

Response to the Law Commission

Open consultation

Regulation of Highly Automated Road Passenger Services (HARPS)¹

On behalf of the UK Computing Research Committee, UKCRC.

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Response

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?

[R1] Yes this seems appropriate, especially if the terms of any licenses are updated in response to evidence about the safety and reliability of HARPS as they begin to be deployed.

Consultation Question 2 (Paragraph 3.86):

Do you agree that there should be a national scheme of basic safety standards for operating a HARPS?

[R2] Yes – however, provision should be made to support research into the effectiveness of a range of alternative approaches, including some consideration of the KPIs that might be used to measure the impact of different safety standards used for comparable HARPS around the globe.

¹ <https://www.lawcom.gov.uk/project/automated-vehicles/>

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)?

[R3] Yes, however, we would question whether the 'line of sight' provision makes much sense in the context of HARPS. This requirement would seem to be a legacy of earlier concerns over the operation of RPAS/UAS which fly within a particular vicinity. It seems unlikely that any HARPS operation would conceivably remain within sight of an operator not in the vehicle? This provision might also have been introduced to cover research and development activities but if this was the concern then it might have been better to introduce a more explicit distinction.

Consultation Question 4 (Paragraph 4.34):

Is the concept of "carrying passengers for hire or reward" sufficiently clear?

[R4] Yes, given the caveats raised in the consultation. However, the benefits of familiarity supporting this concept should be reviewed as new business models are likely to emerge following the introduction of 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.

[R5] We support the consultation's initial view that exemptions should be avoided until greater evidence is available about the longer-term safety concerns that might arise from the operation of HARPS. In particular, it seems likely that these vehicles will place greater demands for maintenance, including software updates, than might be the case for existing road vehicles operated under the Section 19-22 exemptions.

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).

[R6] Yes, we strongly support the exemption for trials given the need to establish an appropriate evidence base to improve both the design, operation and maintenance of these vehicles, as well as their safety.

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?

[R7] We note and echo the concerns raised in the consultation that there may be a need for an operator to have access to someone with a technical understanding of automated driving systems. We would go further and require such an understanding coupled with training on how to identify and then report potential concerns that might arise during the operation and maintenance of HARPS vehicles – given the importance of establishing the evidence needed to refine both the technical and legal basis for these new operations.

Consultation Question 8 (Paragraph 4.73):

How should a transport manager demonstrate professional competence in running an automated service?

[R8] Attendance at an approved course together with the successful completion of a summative assessment in the particular technical and organisation challenges of HARPS operation. While the consultation mentions the possibility of a safety case being used to discharge certain requirements, we do not believe this should replace specific training – including an introduction to previous incidents involving highly automated vehicles. The precise syllabus should be the subject of further consultation but could include an introduction to cyber security as well as software and safety management.

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”?

[R9] Yes – the proposals seem well considered. However, although we acknowledge “it is too early to say what the challenges of maintaining automated vehicles and their software might be” we would strongly urge research into these challenges. Without some view as to the potential maintenance and roadworthiness requirements the provisions in the consultation lack substance. In particular, the use of automated health monitoring systems and of on-board logging creates the potential for strong feedback into safety management systems but also raises questions about confidentiality and privacy.

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?

[R10] Yes.

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?

[R11] These are appropriate requirements. There might also be a case for extending the duty to report accidents to the passengers of a HARP in situations where the operator might only have limited information about the events leading to an adverse outcome. Similarly, the need to gather data about potential safety concerns might also suggest an obligation to report near miss events as is common practice in the aviation industry. This enables HARPS operators to reinforce the defences that may have prevented an accident from occurring.

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)?

[R12] We strongly agree with this proposal. However, provisions need to be made to ensure that the data is not simply ignored. Additional considerations include how this information might be made more widely available both to relevant safety agencies, to other HARPS operators and to the research community working to improve the safety performance of highly automated vehicles.

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?

[R13] Yes – in particular, feedback from previous incidents may help to identify future information requirements from HARPS operators so that we can learn more about potential patterns of incidents across the nascent industry.

Price information

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, and/or
2. withdraw the licence of an operator who failed to give price information?

Who should administer the system?

[R14] We support the notion of a HARPS operator licensing agency from reading the consultation document. However, some consideration ought also to be made about whether this agency should or should not also have responsibility for the safety considerations in the proposal. Having a separate body for safety will ensure independence and help guarantee that economic considerations should not increase risk for the travelling public. Equally, separating the licensing agency from the organisation responsible for safety might create conflict between the two bodies if there were disagreement about the suitability of a particular HARPS operator.

Consultation Question 15 (Paragraph 4.138)

Who should administer the system of HARPS operator licensing?

[R15] A number of existing agencies provide a suitable template for administering the system – these include both the HSE as a direct government agency under the Department for Work and Pensions. They also include the CAA as an independent public corporation reporting to the Department for Transport. The particular model will depend upon some of the issues outlined in [R14].

Freight transport

Consultation Question 16 (Paragraph 4.140)

We welcome observations on how far our provisional proposals may be relevant to transport of freight.

[R16] The proposals provide a sound basis for the consideration of freight transport but significant additional work would be required to account, for example, for the risks arising from the carriage of hazardous materials without direct driver observation.

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?

[R17] Yes, the proposals identify the complexities that arise in the boundaries between leasing and hiring highly automated vehicles. While we support this six months distinction this is an area that should be subject to review – including comparisons made with practices in other countries to ensure that this does not restrain emerging business models including shared forms of ownership, including car-pooling these vehicles.

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?

[R18] Yes – however, greater clarity is required in respect of any obligation to install safety-critical updates and reporting accidents. These raise significant technical questions, for example, in terms of how updates are distributed and the timescale by which any offence might be presumed to have occurred. Similarly, reporting an accident may provide only limited insights if relevant safety agencies do not also have access to on-board monitoring data.

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?

[R19] Yes, however, the notion of a register seems rooted in a previous century rather than the world of HARPS. It would seem appropriate to explore whether software could be used to rapidly update the person who keeps the vehicle, for example when a registered keeper is not able to remove the vehicle if it causes an obstruction or is left in a prohibited place.

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.
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?

[R20] Yes – but see also [R19] on technical approaches to more flexible allocation of these responsibilities.

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?

[R21] Yes but some exceptions should be allowed for research organisations and for individuals who can demonstrate appropriate competence in the supervision and maintenance of these vehicles.

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.

[R22] The proposals seem appropriate and robust in the face of peer to peer lending/group arrangements. However, the focus ought less to be on potential loopholes and more on the need to review any legislation to avoid any side-effects that limit innovation or the development of more flexible business models.

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.

[R23] This depends on whether the safety agency also has a role in pricing policy and licensing, as discussed in [R14] and [R15]. If they are the same body then this seems a natural role. However, if a separate agency is developed then the safety body would not determine potential costs of ownership/licencing.

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.

[R24] We would see this as a 'door to door' concern where accessibility is not just a concern for the vehicle itself but also all aspects of interaction with transport services – including any software used to obtain access to HARPS. Involving passenger groups would be essential in validating claims of accessibility by HARPS operators.

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?

[R25] Yes

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?
2. Requiring reassurance when there is disruption and accessible information?

3. Expansion of support at designated points of departure and arrival?

[R26] Yes. In addition, some consideration needs to be paid to ensure the safety of all passengers following an accident. The HARPS operator should have a designated response team capable of interacting with the relevant emergency services but also capable of supporting all passengers in the event of a more minor incident.

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.

[R27] Yes – to be determined in consultation with appropriate passenger groups and revised in accordance with operational experience. The principles of co-design in the consultation are to be commended.

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.

[R28] Yes – sampling techniques could be determined with the relevant licensing agencies, discussed elsewhere in this response. Privacy concerns prevent the gathering of such data for all passengers. As before, there should be clear plans for how this information will influence future policy to ensure accessibility to HARPS.

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.

[R29] Just as highly automated vehicles challenge us to think of new technologies for registering and identifying the keeper, they also challenge the outdated mechanisms used to register TROs. The consultation is eloquent on the benefits of digital TROs. We strongly support a national programme to identify future requirements for integrated digital infrastructures needed to support new models of transportation.

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 122 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?

[R30]. Yes, it seems essential to enable local authorities to respond to emerging problems in a flexible manner but working with the HARPS operators and the wider public. There is a danger that traffic authorities might undermine the introduction of

these services through inappropriate charges that then jeopardise the potential economic, environmental and accessibility benefits. Equally, there is evidence that members of the public feel they have little influence over the existing practice of setting parking charges and restrictions. The complexity of these new operating models creates an opportunity to develop more consultative mechanisms that address some of the perceived limitations in existing practices.

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.

[R31] As noted in the consultation, there are significant opportunities to use new technologies to implement flexible, local solutions to this balance. However, reiterating the comments from [R30] the application of these approaches must be built on mechanisms that ensure transparency and, as far as is possible, achieve local consensus.

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.

[R32] We would not advocate specific schemes for road pricing for HARPS unless their introduction involved additional income that could be used to support infrastructure maintenance. As in previous aspects of our response, we would see HARPS as a forcing function that encourages DfT and other government departments to consider a systemic approach to the design of digital transport infrastructures. Hence road pricing mechanisms should be considered within the context of a more integrated view of the future of road transportation rather than an opportunity to focus on charges for this new class of highly automated vehicles.

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?

[R33] Yes, following the Rand proposals for a graded introduction. An annual review would seem sufficient but with the opportunity for operators to negotiate exceptions based on an appropriate safety case that may also include other operational restrictions.

Consultation Question 34 (Paragraph 7.120):

Do you agree that there should be no powers to impose quantity restrictions on the total number of HARPS operating in a given area?

[R34] No – especially during the initial deployment, there should be restrictions on the total number of HARPS to limit risk exposure and unintended interactions that may not have emerged during testing.

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:

1. if it can transport more than eight passengers at a time and charges separate fares; and
2. does not fall within an exemption applying to group arrangements, school buses, rail replacement bus services, excursions or community groups?

[R35] Yes – these requirements seem appropriate. However, the impact on bus services from the introduction of HARPS is likely to force significant changes in the operation of conventional services.

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.

[R36] Not that we can see at present. However, regulations should be flexible in the face of possible new business models not foreseen yet.

Consultation Question 37 (Paragraph 8.95):

We welcome views on whether a HARPS 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?

[R37] Yes this seems appropriate.

Encouraging use of mass transit: Mobility as a Service

Consultation Question 38 (Paragraph 8.109):

We seek views on a new statutory scheme by which a transport authority that provides facilities for HARPS could place requirements on operators to participate in joint marketing, ticketing and information platforms.

[R38] We again propose this as an opportunity to conduct a ‘root and branch’ review of the digital infrastructures that support road transport across the UK. There is an opportunity to create harmonised and transparent exchange formats that will enable HARPS but also more integrated passenger experiences – of which joint ticketing etc only addresses a narrow set of issues.

