pavement if necessary:
(1) to avoid collisions;
(2) to allow emergency vehicles to pass;
(3) to enable traffic flow;
(4) in any other circumstances?

MPS response
The MPS believes that a vehicle should always be programmed to obey all relevant law. Any deviation is then a matter solely for the user-in-charge. The MPS sees a wider benefit on the behaviour of human-driven vehicles, particularly with regard to speed limits.

Consultation Question 40.
We seek views on whether it would be acceptable for a highly automated vehicle to be programmed never to mount the pavement.

MPS response
The MPS believes that a vehicle should always be programmed to obey all relevant law. Any deviation is then a matter solely for the user-in-charge. The MPS sees a wider benefit on the behaviour of human-driven vehicles, particularly with regard to speed limits.
Consultation Question 41.
We seek views on whether there are any circumstances in which an automated driving system should be permitted to exceed the speed limit within current accepted tolerances.

MPS response
The MPS believes that a vehicle should always be programmed to obey all relevant law. Any deviation is then a matter solely for the user-in-charge. The MPS sees a wider benefit on the behaviour of human-driven vehicles, particularly with regard to speed limits.

Consultation Question 42.
We seek views on whether it would ever be acceptable for a highly automated vehicle to be programmed to “edge through” pedestrians, so that a pedestrian who does not move faces some chance of being injured. If so, what could be done to ensure that this is done only in appropriate circumstances?

MPS response
The MPS believes that a vehicle should always be programmed to obey all relevant law. Any deviation is then a matter solely for the user-in-charge. The MPS sees a wider benefit on the behaviour of human-driven vehicles, particularly with regard to speed limits.

Consultation Question 43.
To reduce the risk of bias in the behaviours of automated driving systems, should there be audits of datasets used to train automated driving systems?

MPS response
The MPS holds no firm view but notes that it may be more desirable to adopt a common code of practice.

Consultation Question 44.
We seek views on whether there should be a requirement for developers to publish their ethics policies (including any value allocated to human lives)?

MPS response
The MPS holds no firm view.

Consultation Question 45.
What other information should be made available?

MPS response
The recently revised guidelines for testing autonomous vehicles includes details of telematics data which must be retained and provided to police after a collision or other incident. The MPS is of the firm view that similar requirements must be enshrined in law for non-test automated vehicles.

3. Conclusion

3.1 The MPS remains keen to engage with testing organisations, legislators and developers in the field of automated vehicles. In doing so, its primary objective is the preservation of public safety.

3.2 The MPS hopes that its contribution to the work of the Law Commissions will help to achieve this aim. The MPS remains keen to engage with the Law Commissions and other stakeholders in this area.