Response to Law Commissions' second consultation on Automated Vehicles (Law Commission Consultation Paper 245; Scottish Law Commission Discussion Paper 169)

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Any personal email addresses and phone numbers have been excluded from this document.

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What is your name?

Nick Reed

What is the name of your organisation?

Reed Mobility

Are you responding to this consultation in a personal capacity or on behalf of your organisation?

[Respondents chose from the following options: Personal response; Response on behalf of your organisation; Other.]

Responding on behalf of organisation

CHAPTER 3: OPERATOR LICENSING - A SINGLE NATIONAL SYSTEM

A single national scheme

Consultation Question 1 (Paragraph 3.82): Do you agree that Highly Automated Road Passenger Services (HARPS) should be subject to a single national system of operator licensing?

[Respondents chose from the following options: yes; no; other.]

Yes

A national system of licensing seems to offer the best option to deliver consistency, transparency and robustness in the regulation of automated vehicle services. This consistency would help service developers and operators by facilitating their ability to scale HARPS across multiple cities and regions by applying a common licensing system.

It may be prudent to permit local authorities to add additional conditions to the licensing scheme to suit their particular interests / requirements.

Consultation Question 2 (Paragraph 3.86): Do you agree that there should be a national scheme of basic safety standards for operating a HARPS?

[Respondents chose from the following options: yes; no; other.]

Again, for reasons of consistency, transparency and robustness, a national scheme of basic safety standards seems most appropriate.

CHAPTER 4: OPERATOR LICENSING –SCOPE AND CONTENT

Scope of the new scheme

Consultation Question 3 (Paragraph 4.33): Do you agree that a HARPS operator licence should be required by any business which: (1) carries passengers for hire or reward; (2) using highly automated vehicles; (3) on a road; (4) without a human driver or user-in-charge in the vehicle (or in line of sight of the vehicle)?

[Respondents chose from the following options: yes; no; other.]

Yes

Any HARPS operating as a commercial passenger service should be held to a common standard to provide confidence and assurance to passengers and service operators alike.

Consultation Question 4 (Paragraph 4.34): Is the concept of "carrying passengers for hire or reward" sufficiently clear?

Yes

This term is well known in the transport and insurance industries and would be appropriate for HARPS.

Exemptions

Consultation Question 5 (Paragraph 4.46): We seek views on whether there should be exemptions for community or other services which would otherwise be within the scope of HARPS operator licensing.

One of the frequently cited benefits of automated vehicles is their potential to increase social equity by serving the mobility needs of underserved communities. However, commercial pressures may lead operators to concentrate their efforts on services that generate the greatest revenues; likely to be in higher density, higher income communities. Regulatory exemptions that do not compromise the safety, security or integrity of services but that encourage the use of HARPS to support community or other services may help support more equitable transport provision.

Consultation Question 6 (Paragraph 4.54): We seek views on whether there should be statutory provisions to enable the Secretary of State to exempt specified trials from the need for a HARPS operator licence (or to modify licence provisions for such trials).

To facilitate the development of commercially viable and attractive HARPS, it would be helpful for it to be possible for specified trials to be made exempt from the requirement for a HARPS licence. However, there should be clear conditions over the terms of the exemption and consideration of any unintended consequences that may emerge as a result of the trial - for example, it could be seen as harmful to existing public transport services if a HARPS trial offers a competing service for an extended period.

Operator requirements

Consultation Question 7 (Paragraph 4.72): Do you agree that applicants for a HARPS operator licence should show that they: (1) are of good repute; (2) have appropriate financial standing; (3) have suitable premises, including a stable establishment in Great Britain; and (4) have a suitable transport manager to oversee operations?

[Respondents chose from the following options: yes; no; other.]

Yes

These seem sensible requirements. The requirement to demonstrate appropriate financial standing should be sufficiently flexible to allow start-ups and smaller organisations to gain an initial foothold as a service provider at a scale commensurate with their position.

It also be considered that being of 'good repute' would mean that the organisation pays the relevant taxes and duties associated with the provision of a transport service.

Consultation Question 8 (Paragraph 4.73): How should a transport manager demonstrate professional competence in running an automated service?

A transport manager could be said demonstrate competence through the successful management of existing transport services, where evidence of success would include the health and safety of passengers and drivers, appropriate mitigation of risks, financial stability of the operation and adherence to applicable regulations.

Given HARPS represent a new technology, it is difficult for transport managers to show they have experience in managing HARPS - however, they may be able to demonstrate the integration and appropriate use of new technologies (e.g. vehicle telematics) and data management, that may be indicative of competence required for HARPS deployment.

Adequate arrangements for maintenance

Consultation Question 9 (Paragraph 4.89): Do you agree that HARPS operators should: (1) be under a legal obligation to ensure roadworthiness; and (2) demonstrate "adequate facilities or arrangements" for maintaining vehicles and operating systems "in a fit and serviceable condition"?

[Respondents chose from the following options: yes; no; other.]

Yes

Consultation Question 10 (Paragraph 4.90): Do you agree that legislation should be amended to clarify that HARPS operators are "users" for the purposes of insurance and roadworthiness offences?

[Respondents chose from the following options: yes; no; other.]

Compliance with the law

Consultation Question 11 (Paragraph 4.124): Do you agree that HARPS operators should have a legal duty to: (1) insure vehicles; (2) supervise vehicles; (3) report accidents; and (4) take reasonable steps to safeguard passengers from assault, abuse or harassment?

[Respondents chose from the following options: yes; no; other.]

Yes

Consultation Question 12 (Paragraph 4.125): Do you agree that HARPS operators should be subject to additional duties to report untoward events, together with background information about miles travelled (to put these events in context)?

[Respondents chose from the following options: yes; no; other.]

Yes

Agree - though care should be taken to achieve the right balance between requiring operators to share information that is relevant to safety and security of operations versus information could be considered commercially sensitive.

Consultation Question 13 (Paragraph 4.128): Do you agree that the legislation should set out broad duties, with a power to issue statutory guidance to supplement these obligations?

[Respondents chose from the following options: yes; no; other.]

Yes

This will be helpful, especially in the early incarnations of the technology. However, the duties and guidance should be created in close consultation with technology developers and local authorities to ensure that the information is fit for purpose. It should also be possible to update the duties and guidance regularly to evolve with new developments in the technology and experience in the operation of such services.

Consultation Question 14 (Paragraph 4.133): We invite views on whether the HARPS operator licensing agency should have powers to ensure that operators provide price information about their services. In particular, should the agency have powers to: (1) issue guidance about how to provide clear and comparable price information?

[Respondents chose from the following options: yes; no; other.]

Yes

Agree - but HARPS operators should have considerable flexibility in how they operate their pricing structure (provided that this is clear to consumers).

And/or (2) withdraw the licence of an operator who failed to give price information?

[Respondents chose from the following options: yes; no; other.]

Agree - the agency should be able to withdraw the licence of an operator that did not provide pricing information with sufficient clarity for consumers to be able to make an informed decision about the use of the service.

Who should administer the system?

Consultation Question 15 (Paragraph 4.138): Who should administer the system of HARPS operator licensing?

In my view, the responsibility for administering HARPS operator licensing should rest with the Traffic Commissioners - this seems more of a natural fit with regard to the provision of service and the need to respect the rights and needs of passengers. This would allow the authority responsible for authorising automated driving systems to focus on technological issues.

Freight Transport

Consultation Question 16 (Paragraph 4.140): We welcome observations on how far our provisional proposals may be relevant to transport of freight.

In line with Q15, the Traffic Commissioners should have responsibility for authorising freight transportation services that use automated vehicles - with a similar ability to be able to withdraw O licences from AV-based freight services as necessary.

CHAPTER 5: PRIVATELY-OWNED PASSENGER-ONLY VEHICLES

Setting a boundary between HARPS and private leasing

Consultation Question 17 (Paragraph 5.12): Do you agree that those making "passenger-only" vehicles available to the public should be licensed as HARPS operators unless the arrangement provides a vehicle for exclusive use for an initial period of at least six months?

[Respondents chose from the following options: yes; no; other.]

Yes

This seems sensible - though any additional responsibilities on the user as a result of them using a highly automated vehicle for more than six months would need to be made absolutely clear to them when the agreement is made. Furthermore, the organisations making the vehicles available on this longer term basis should have a responsibility to provide guidance to users as to how they can fulfil these responsibilities.

Allocating responsibility for a privately-owned passenger-only vehicle: placing responsibilities on keepers

Consultation Question 18 (Paragraph 5.40): Do you agree that where a passenger-only vehicle is not operated as a HARPS, the person who keeps the vehicle should be responsible for: (1) insuring the vehicle; (2) keeping the vehicle roadworthy; (3) installing safety-critical updates; (4) reporting accidents; and (5) removing the vehicle if it causes an obstruction or is left in a prohibited place?

[Respondents chose from the following options: yes; no; other.]

I agree that responsibility for these issues should lie with the registered keeper - however, it is highly likely that the an individual owner would contract a third party for some or all of them since they may require specialist technical knowledge and/or equipment.

Consultation Question 19 (Paragraph 5.41): Do you agree that there should be a statutory presumption that the registered keeper is the person who keeps the vehicle?

Yes

Consultation Question 20 (Paragraph 5.42): We seek views on whether: (1) a lessor should be responsible for the obligations listed in Question 18 unless they inform the lessee that the duties have been transferred?

Agree. There will need to be a clear audit trail for the transfer of responsibility for the obligations showing when and to whom they were transferred.

(2) a lessor who is registered as the keeper of a passenger-only vehicle should only be able to transfer the obligations to a lessee who is not a HARPS operator if the duties are clearly explained to the lessee and the lessee signs a statement accepting responsibility?

Agreed. It could perhaps be made part of the operating software of the vehicle that the register of responsibility for these obligations is recorded also within its systems - and that this information is accessible by crash investigators arriving at the scene of any incident involving an automated vehicle.

Will consumers require technical help?

Consultation Question 21 (Paragraph 5.47): Do you agree that for passenger-only vehicles which are not operated as HARPS, the legislation should include a regulation-making power to require registered keepers to have in place a contract for supervision and maintenance services with a licensed provider?

Yes

The supervision and maintenance of these vehicles is likely to require specialist knowledge, tools and equipment. Organisations offering these services should be licensed to do so with requirements to prove their capabilities are in line with the requirement.

Peer-to-peer lending

Consultation Question 22 (Paragraph 5.53): We welcome views on whether peer-to-peer lending and group arrangements relating to passenger-only vehicles might create any loopholes in our proposed system of regulation.

Yes

Not a loophole but I would be concerned about the situation where a critical or highly used service is supported by a third party organisation for operational maintenance and that third party organisation gets into financial difficulties and is unable to fulfil its responsibilities. This could leave employees unable to reach their jobs, children unable to get to school or patients unable to get to medical appointments. This could perhaps be mitigated by operators using a scheme similar to ATOL protection in the aviation industry - whereby operators would purchase bonds against a percentage of their turnover from a central agency as a means of insurance against any service disruption.

Protecting consumers from high ongoing costs

Consultation Question 23 (Paragraph 5.60): We seek views on whether the safety assurance agency proposed in Consultation Paper 1 should be under a duty to ensure that consumers are given the information they need to take informed decisions about the ongoing costs of owning automated vehicles.

There should be guidance provided on the ongoing costs and responsibilities involved in operating automated vehicles. However, responsibility for providing this guidance needn't necessarily fall upon the safety assurance agency and could be the responsibility of an alternative Government agency (e.g. DVSA).

CHAPTER 6: ACCESSIBILITY

What we want to achieve

Consultation Question 24 (Paragraph 6.11): We seek views on how regulation can best promote the accessibility of Highly Automated Road Passenger Services (HARPS)? In particular, we seek views on the key benefits and concerns that regulation should address.

Regulation can support accessibility of HARPS by requiring features that enable use by a wide range of passengers - and in doing so make the experience of using such vehicles more convenient and pleasant for all.

Examples would be:

- * Large door apertures
- * Access ramps
- * ISO standard fixing / restraint points for wheelchairs, child seats etc.
- * High visibility markings
- * Features to support the sensory impaired (Braille for major controls, induction loop for hearing aids etc.)
- * Ability to store wheelchairs separately if preferred.

Core obligations under equality legislation

Consultation Question 25 (Paragraph 6.31): We provisionally propose that the protections against discrimination and duties to make reasonable adjustments that apply to land transport service providers under section 29 of the Equality Act 2010 should be extended to operators of HARPS. Do you agree?

[Respondents chose from the following options: yes; no; other.]

Yes

If the service is intended to be publicly available then vehicles should be reasonably adjusted to accommodate users with additional needs and/or a subset of vehicles should be part of their service that can be dedicated to supporting those users in a reasonable manner.

HARPS operators should not be able to refuse journeys for users with additional needs or those that have assistance dogs.

Information should be provided to ensure that users of larger wheelchairs will know whether the HARPS vehicle will be accessible for them.

Specific accessibility outcomes

Consultation Question 26 (Paragraph 6.106): We seek views on how regulation could address the challenges posed by the absence of a driver, and the crucial role drivers play in order to deliver safe and accessible journeys. For example, should provision be made for:

(1) Ensuring passengers can board and alight vehicles?

[Respondents chose from the following options: yes; no; other.]

Yes

Passengers should be able to request support for boarding and alighting the vehicle. This could be by an on-board attendant or by personnel deployed at the origin and destination of the journey. Support may include simple access to the vehicle or helping to manage the safe storage of luggage in the vehicle.

Where applicable, HARPS vehicles may need some form of sensing to confirm that wheelchairs, pushchairs, child seats are correctly and securely fixed in place before setting off and over the course of a trip (with appropriate contingency plans in place for situations where passengers / loads become insecure).

(2) Requiring reassurance when there is disruption and accessible information?

[Respondents chose from the following options: yes; no; other.]

Other

In the shorter term, this may be necessary as users become familiar with the service and using any in-vehicle voice or screen interfaces for this purpose but eventually it should be possible for most users to gain reassurance by using in-vehicle systems.

(3) Expansion of support at designated points of departure and arrival?

[Respondents chose from the following options: yes; no; other.]

Yes

This should be an option for users with additional needs and / or with luggage. It would need to be possible for users to request such support when booking their journeys.

Developing national minimum accessibility standards for HARPS

Consultation Question 27 (Paragraph 6.109): We seek views on whether national minimum standards of accessibility for HARPS should be developed and what such standards should cover.

Yes - this should cover access, in-vehicle adaptations, fixing points, interfaces, conspicuity of markings and adaptations for those with sensory impairments. The LEVC London taxi is a good reference for accessibility.

Enforcement mechanisms and feedback loops

Consultation Question 28 (Paragraph 6.124): We seek views on whether operators of HARPS should have data reporting requirements regarding usage by older and disabled people, and what type of data may be required.

[Respondents chose from the following options: yes; no; other.]

Yes

The following data may be of interest in relation to use by older and disabled people to monitor and improve HARPSs:

- * Frequency of use
- * Frequency of requests for additional support
- * Types of request for additional support
- * Trips that it was not possible for the HARPS operator to deliver due to additional needs of the customer.
- * Trips that were aborted by the customer
- * Use of interactive tools within the vehicle
- * Specific customer feedback related to these issues

In general, there will be a requirement for HARPS operators to monitor the safety and well-being of their customers in their vehicles - this may be particularly important for older and disabled users.

CHAPTER 7: REGULATORY TOOLS TO CONTROL CONGESTION AND CRUISING

Traffic regulation orders

Consultation Question 29 (Paragraph 7.23): We seek views on whether the law on traffic regulation orders needs specific changes to respond to the challenges of HARPS.

TROs may be vitally important in helping to define the regions where and times at which HARPS vehicles may operate; this is particularly pertinent to the issue of stopping, either to wait for the next trip or to pick up / drop off passengers.

Giving Local Authorities the ability to manage TROs quickly and effectively will enable them to exert fine control of the traffic characteristics of their cities / regions. Of course, it must be possible for HARPS operators to be informed about any changes to TROs and have the ability to adapt their services accordingly.

Regulating use of the kerbside

Consultation Question 30 (Paragraph 7.59): We welcome views on possible barriers to adapting existing parking provisions and charges to deal with the introduction of HARPS.

In particular, should section 112 of the Road Traffic Regulation Act 1984 be amended to expressly allow traffic authorities to take account of a wider range of considerations when setting parking charges for HARPS vehicles?

[Respondents chose from the following options: yes; no; other.]

Yes

In my view, it will be vital for traffic authorities to have the tools to manage parking provisions for HARPSs in order to control the impact of their vehicles on city / regional congestion. The relevant legislation should be reviewed to ensure that they are able to do that.

Road pricing

Consultation Question 31 (Paragraph 7.86): We seek views on the appropriate balance between road pricing and parking charges to ensure the successful deployment of HARPS.

In my view, there is no simple answer to this question as it very much depends on a range of features of the environment in which HARPSs are being deployed (including geography, infrastructure, air quality, demand etc.). However, city / region / transport authorities should have the regulatory tools available to them to be able to implement road pricing and parking charges for the purposes of traffic management.

This should be transparent so that residents and businesses can understand the structure and purpose of such charges.

Consultation Question 32 (Paragraph 7.87): Should transport authorities have new statutory powers to establish road pricing schemes specifically for HARPS?

If so, we welcome views on:

- (1) the procedure for establishing such schemes;
- (2) the permitted purposes of such schemes; and
- (3) what limits should be placed on how the funds are used.

[Respondents chose from the following options: yes; no; other.]

Yes

(1) The procedure for establishing such schemes should build on the existing procedures that led to the introduction of congestion charging in London, including extensive consultation with residents and businesses affected and with clarity over the intended outcomes and key metrics that will be used to assess the effectiveness of the schemes (and mechanisms for withdrawal if the scheme does not prove to have the desired effect or if there are are unintended adverse consequences).

There will be a balance to strike between encouraging innovative new transport operators to come to the market (using low prices) and large existing providers that can more easily afford to absorb any additional costs caused by parking / road charges.

- (2) The purposes of such schemes should be to manage congestion and / or air quality; to encourage transport provision for underserved communities and to help manage road access for certain classes of vehicle.
- (3) The funds raised should be used to support the provision of sustainable transport modes in particular public transport services and active travel. This should align with a broader transport strategy published by the relevant transport authority.

Quantity restrictions

Consultation Question 33 (Paragraph 7.97): Do you agree that the agency that licenses HARPS operators should have flexible powers to limit the number of vehicles any given operator can use within a given operational design domain for an initial period? If so, how long should the period be?

[Respondents chose from the following options: yes; no; other.]

Yes

This seems to be a sensible approach to ensure the impact of new services is managed effectively and has been applied with other transport modes (e.g. limits on e-scooter deployments in U.S. cities).

Such limits should be introduced and scaled through collaboration between transport authorities, operators and affected businesses to ensure the right balance is struck between enabling not providing enough permits (potentially resulting in nascent transport services failing to flourish) and providing too many (potentially resulting in worse congestion than existed before the service was introduced).

Consultation Question 34 (Paragraph 7.120): Do you agree that there should be no powers to impose quality restrictions on the total number of HARPS operating in a given area?

[Respondents chose from the following options: yes; no; other.]

Yes

I agree that it would be sensible not to have a blanket cap on vehicle numbers operating in a given area - with the proviso that it should be possible for transport authorities to apply other measures such as road / parking charges to help manage any congestion that arises through oversupply.

CHAPTER 8: INTEGRATING HARPS WITH PUBLIC TRANSPORT

The current system of bus regulation: HARPS as mass transit

Consultation Question 35 (Paragraph 8.92): Do you agree that a HARPS vehicle should only be subject to bus regulation if it:

(1) can transport more than eight passengers at a time and charges separate fares?

[Respondents chose from the following options: yes; no; other.]

(2) does not fall within an exemption applying to group arrangements, school buses, rail replacement bus services, excursions or community groups?

[Respondents chose from the following options: yes; no; other.]

Yes

Consultation Question 36 (Paragraph 8.94): We welcome views on whether any particular issues would arise from applying bus regulation to any HARPS which transports more than eight passengers, charges separate fares and does not fall within a specific exemption.

It seems the main issue that would arise is where bus regulations limit innovation that may be possible through the use of automated vehicles and the associated technologies for ondemand transport. Provided they can be suitably adapted in consultation with the bus industry (and noting that innovative services like ArrivaClick and Oxford PickMeUp have been possible within appropriate frameworks), applying bus regulations to HARPS intended to carry more than eight passengers seems to be appropriate.

Consultation Question 37 (Paragraph 8.95): We welcome views on whether a HARPS vehicle should only be treated as a local bus service if it:

- (1) runs a route with at least two fixed points; and/or
- (2) runs with some degree of regularity.

It seems that HARPS are likely to operate in a manner that makes them unlikely to be recognised as local bus services - in particular, they may not advertise journeys in advance to the general public. I would therefore agree that HARPS should only be treated as local bus services if their operation fits the narrow definition.

Consultation Question 38 (Paragraph 8.109): We seek views on a new statutory scheme by which a transport authority that provides facilities for HARPS vehicles could place requirements on operators to participate in joint marketing, ticketing and information platforms.

Such a scheme seems to fall within the spirit of how HARPS should be managed by the relevant authorities - that they should represent one component of a wider transport network and that relevant data about that service should be contributed as part of joint marketing, ticketing and information platforms.

Consultation Question 39: Is there any other issue within our terms of reference which we should be considering in the course of this review?

The Law Commission is to be commended for evaluating how regulations should be managed in anticipation of the arrival of automated vehicles. It is vital that there is sufficient flexibility in those regulations to allow for a variety of use cases of AVs to emerge without compromising safety nor giving unfair advantages to new market entrants and scope for the regulations to evolve as technologies and markets mature.

Regulations should also give city / regional / transport authorities the necessary tools to be able to manage the implementation of HARPS to maximise the benefits for and minimise harm to citizens and businesses. The approach set out in the consultation document appears to offer a route to achieving that.

I hope that existing transport service providers engage with the consultation as their knowledge of the industry and understanding of the practicalities of operating safe, attractive and commercially viable public transport services will be helpful in ensuring that the shape of future regulations is fit for purpose.