## Automated Vehicles: Consultation Paper 2 on Passenger Services and Public Transport

Once again we congratulate the Law Commissions for a very thorough examination of the issues surrounding highly automated passenger service vehicles. There are four points we would emphasise before diving into the specific consultation questions posed.

First, we should not be contemplating the introduction of such vehicles unless and until their safe operation is assured by the creation of an appropriate type-approval and testing regime which is, as of today, something of a work in progress.

Second, we are necessarily having to apply some assumptions and some imagination to the sort of passenger services that might emerge as autonomous technology develops, and it could turn out to be quite different to what we forecast based on past experience (as the Commissions acknowledge).

Third, we would strongly suggest that if the learning cycle envisaged by the diagram on page 10 is to be realised it will require the creation of some form of collision investigation authority, such as we are currently exploring for the Department for Transport in our Road Collision Investigation Project (<a href="https://www.racfoundation.org/collaborations/road-collision-investigation-project">https://www.racfoundation.org/collaborations/road-collision-investigation-project</a>)

Fourth, we'd agree with the Government Office for Science (page 25) that the reasons why "private car use per capita has lessened or plateaued in multiple countries and in some large urban areas" are not well understood. Our soon-to-be-published analysis suggests that the number of young people gaining a full driving licence may be on the rise (after a sizeable fall) and that young peoples' decisions may be as much a response to the economic constraints they face as they are to a positive lifestyle choice.

We are very happy to discuss any of the issues raised by the Commissions' consultation.

Q1 – we see the logic of there being a single, national system of operator licensing for HARPS, and

Q2 – that there should be a national scheme of basic safety standards for HARPS operation,

but would say that the national framework is likely to require regional/local machinery to put the framework into effect.

Q3/Q4 – we agree that in the highly automated world the operation of a vehicle carrying passengers for hire or reward should be regulated through a licensing system, and that the definition of 'hire or reward' should be drawn sufficiently widely to encompass new forms of service that may emerge.

Q5 – we would be very nervous of there being exemptions from licensing for community or other services insofar as those regulations specifically apply to the safe operation of the highly automated vehicle. It is possible that a bespoke licensing regime might apply to micro- and

volunteer-operated services which apply the same duties in respect of vehicle operation but different responsibilities to other aspects of business operation.

Q6 – We would refer back to the first point we made above – we are properly concerned here with the regime applying to commercial deployment of HARPS after they have been found roadworthy. It seems unlikely that trials will still be running after an appropriate type approval and licensing system has been created, or that the operators of such trials should need exemption from a licensing system that adequately protects passenger safety (in contrast to the current operator licensing scheme that does not envisage highly-automated operation).

Q7/Q8/Q11 – We see no reason in principle why the general requirements of the current operator licensing system should not be carried over into HARPS licensing. As for the professional competence of the HARPS operator we see attractions to requiring a safety case rather than a specific personal professional competence - the architecture of the safety regime applying to the national railway might offer a useful model to draw from.

Q9/Q10/Q11 – The HARPS operator must carry the legal liability for the roadworthiness and safe operation of its vehicles (whether it owns or leases them). There remains a challenge in testing the adequacy of facilities for maintaining HARPS vehicles and their operating systems, which might be answered at least in part by the work to develop an appropriate type approval regime for automated operation.

Q12 – rather than rely on the operator to report on 'untoward events' we would prefer a presumption of full, real-time operational transparency, within which operators would be required to volunteer explanations for any departures from the norm.

Q13 – We'd generally agree that it is better to avoid over-specification in primary legislation which is, by its nature, harder to amend than implementing regulations, particularly in circumstances where, as here, the shape of future services is uncertain.

Q14 – we offer no view on pricing of services or the commercial aspects of HARPS operation.

Q15 – the only view we'd offer on who should administer the HARPS licensing regime is that it is probable that at least some HARPS operators will also be running 'conventional' passenger services, so the DfT would be best advised to look at the future architecture of 'O' licensing in the round, rather than HARPS regime (even if the conclusion is that the new regime should sit separate from the existing system).

Q16 – Insofar as the HARPS licensing regime focuses on the responsibility for roadworthiness and safe operation of HARPS vehicles we see a clear read-across to freight operations.

Q17Q18/Q19 – Whether those making "passenger-only" vehicles available to the public for sale or lease should be licensed as Highly Automated Road Passenger Services (HARPS) operators' is possibly the most interesting question that the consultation poses, since it goes to the heart of how far the individual citizen can reasonably be expected to ensure the safe roadworthiness of a highly automated system. The answer must depend on how confident we

can be that the highly-automated system that operates the vehicle will continue to operate safely so long as it is maintained and operated within the correct, specified regime. As of today this looks to us at least to be uncertain, and therefore an ongoing liability for the supplier of the vehicle would seem appropriate, and even a six-month 'ownership' cut-off a somewhat arbitrary and unnecessary element. This might necessitate revisiting the statutory presumption in respect of the definition of 'registered keeper' and the duties that follow from that definition.

Q20 – we'd suggest that the answer to the question of lessor liability, and to several other questions posed in this consultation, is the adage that risk should be managed by those best placed to manage it. Ergo, there are obligations it would be sensible for the lessor to transfer to a lessee, which might form part of the contractual obligations of the lease, but for highly-automated systems there are likely to be safety-critical system elements which neither the lessee nor a traditional lessor could reasonably be expected to carry.

Q21 – thinking ahead to a time when highly-automated vehicles enter the wholly-privately owned used-vehicle market, it would seem prudent to envisage a regulation-making power to require registered keepers to have in place a contract for supervision and maintenance services with a licensed provider, though we wouldn't underestimate the challenge involved in ensuring compliance, or with dealing with circumstances where the original designer/producer of a vehicle or a vehicle operating system has ceased trading.

Q22 – we offer no view

Q23 – 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, in the light of pressures on the existing trading standards regime must depend in part on the resourcing of that body. Could such a duty be discharged? Could the information be folded into the existing vehicle labelling regime that covers emissions and fuel economy?

Q24/Q25/Q26/Q27 — Providing accessibility for mobility-impaired people is a big issue and it is right that the Commissions should devote a considerable amount of space in its consultation to tease the various strands apart. The starting point should be that the obligations for HARPS should be analogous to those for PSV licence holders, but with the additional aspect that there is potentially no human 'driver' on hand. As the short report we funded from the Royal College of Art in 2018 revealed autonomous, highly-automated vehicles will only benefit mobility impaired people if those people are readily able to access the vehicle, and for some that means the mobility challenge begins with the challenge of leaving home, not just of immediate access to a vehicle ( https://www.racfoundation.org/wp-

content/uploads/Inclusion and empathy Meeting special mobility needs in age of autono my RCA June 2018.pdf ) The report also promotes the value of co-design. We would be happy to discuss this further, but would suggest the DfT's Disabled Persons Transport Advisory Committee would be the best placed to assist with further thinking.

Q28 – it is very hard to say at this stage whether it would be appropriate for HARPS operators to have a data reporting requirement regarding usage by older and disabled people since we

cannot say how readily available such data might be or what reporting system (at what cost) might be involved. We will be interested to see others' responses to this idea.

Q29 – the question of whether the process for making Traffic Regulation Orders needs to be changed to accommodate HARPS depends in part on the system architecture that informs the highly-automated vehicle's movements – clearly the vehicle needs to 'know' where it may or may not travel and dwell. This probably adds to the pressure for digitisation rather than, of itself, requiring it.

Q30 – based on our current working assumptions about the commercial deployment of HARPS we would expect the Road Traffic Regulation Act purpose to achieve "the expeditious, convenient and safe" movement of traffic, alongside the duty in the Traffic Management Act 2004 to make sure traffic moves freely and quickly on their roads and the roads of nearby authorities, to be sufficient, though this should be kept under review as new business models are developed.

Q31/Q32 – the question of whether road pricing in some form could be introduced as a way of securing the desired policy outcome from the deployment of HARPS needs to be taken forward in the context of a wider debate about motoring taxation as the Treasury's income from fuel duty declines. Highway authorities already have considerable powers to place restrictions and impose charges on vehicle movements to achieve environmental and traffic outcomes. Q33/Q34 – if it seems likely, as some predict, that removing the cost of a human driver together with the associated cost reductions of mass production in turn makes mass-scale deployment of HARPS then it might indeed be preferable for the agency that licenses HARPS operators to have the powers to limit the number of vehicles any given operator can use within a given Geographically-defined operational design domain rather than relying on competition to winnow out the services. It is less clear whether this should be for an initial period, as proposed, or on a standing time-related basis (i.e. the presumption might best be for an ongoing restriction of varying volume, rather than a simple time-limited restriction). Q35/Q36/Q37/Q38 – we offer no view on bus regulation, beyond the expectation that the regime for HARPS should match the obligations placed on driven buses, which is itself likely to be the subject of review and reform in the coming years.

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