

SMMT response to the Law Commission of England and Wales and the Scottish Law Commission joint consultation on Automated Vehicles: Passenger Services and Public Transport

INTRODUCTION

- 1. The Society of Motor Manufacturers and Traders (SMMT) is one of the largest trade associations in the UK, supporting the interests of the UK automotive industry at home and abroad. SMMT represents more than 800 member companies, including all major vehicle manufacturers, component and system suppliers, the aftermarket, services and engineering firms, technology companies and mobility start-ups. The automotive industry is a vital part of the UK economy accounting for £82 billion turnover and £18.6 billion value added. With some 168,000 people employed directly in manufacturing and 823,000 across the wider automotive sector, it accounts for 14.4% of total UK exports to over 160 countries, and invests £3.75 billion each year in R&D. More than 30 manufacturers build in excess of 70 vehicle models in the UK, supported by around 2,500 component providers and some of the world's most skilled engineers.
- 2. The overall economic benefits of Connected and Autonomous Vehicles (CAVs) are expected to be in the region of £62 billion per year by 2030, with up to 420,000 new jobs being created in the UK, 20,000 of which are directly in automotive. Given that 94% of traffic accidents occur due to human error, significant social benefits are expected to be realised in increased safety that comes with automation, which could see 3,900 lives saved and 47,000 serious accidents prevented in the UK between 2019 and 2030.¹ If the UK is to unlock the full economic and social benefits of CAVs it is essential that it becomes the best place in the world to develop, test and deploy this new technology. This includes creating the right regulatory framework and market conditions as key enablers towards achieving this ambition.
- 3. The significant economic and social benefits that could come with the development and deployment of CAVs are motivating many countries to try to position themselves as world leaders. While the UK is already one of the leading locations in the world for testing and trialling automated vehicles (AVs), government and industry must work closely together and expend every effort to ensure the UK is also a leading location for the **deployment** of AVs. The UK as a whole is seen as the most attractive among several major markets for demand responsive transport,² which indicates huge potential for the deployment and take-up of highly automated road passenger services (HARPS).
- 4. Therefore any future policy and regulatory reform, including those that may potentially emanate from this consultation, must continue to support rather than hinder this ambition and to pave the way for the UK to realise its potential. It is important to ensure that the outcome of this consultation does not make it onerous to deploy HARPS in the UK. Despite the attractiveness of the UK as a market for demand responsive transport and for deployment of AVs in general, HARPS operators are not beholden to deploying services in the UK.
- 5. SMMT welcomes the opportunity to respond to this second joint consultation of the Law Commission of England and Wales and the Scottish Law Commission on automated vehicles. We set out below our responses to the questions of this consultation and would welcome further engagement with the Law Commissions on this subject.

¹ Frost & Sullivan (2019), Connected and Autonomous Vehicles: The Global Race to Market.

² Ibid



RESPONSE TO CONSULTATION QUESTIONS

Operator licensing: a single national system

Consultation Question 1

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

- 6. We agree that HARPS should be subject to a single national system of operator licensing. A unified national operator licensing system eliminates fragmentation and incoherence that might occur if there were disparate licensing systems among local authorities. A harmonised process and system at the national level that is applied in uniformity across the country enables operators to focus on the safety of their operations instead of expending much time and effort complying with multiple, and likely incoherent, licensing requirements at the local level.
- 7. A national system is required to remove the complexity and inefficiency that currently exist in private hire licensing. It is also necessary in order to avoid a repeat of the confusion surrounding the multiplicity of local Clean Air Zone requirements, which stems from the lack of a harmonised framework and guidelines.
- 8. Deployment of HARPS in a specific country, or national market, itself involves meeting stringent regulatory requirements, principally on safety, as it almost certainly necessitates costly software and hardware customisation. Ensuring licensing rules within a country are as uniform as possible is pivotal to enabling the UK to reap the benefits of early HARPS deployment.

Consultation Question 2

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

- 9. Given safety is the most important aspect in the operation of HARPS, and for the same reasons set out in our answer to the previous question, we agree that there should be a national scheme of basic safety standards for operating HARPS.
- 10. Basic safety standards prevent the operation of unsafe HARPS by ensuring a minimum acceptable level of safety is always upheld uniformly across the entire country and in accordance with existing and future international standards. This is crucial for providing confidence to passengers that their safety is not subject to postcode lottery. Furthermore, basic standards support the acceptance of new technologies by defining official requirements instead of possibly divergent capabilities of different service providers. A "level-playing-field" of basic safety requirements is a good basis for fair competition.



Operator licensing: scope and content

Consultation Question 3

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 the services of a human driver or user-in-charge in the vehicle (or in line of sight of the vehicle)?
- 11. We agree with the proposal above to require an entity that carries passengers for hire or reward using highly automated vehicles on the road without a human driver or user-in-charge in the vehicle, or within the line of sight of the vehicle, to obtain a HARPS operator licence. Strict and uniform enforcement of this requirement across the country is important for promoting trust and instilling confidence among the public, as well as for ensuring basic safety standards are met.
- 12. However, we suggest what constitutes (3) "on a road" should be clarified. It is still not entirely clear from the conclusion in paragraph 4.29 of the consultation paper whether pedestrianised public areas where, in theory, HARPS could still operate at very low speeds are considered "roads".

Consultation Question 4

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

- 13. We agree that the concept of "carrying passengers for hire or reward" is sufficiently clear in the majority of circumstances, i.e. any trip in which a payment or remuneration is made, regardless of the form of payment or remuneration, and who the payer or payee is.
- 14. However, it could be made clearer that HARPS that **normally** carry passengers for hire or reward but may from time to time carry passengers free of charge should still be subject to operator licensing requirements. For example, some manually driven shuttle buses in Tel Aviv and Tiberias in Israel already provide free rides on Shabbat, but would normally charge a fare on other days.³

Consultation Question 5

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.

15. We take the view that there should **not** be exemptions for community or other services. All types of HARPS regardless of use case must meet basic safety standards, and must therefore be assessed using a common national safety assurance scheme and subject to the same national system of HARPS operator licensing. No user segment, including those using HARPS as a free service provided by charitable organisations, should have their safety and wellbeing treated less seriously than another. Exemptions will only thwart the principle of ensuring common safety standards applicable to all HARPS.

 $^{^{3}\,\}underline{\text{https://www.timesofisrael.com/tel-aviv-buses-shuttle-over-10000-passengers-on-first-shabbat/}$



- 16. Furthermore, exemptions may also inadvertently hinder the wider deployment and adoption of HARPS. Given that HARPS will always be geofenced to a particular operating design domain and geographical area, extending exemptions to a particular use case, e.g. community shuttle service, may encourage a disproportionate number of HARPS being deployed in such domains in the first instance where the bar is perceived to be lower.
- 17. Exemptions may also be confusing and difficult to administer for potentially dual-purpose HARPS. For example, drawing on the concept discussed in Question 4, some operators may normally run HARPS for hire or reward for most of the week, but may make available a limited number of vehicles to carry elderly residents to a community centre free of charge on certain days of the week.
- 18. That said, the needs of different operators and types of services must be considered to ensure the basic safety standards and the national licensing scheme are suitable, relevant and applicable to all.

We seek views on whether there should be statutory provisions to enable the Secretary of State to exempt specified trials from the needs for a HARPS operator license (or to modify licence provisions for such trials).

19. Trials must be clearly distinguished from deployment. Insofar as trials are conducted in a limited and clearly geofenced area and satisfy stringent safety case requirements, there should be statutory provisions to enable the Secretary of State to exempt specified trials from the need for a HARPS operator license. This is no different to existing automated vehicle trials, which are required to abide by the Department for Transport's Code of Practice for AV Trialling. The Government's CAV PASS scheme could be purposed to assess each trial application and its safety case, and recommend to the Secretary of State if an exemption should be authorised. Requiring an operator licence just to trial HARPS would be a disproportionate measure that contradicts the Government's light-touch approach to regulation concerning testing and trialling.

Consultation Question 7

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?
- 20. We agree in principle with the proposal that applicants for a HARPS operator licence should be required to satisfy the above criteria. However, the definition and interpretation of the criteria must not be unreasonably onerous, but must be sufficiently comprehensible, unambiguous and plausible. In particular, criteria (2) and (3) require careful definition, whereas criterion (4) should be broadened to a suitable transport management system rather than focussing specifically on just a transport manager.
- 21. The capital and reserves requirement to operate large numbers of vehicles as HARPS may be too onerous for less well resourced operators. We suggest the threshold should either be lowered



or alternatives, such as but not limited to insurance or third party guarantees, should be considered to provide a competitive system for operators to procure finance based on how well they demonstrate their HARPS capability.

- 22. The requirement to have a stable establishment in Great Britain could also inadvertently hinder innovation. We think the requirement for operators to have suitable premises should be applied flexibly, as the size of some HARPS vehicles, or the nature of their operations, means they may not need to be kept on premises. The requirement for the operator to have one or more operating centres in the relevant traffic area should be considered and applied on a case by case basis. For example, it may be unnecessary to require an operator to have two separate operating centres in towns adjacent to each other, just because they are defined as two separate traffic areas, when one well resourced operating centre could adequately serve and respond to events in both areas.
- 23. Although discussed in paragraphs 4.100 and 4.101 of the consultation paper, it is unclear whether HARPS operator licence will only be issued for operation in traffic areas where there is proven uninterrupted cellular connectivity with adequate bandwidth and capacity. Clarity on this issue will benefit prospective HARPS operators.
- 24. Requiring a suitable transport management **system**, instead of merely a transport manager, to be in place to oversee operations is important in the context of HARPS. While transport services in the past may have relied on a transport manager that was a natural person, HARPS are likely to be run by a system comprising software components and a fleet management team dedicated to one deployment area. Therefore the professional competence to operate HARPS should be proven at a more holistic process, system and organisational levels, instead of merely at an individual level.

Consultation Question 8

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

- 25. To begin with, the transport manager's role/job description must be clearly and unambiguously set out, as is the case with other professional roles that involve a safety element. Apart from acquired formal qualifications and experience relevant to the role/job description, transport managers should not be able to self-determine their professional competence. They should instead be required to demonstrate adherence to a common core competencies scorecard by way of periodic assessments aided by regular training. This should also account for potential future advancements in automated driving technology that may require the transport manager to handle HARPS operations differently.
- 26. However, in the context of our response set out in paragraph 24 above, we suggest professional competence ought to be demonstrated at a system level, where outcome-based requirements should be set. This is to avoid stifling innovation and encourage organisations to find the best solutions in the early years of deploying automated vehicle technology and HARPS. HARPS operators should prove they meet the outcome requirements by providing a robust safety case, documentation and demonstration of their transport management system.



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"?
- 27. We agree in principle with the proposal that HARPS operators should be legally responsible for ensuring roadworthiness, which is similar to the responsibility of a user-in-charge as proposed in the previous consultation paper, and maintaining vehicles and operating systems. We think these are appropriate given operators are the legal entity running the services. A vehicle that is not roadworthy must never enter into service as a HARPS.
- 28. However, this proposal must also:
 - Allow for the possibility of contractual agreements and the implied shared responsibilities –
 between the HARPS operator, the automated driving system entity (ADSE) and/or the vehicle
 (hardware) manufacturer, assuming all three are different entities, to jointly maintain the
 vehicles and operating systems;
 - Consider the different capabilities of HARPS vehicles to self-diagnose and in the future potentially self-rectify problems;
 - Clarify such responsibilities in greater detail, as the previous consultation paper did with regard to the user-in-charge; and
 - Ensure the requirements are not overly onerous such that technical progress may be hindered.

Consultation Question 10

Do you agree that legislation should be amended to clarify that HARPS operators are "users" for the purposes of insurance and roadworthiness offences?

- 29. While we agree that HARPS operators should be clarified as "users" for the purposes of insurance and roadworthiness offences, we suggest consideration ought to be given to whether legislation should merely be amended to reflect this, or a new clause or addendum to legislation should be drafted so as to distinguish between traditional public service vehicles and HARPS.
- 30. However, as we set out in our answer to Question 9, this should not preclude the possibility of contractual arrangements where the HARPS operator, the ADSE and/or the vehicle manufacturer share responsibilities, particularly where roadworthiness is concerned.

Consultation Question 11

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?
- 31. We agree in principle with the above.



- 32. Accident reporting requirements should be stipulated in a clear and intelligible manner that facilitates legal certainty while not hindering technological advancement or service innovation by creating overly onerous obligations. Complying with such requirements must be technically feasible, and should consider intellectual property rights, trade secrets, data protection and antitrust laws.
- 33. Accident reporting requirements should be spelled out in greater detail, for example, the types of near misses apart from those that are "calculated to affect the safety of occupants or others using the road". Where severe accidents occur, emergency services ought to be notified immediately, not unlike the eCall system in passenger cars, and there should be a framework for HARPS operators to cooperate with emergency services and investigators accordingly.
- 34. Information on accidents and near misses that are reported should be stored in a central database, where anonymised data can be accessed by relevant and authorised stakeholders (e.g. HARPS operators, ADSEs and vehicle manufacturers) so that the learnings can be shared and future risks mitigated for the greater good.
- 35. With regard to HARPS operators should take reasonable steps to safeguard passengers from assault, abuse and harassment, we agree with the suggestion in paragraph 4.123 of the consultation paper that this will need to be developed in the light of experience. Although this issue is probably most pertinent in ride-sharing (as opposed to single occupancy HARPS), this will almost certainly require close collaboration between HARPS operators and the police to implement acceptable solutions for safeguarding passengers from criminal activities. For example, where CCTV is used, a balance must be struck between reasonable monitoring and the privacy of HARPS users.

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)?

- 36. We think context is crucial in any additional reporting requirements, and as such the application of this proposed requirement must be more nuanced and better defined. For example, the automated driving system intermittently failing to recognise and respond to traffic signals and situations critical to national security are both untoward events, but each should clearly warrant different reporting protocols. In any case, it may be too soon to be too prescriptive on additional reporting requirements. Insights on these will only emerge when there are substantial trial, pilot and early stage deployment activities.
- 37. As implied in paragraph 4.115 of the consultation paper itself, merely reporting miles travelled without an appreciation of the operational design domains may end up with a situation similar to California, where statistics on miles travelled without untoward events could be skewed by travelling in relatively unchallenging domains, e.g. wide roads without vulnerable road users.

Consultation Question 13

Do you agree that the legislation should set out broad duties, with a power to issue statutory guidance to supplement these obligations?



38. Legislation should set out duties in a manner conducive to legal certainty and that is sufficiently detailed. A HARPS operator cannot sensibly account for the full requirements of a use case if there is insufficient understanding of its legal obligations.

Consultation Question 14

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?
- (2) withdraw the licence of an operator who failed to give price information?
- 39. In order to avoid any potential anti-trust issues, guidance should be limited to how consumers can/should be informed about fares in a clear and simple way such that may enable consumers to make fare comparisons between services and thereafter make informed decisions. This, however, is akin to stating the obvious. Communication of pricing to consumers is already commonplace in ride-hailing services today, where the approximate fare is shown to the consumer on a smartphone app, allowing the consumer to make an informed decision.
- 40. However, a more important matter is to clearly define the role of a HARPS operator **licensing** agency and distinguish it from the role of existing agencies, such as the Competition and Markets Authority (CMA), that regulate the market insofar as issues on pricing and competition compliance are concerned. As we pointed out in paragraph 47 of our response to the previous consultation, these activities can be adequately performed by the CMA.⁴ Duplication of roles and responsibilities is highly undesirable, as it creates confusion and economic inefficiencies. The operator licensing agency may wish to revoke the licence of a HARPS operator upon advice from the CMA should the **latter's** investigation find the operator to have severely infringed regulation.

Consultation Question 15

Who should administer the system of HARPS operator licensing?

41. HARPS operator licensing should be administered by an independent organisation whose standing must not be compromised by close association with any of the HARPS operators. Traffic Commissioners could be a possible candidate.

Consultation Question 16

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

42. Freight will require separate analysis that draws in part on the provisional proposals set out in this consultation paper. This is because a number of HARPS proposals are irrelevant, or will have to

⁴ https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2019/06/AV145-Society-of-Motor-Manufacturers-and-Traders-SMMT.pdf



be modified, for freight, e.g. safeguarding of passengers, communication of pricing, role of transport managers.

Privately-owned passenger-only vehicles

Consultation Question 17

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?

43. We agree with this proposal. It is likely that with the onset of HARPS exclusive use of vehicles may become more popular on a subscription-based model instead of conventional private ownership. This is envisaged as people may not sufficiently understand the operation of highly automated vehicles of this type to be confident enough to own them outright, but may still value the convenience, personalisation and, in some cases, luxury that high automation of this type offers. Moreover, any reservations regarding the perceived hassle of swapping vehicles every six months or less for exclusive use can be mitigated by the fact that it is easier to do so since the vehicle is capable of operating on its own between destinations. In other words, the involvement of the user is reduced when it comes to swapping a vehicle with another. That said, the timescale of six months could be made more flexible and may require further consideration.

Consultation Question 18

Do you agree that where a vehicle which is not operated by a HARPS licence-holder is authorised for use without a user-in-charge, the registered keeper should be responsible for:

(1) insuring the vehicle;

- 44. This will depend on the model of "ownership". If the registered keeper owns the vehicle outright or has the vehicle on a long-term lease, as many people still do with conventional cars today, it is sensible for the keeper to be responsible for insuring the vehicle.
- 45. If the vehicle is held on a subscription basis, or a short-term lease of six months or less, it might be more efficient for the keeper to pay a fee to the subscription service provider, or lessor, towards insurance. In any case, most subscription-based models involving conventional cars today already include insurance. Subscription-based passenger-only highly automated vehicles for exclusive use are expected to follow a similar arrangement.
- 46. If the vehicle is held on a rental basis similar to current rental services provided by companies such as Hertz, responsibility to insure the vehicle may entirely depend on the duration the customer has committed to renting the vehicle.

(2) keeping the vehicle roadworthy;

47. We agree with this.



(3) installing safety-critical updates;

- 48. The ADSE should determine what is safety-critical software update, not the user, the HARPS operator or any third parties for that matter. The responsibility for installing safety-critical software updates should be split between the ADSE and the registered keeper.
- 49. In systems where safety-critical software updates are programmed to be automatically downloaded and installed when suitable and adequate connectivity is detected, the keeper has virtually no responsibility for download or installation. In other systems, the keeper could be made responsible for triggering the update, for example by authorising the update process to begin. This assumes it is not an onerous process, but sufficiently simple and intelligible to be executed by the keeper. The ADSE should then be responsible for ensuring that the update has been correctly installed, otherwise the ADSE will prompt the keeper to begin the process again until installation is successful.
- 50. The above assumes safety-critical software updates will be downloaded over-the-air (OTA) in the future. Until OTA software update becomes the norm, the vehicle may be required to visit an operating or service centre for safety-critical software updates to be downloaded and installed by way of a tethered cable.

(4) reporting accidents; and

- 51. Insofar as the vehicle is not operated by a HARPS licence-holder and is authorised for exclusive private use without a user-in-charge, we agree that the registered keeper should be responsible for reporting accidents.
- 52. However, depending on the ownership model or leasing arrangements between the lessor and lessee, the availability of remote supervision or assistance as part of the contractual obligations of the lessor should not be ruled out. In such arrangements, we default to our views as set out in our response to Question 11.

(5) removing the vehicle if it causes an obstruction or is left in a prohibited place?

53. This will depend on the circumstances in which the vehicle needs to be removed and the type of vehicle itself. In the previous consultation we agreed that the user-in-charge is responsible for removing the vehicle if it causes an obstruction or is left in a prohibited place, which, given the vehicle has a steering wheel and pedals, should not be impossible. However, in the context of passenger-only highly automated vehicles, it is likely some of these will not have a steering wheel and pedals. It may therefore be almost impossible for the keeper to remove the vehicle without assistance from or intervention by either the lessor, a remote supervisor of some form or even the ADSE.

Consultation Question 19

Do you agree that there should be a statutory presumption that the registered keeper is the person who keeps the vehicle?

54. The concept of registered keeper in the context of privately-owned, or exclusive-use, passengeronly highly automated vehicles is by no means straightforward and is highly dependent on the "ownership" model associated with the vehicle.



55. The registered keeper can only be presumed to be the person who keeps the vehicle if the person "owns" the vehicle outright, or has taken out a long-term lease of the vehicle. In the context of a vehicle subscription service, the vehicle provider (which could also be known as the lessor, or in certain cases the vehicle manufacturer) is usually the owner and registered keeper, but is certainly not the person who keeps the vehicle, who is normally the customer. This is because the customer in this instance may receive a new vehicle every six months or less; requiring the customer to register as the official keeper at such frequent intervals defeats the proposition of convenience offered by subscription services. Statutory regulation could be phrased in a way that is more differentiating and takes account of these different possibilities.

Consultation Question 20

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?
- 56. We agree with the above. In the interest of transparency and lessee protection this should be the case. A lessee should never be responsible unless informed otherwise. That said, as we set out in our answers to Questions 18 and 19, these roles and responsibilities could in certain arrangements be shared, but should in any case be clearly explained in the leasing contract. Services will emerge where providers and/or leasing companies seek to deliver propositions that relieve the customer of the pain and hassle of ownership.

Consultation Question 21

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?

- 57. While the notion that registered keepers should have in place a contract for supervision and maintenance services with a licensed provider is sound and sensible, it is unclear if this must be written into legislation.
- 58. It would anyway be expected that a privately-owned, or exclusive-use, passenger-only highly automated vehicle will include supervision and maintenance services, which are **normally written into contracts**. This is particularly the case with vehicles offered as a subscription service, as we set out in our answers to the previous three questions. For example, without supervision it could be impossible for users of such vehicles, some of which will not have a steering wheel and pedals, to remove them if stranded in a prohibited place. In any case, it is expected that without such contracts the registered keeper will encounter difficulty in obtaining insurance cover.
- 59. With regard to maintenance, the contracts should be specific, such as whether they cover only tyres and running gears, or also software. Unlike supervision contracts, which are likely to be offered by one entity at a time, there should be flexibility to choose from multiple maintenance providers, just as registered keepers of private passenger cars today have the right to access services provided by franchised dealers or the independent aftermarket.



We welcome views on whether peer-to-peer lending and group arrangements relating to highly automated passenger-only vehicles might create any loopholes in our proposed system of regulation.

60. Although we are unclear if the proposed system of regulation might create any loopholes for peerto-peer lending and group arrangements, we take the view that the limits of such arrangements should be delineated in the law.

Consultation Question 23

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.

- 61. While we agree that consumers should be informed about the ongoing costs of owning automated vehicles, along with other salient information related to using automated vehicles including HARPS, we **disagree** with the idea that the safety assurance agency proposed in the previous consultation paper should be tasked with ensuring this.
- 62. The principal reason behind the proposal to create a new safety assurance scheme and agency is to authorise automated driving systems installed either as modifications to registered vehicles or in small series vehicles. Centralising both the pre-deployment approval and post-deployment regulation of consumer affairs and market surveillance under one unitary authority creates confusion and blurs the focus of this agency. These responsibilities can be adequately performed by existing agencies, namely the Advertising Standards Authority in respect of regulating consumer and marketing materials and the Competition and Markets Authority in respect of market surveillance. In any case, subjects such as costs and consumer affairs are clearly **outside** the remit of the proposed safety assurance agency, which should fully focus on the key issue within its remit safety.
- 63. It is also expected that in due course there will be no shortage of consumer organisations and automotive/transport/mobility publications providing consumers with information about the ongoing costs of owning automated vehicles or using HARPS, just as there are today on the running costs of passenger cars of various propulsion options.

Accessibility

Consultation Question 24

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.

64. Accessibility is of major importance and is one of the potential key benefits of HARPS. An SMMT-commissioned report in 2017 found that automated vehicles have the potential to reduce social



exclusion significantly. Almost half of all people with mobility-related disabilities in the study said automated vehicles would allow them to pursue hobbies outside of home, while two-fifths said they would benefit from having better access to healthcare. 47% of older people surveyed said automated vehicles would make it easier for them to fulfil basic day-to-day tasks such as grocery shopping.⁵

- 65. Regulation should not impose inappropriate technical and operational requirements that could hinder the introduction of HARPS. For example, instead of requiring all HARPS to have staff on board with non-driving responsibilities to focus on providing customer care, regulation should be flexible enough to account for the deployment of a mixed fleet where some vehicles will have staff on board to cater for special customer access needs. HARPS offerings could be personalised a special disability access option could be available on the vehicle configurator app at the ordering stage. Furthermore, not unlike the Motability Operations model, some emerging HARPS propositions may exclusively serve the special access needs segment of the market.
- 66. Regulation, where necessary, could focus on improving accessibility for the most relevant HARPS use cases (e.g. access to healthcare, workplace, transport hubs) and making these operationally attractive for HARPS operators to address. For example, not unlike taxi regulation in London, some HARPS in a mixed fleet could be specially designed for ease of getting in and out of the vehicle and seating comfort for people with wheelchairs.

Consultation Question 25

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?

67. HARPS are seen as a solution to a variety of mobility problems, thus insofar as HARPS are available as a service for the public it is only right that protections against discrimination must be upheld. However, "duties to make reasonable adjustments" must be proportionate. For example, as we pointed out in our answer to Question 24, we do not think all HARPS should be required to cater for wheelchair access. The needs of all customer segments ought to be carefully balanced.

Consultation Question 26

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?
- 68. We agree that the challenges posed by the absence of a driver need to be addressed and believe a "whole journey" approach, as discussed in the consultation paper, is sensible. However, we do not think regulation is necessarily the best way to address all these challenges. Over-regulation, particularly in areas where there is unlikely to be market failure or where healthy commercial competition will adequately address these challenges, may only hinder the deployment of HARPS and the development of the HARPS market.

⁵ PwC Strategy& (2017), Connected and Autonomous Vehicles: Revolutionising Mobility in Society.



- 69. Furthermore, the likelihood of different types of commercial propositions addressing the articulated challenges should not be overlooked. We have already emphasised the mixed fleet approach in answering Question 24. In the mainstream HARPS market, some HARPS vehicles in a mixed fleet will very likely include the presence of staff to help with boarding and alighting as well as with luggage and wheelchairs. Whether the staff will be in the vehicle or stationed at designated departure and arrival points is irrelevant, as long as they are available at the point of need. Some HARPS operators offering a premium service are very likely to include assistance with luggage, boarding and alighting in their proposition anyway. It is also expected that HARPS operators serving the mobility-restricted users segment of the market will likewise very likely include similar assistance in their proposition. Regulation should only be seriously considered where there is **market failure**, for example if HARPS operators clearly neglect to provide access assistance in rural areas despite a clear and demonstrable need for it.
- 70. We agree that providing reassurance and support in the event of disruption and accessible information about the journey is absolutely important for positive customer experience. This cannot be more stark than in the journey disruptions experienced by long-suffering rail passengers in England, where the top dissatisfaction has consistently been the lack of information and communication from rail and/or station staff. Regulation, where necessary, should focus on requiring adequate and consistent safety and operational (status of disruption) messages to be communicated in an accessible way to HARPS users, rather than on the choice of communications technology or interface.
- 71. In terms of journey information, some modern mobility services, notably ride-hailing, already provide real-time information on an app, such as the location of the vehicle ordered. Other modern mass transit services in the UK and Europe also provide real-time journey information. As HARPS will essentially be a digitally enabled service, similar information provision can be reasonably expected.

We seek views on whether national minimum standards of accessibility for HARPS should be developed and what such standards should cover.

- 72. We agree with the suggestion in paragraph 6.108 of the consultation paper that a balance needs to be struck between ensuring a degree of consistency of accessibility for HARPS and allowing new solutions to be tried. As such, we support the idea of developing guidance, or a code of practice, that includes standard layouts.
- 73. However, these should not be imposed on all HARPS vehicles, as there will be some HARPS in a mixed fleet that will specially cater to passengers with disabilities or special needs. Alluding to our answer to Question 24, minimum accessibility standards covering the ease of getting in and out of the vehicle, seating comfort and special access to communication with operating centre staff should apply to only such vehicles.



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.

- 74. Data that is collected, retained and processed should be relevant, proportionate and based on justifiable need, and must comply with legal requirements. Insofar as personal data is concerned, data should be retained for only as long as it is necessary to fulfil the purposes for which it is collected, and customer consent must be obtained for sharing the data with third parties. We do not think data on passengers' age is relevant or its collection justifiable for the delivery of HARPS. Ride-hailing services today do not require customers to reveal their age when registering on an app. We are unclear why there is an implicit assumption that it should be any different for HARPS.
- 75. However, it is logical that data on usage by disabled passengers will naturally be collected as a direct result of passengers ordering and completing trips using special access HARPS vehicles. In addition, it would not be unusual for HARPS operators to conduct a feedback survey asking disabled, as well as ordinary, passengers their experience using the service. Such data can yield useful insights to improve operators' understanding of HARPS usage by disabled people, leading to improvement in services to better suit passenger needs. For example, information that could be useful may include:
 - Type of disability, although it must be ensured that the collection of such data is legal under GDPR;
 - Ease of booking the service;
 - Ease and clarity of pre-boarding procedures and physical access;
 - Journey experience, including level of comfort without a human driver, and the general psychological comfort and sense of safety;
 - Ease and clarity of understanding of real-time journey information and alighting the vehicle;
 and
 - Experience with staff assistance, if requested and/or offered.
- 76. However, reporting the data to third parties is another matter. Passengers must first consent to the sharing of their data. The onus should be on regulators, or any third party wishing to access the data, to justify beyond reasonable doubt why HARPS operators must report data on usage by older and/or disabled people. To the extent that data that is required to be shared can be used to identify a natural person, personal data protection implications must be considered.

Regulatory tools to control congestion and cruising

Consultation Question 29

We seek views on whether the law on traffic regulation orders needs specific changes to respond to the challenges of HARPS.

77. Digitalisation of Traffic Regulation Orders (TROs) is a welcome change, mainly for the purpose of improving efficiency. Digital TROs make the entire process of developing and implementing TROs less cumbersome and their discovery by any relevant parties far easier and quicker. In the context of HARPS, examples may include special or temporary boarding and alighting zones for HARPS vehicles, and the length of roads permitted for HARPS to platoon.



78. However, our understanding of the TRO Discovery Project is that it will at this stage produce no more than just a central catalogue. It is important for the project to progress all the way towards digitalising TROs and making them available on an online platform.

Consultation Question 30

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?

- 79. While we support the view that local transport management and parking charges are matters for local authorities and should be highly dependent on the unique characteristics of each individual local area, we think it is not strictly necessary to incentivise parking for HARPS in order to avoid empty cruising.
- 80. The conundrum of empty cruising is no different for HARPS than for manually driven taxis and private hire vehicles today indeed the only difference is HARPS will not have a driver. Whether it is HARPS, a taxi or a private hire service, it is a commercial imperative for operators to match available vehicles to the nearest customer as frequently as possible. Where HARPS are offered using electric vehicles, empty cruising serves only to drain the battery more quickly and reduces the available range for carrying passengers. The optimisation algorithms on the operator's platform will therefore ensure empty cruising is minimised, as empty cruising effectively means increased inefficiency and lost business.

Consultation Question 31

We seek views on the appropriate balance between road pricing and parking charges to ensure the successful deployment of HARPS.

- 81. While we are not able to comment on the appropriate balance between road pricing and parking charges, we urge caution when these measures are considered for HARPS deployment.
- 82. One of the fundamental benefits of HARPS deployment is the anticipated reduction in the use of private cars in congested cities or urban areas at peak hours. In order to persuade people to leave their private cars behind, HARPS must be both convenient and affordable. If the combined effect of road pricing and parking charges is unattractive HARPS fares, it should not surprise local authorities if some people eventually resort to driving their private cars.
- 83. It would also seem unfair if a combination of road pricing and parking charges are imposed only on HARPS, as if only HARPS could potentially cruise empty and/or create congestion.
- 84. Furthermore, the history of local politics and policy implementation is riddled with siloed thinking and actions. Measures associated with the implementation of Clean Air Zones hitherto are a case in point. Road pricing and parking charges are the prerogative of local authorities. The lack of uniformity, however, may inadvertently create certain local markets that are more economically attractive for HARPS deployment than others.



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.
- 85. We do not see a reason why there should be road pricing schemes specifically for HARPS. As we alluded to in our answer to Question 31, HARPS should not be singled out for potentially cruising empty and/or creating congestion.

Consultation Question 33

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? If so, how long should the period be?

- 86. We agree with this in principle on the grounds of safety and on the basis that this is **not quantity restrictions which place a cap** on the number of vehicles available to all operators following full deployment, as explained in paragraph 7.96 of the consultation paper, but rather the equivalent of a probationary period. The agency could then increase the number of vehicles allowed once the operator is in a position to show that the service could be managed safely.
- 87. However, we question how the agency might be sufficiently knowledgeable of local areas to determine the right number of vehicles permitted under a given operational design domain (ODD). ODD is a developer- or vehicle manufacturer-defined terminology, and must not be confused with geographic areas. A simple ODD may be single-direction dual carriageway with clearly marked lines in urban environment, with the presence of vulnerable road users, and kerb and pavement on both sides. However, the same ODD may be found in two different locations with very different profiles and features. One has disproportionately high number of elderly and young road users, but is located in the driest and sunniest region of the country. The other has far fewer elderly and young road users, but is located in the wettest part of the country. Limiting the number of vehicles in a given ODD in the first instance may discriminate between geographic areas in terms of HARPS deployment and inadvertently prevent operators deploying in what would actually be perfectly suitable local areas.

Consultation Question 34

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

88. We agree. Quantity restrictions distort the market and work against the interest of consumers, as they will result in reduced availability, increased waiting times, reduced scope for downward competitive pressure on fares and reduced choice.



Integrating HARPS with public transport

Consultation Question 35

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?

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

Consultation Question 36

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.

90. There might be obligations of the conventional bus driver which either cannot be performed or is no longer necessary in HARPS, unless ordered by the passenger (e.g. staff assistance).

Consultation Question 37

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.
- 91. Yes, this is reasonable. Such service is to all intents and purposes a local bus service, except that there is no driver.

Consultation Question 38

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.

92. While there is merit in participating in joint marketing, ticketing and information platforms, we do **not** think this should be made a requirement by way of a new statutory scheme. Some operators would prefer to maintain the exclusivity of interface with customers via their own app. There is no requirement for all ride-hailing operators today to participate in joint marketing, ticketing and information platforms. HARPS should not be treated any differently.



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