

Highly Automated Road Passenger Services (HARPS) Consultation Paper 2

The Law Commission: Automated vehicles: passenger services and public transport. A second joint consultation paper.

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Responses are provided here to each of the individual Consultation Questions

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?

The HARPS is a totally new concept having the potential to bring a great many innovations to the society and economy. Although it is not expected without any challenge to the licensing authorities, users and operators, its benefits would outnumber the disadvantages or drawbacks if elaborated with right policy decisions.

Dealing with the HARPS under a national system of operator licensing is of particular benefits denoting a right policy decision. It would minimise would-be divergences across the country and make the HARPS-based transformation more effective and smoother particularly considering that it will mainly build on the PSV regime and regulations.

As implied above and in the Consultation Paper, HARPS will open a new era for the UK transport market. Having said that, the local and dynamic needs surrounded by HARPS should be harmonised with and responded well by the national level PSV-inspired policies. After being licenced, the HARPS operators will be regulated for many reasons, e.g. record keeping, maintenance, parking restrictions, and at this point, decisions of other actors, e.g. local authorities, will have a great role in this new era. Given this fact, these actors' views and practices need to be taken into utmost account during and after the introduction of the HARPS, in relation to licensing and other regulatory issues which may impact licensing terms and conditions.

Consultation Question 2 (Paragraph 3.86):

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

Having a national regulatory perspective does not mean having a fully-fledged national regulatory structure which the HARPS operators are to be subject to. Considering this fact as well as the need to lessen the fragmented standards/protocols in a sensitive area like autonomous cars, introducing minimum safety standards with regard to the HARPS seems to be essential for running the whole system.

Related to this point, it should be born in mind that the autonomous cars' instigations to the unexpected traffic events would differ in various HARPS vehicles produced by different manufacturers. That is why, if not all the diagnostic capabilities but principally potential reactions, e.g. when they are configured to stop safely, in unexpected traffic events e.g. congestion need to be transparent to the policy makers.

On the other hand, HARPS system will depend on many factors e.g. data from the users and roads, which undoubtedly have an impact on the safety assurance. Given the need to a holistic perspective regarding regulation of the HARPS, the applicable rules and standards, e.g. minimal risk conditions, would better be determined not at a certain time point but throughout the process within which all the actors are to be involved.

Having said that, the concept of 'security by design' would also need to be clarified alongside the would-be standards that are envisaged here. More explicitly, should the basic standards be set out in the first place (if not immediately), this would help determination of the contours of a potential duty concerning 'security by design'.

After all, the principle that basic safety standards need to be adopted is of high importance for the prospect and sustainability of the HARPS. Notwithstanding, a principle for 'transparency' regarding the safety assurance could be established in the first place, which would follow more detailed rules to be brought out from the collaboration of the relevant parties.

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)?**

While HARPS is transformative in nature, the role it will play is going to build on the current system of transport rules and regulations. Potential benefits would increase should harmonization of the legacy rules take place with the HARPS-led innovations. Well-established criteria based on the PSV legislation would thus lay out a sustainable ground for HARPS. On this ground, issuing guidance would be crucial element of rule making in order to fill any gap and interpret the legacy rules for the HARPS.

As there will be no fare regulation intended for the HARPS, the legacy ‘hire and reward’ system seems to be sustainable in the future. Relevant case-law offers satisfactory and well-developed criteria to be applied to this emerging context. By this means, there would be a harmonised structure under which new rules and innovations could be cultivated, whereby the distinctive features of HARPS could be taken into account based on the holistic body of knowledge and practice.

On the other hand, although there seems to exist a distinction between monitoring and supervision (p. 60), there is no clarity regarding which of these concepts would better fit to the HARPS. As detailed in the Consultation Paper, many manufacturers aim to supervise the HARPS, most often from a remote camera; however, uncertainty still exists as to whether and to what extent these remote cameras will function having a supervisory role – will they intervene further to ensure the autonomous cars stopping safely? Given this fact, which interventions are foreseen by the car producers need to be clarified in the definitional framework of HARPS.

Consultation Question 4 (Paragraph 4.34):

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

Given our position and remarks regarding the established PSV rules and their broadly applicable nature to the HARPS, the existing concept of “carrying passengers for hire or reward” seems to be sufficiently clear.

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.

It seems in the first instance that exemptions would not fit to the HARPS which requires more sophisticated technical qualifications, software and management skills. Notwithstanding, considering that HARPS will be an element of the whole transport market in the future and needs to build on a sustainable long-term vision, there might be need to exemptions in the future. This prospect appears to be more compelling given the scenario that the conventional transport vehicles are being replaced with the HARPS increasingly. Hence, along the lines with the proposal for the remote-controlled trials, a

statutory provision would be ideal for the potentially application of the exemptions for community or other services in the HARPS context.

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).

Conducting remote-controlled trials is of paramount importance for the prospect and success of the HARPS particularly for the unknown nature of supervision and monitoring as well as safety assurance. As these need to be developed and well tested before deployment of the autonomic vehicles, Secretary of State having the statutory power as to exempt specified trials for HARPS operators seems to be a necessary step while introducing the HARPS.

It should also be noted that public confidence might be better served by trials being authorised under some subset of the operator licensing requirements, even if this is set out within the Secretary of State's statutory power.

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?**

Adopting the PSV rules and criteria as the baseline fits well to the HARPS context. Given the well-developed nature and scope of PSV criteria and the applicability of such criteria for autonomous/driverless vehicles, there seems no serious challenge against this adaptation. On the other hand, item 3 should be expanded to include ability to manage the necessary communications for monitoring and control over the intended area of operation. Considering the potential/actual gaps or grey areas that would arise out of the HARPS context, the Secretary of State would better issue guidance and/or directions to clarify such areas that would need interpretation.

Consultation Question 8 (Paragraph 4.73):

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

The PSV-based condition that operators should have a transport manager could be moved to and accepted within the HARPS context where comparable concerns are valid. Although the concerns have a widening nature in this new context, it is undoubted that transport managers need to demonstrate professional competence in running an automated service.

Given the emerging nature of this market, not only organisational or leadership skills but also basic understanding of the AI and software programming would need to be demonstrated as a basic skill to be covered by the transport managers. On the other hand, the demonstration of professional competence for having a good reputation seems not fitting to this context as explained in the Consultation Paper (p. 71).

Last not but least, a transport manager working within the context of HARPS should be able to demonstrate understanding of the principles of safety as applied to HARPS and further to demonstrate competence in assessing the compliance with those emerging standards.

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”?

As many PSV requirements generally well fit and could be adapted to the HARPS context, there seems no harm doing the same for the issue of maintenance. Given the fact that autonomous/driverless vehicles will rely on the software capabilities of the car manufacturers as well as management skills of the operators, collaboration between these two parties is of utmost importance for the safety and maintenance of the HARPS. Thus, alongside the requirements for the adequate facilities and for maintaining the vehicles, there might be a requirement for a ‘service level agreement’ between the stakeholders that need to be met concerning ‘maintenance’ similarly with the issue of safety assurance. In case these conditions are established at the industry level, HARPS operators could be more readily acknowledged as ‘user’ for the purposes of insurance and roadworthiness offences.

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?

Please see the answer above (to the Question 9).

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?

In general, the envisaged duties for the HARPS operators are sufficient and flexible enough. Principally, already functioning PSV requirements would be adapted for the HARPS operation incorporating the conditions for insurance, supervision, reporting accidents and taking reasonable steps to safeguard passengers from assault, abuse or harassment.

From a broader perspective, it must be noted that obstructions, emergency stops or non-routine instigations of the HARPS vehicles might arouse concerns on the part of the manufacturers and force them to intervene. As implied above, if the HARPS vehicles are controlled directly or indirectly, their AI-based capabilities and responsiveness namely autonomous character becomes questionable, leading questions as to the nature and scope of HARPS.

While the questions referred above might not be self-standing problems, these issues mean a grey area as to the role and responsibilities of the relevant parties. On this note, it should be reiterated that adoption of the safety and maintenance standards seems to be one of the initial steps to be taken from the holistic viewpoint. This needs to be accompanied/supplemented by the designation of the contours of monitoring and supervision of the manufacturers, most often ADSEs. Although these may not require statutory definitions or contours immediately, functioning of the abovementioned roles and responsibilities would require a more comprehensive perspective incorporating the car manufacturers. It is already known that HARPS operators tend to rely on car manufacturers' protocols/standards, and at this point, the envisaged duties in the Consultation Paper, particularly regarding supervision, would pose uncertainty as opposed to what is intended. To eliminate such potential drawbacks, key concepts and requirements concerning the HARPS would better be clarified via collaboration of the stakeholders with the policy makers.

While it seems sensible that the details could be devolved to the guidance to be issued by the Secretary of the State, it might be better to consult the stakeholders from the beginning, with the view to have their feedback based on their operations, and reflect them on a co-regulatory environment, in a dynamic pace of work. This would both fill any threatening gap and enable filtering of best practices ending up a vivid circle.

By this means, initial set of rules, e.g. licensing, reporting, insurance, would be set out in the first instance via statutory provisions, further rules or principles would be left to the so-called co-regulatory platform, along with a reasonable time to end up best practices to be filtered from the industry. Should there be a compelling reason to modify statutory rules e.g. guidance and directions or add a new one, law and policy makers would do so, along the lines with the co-regulatory environment.

It is also important to keep in mind that in some circumstances a new rule would require reliance on data, whereas some would not, in the HARPS context. For instance, some of the supervisory roles of the back-end people might need to be known in advance of the operation. On the other hand, many of the HARPS operations would rely on further data, and given this fact, open-mindedness is important throughout the process.

Hence, it is important to establish at the outset that transparency and collaboration are key to the success of the HARPS. While it would be too early to determine the extent to what relevant data need to be shared among the stakeholders, introducing a transparency duty for the HARPS operators as well as ADSEs would be necessary for the prospect of the HARPS, given the dynamic and evolving nature of the autonomous/driverless cars.

Last but not least, on an imagined range of vehicles categorised by technical complexity, one could suggest that the next vehicle in the range after a HARPS vehicle would be a commercial airliner. Given the instrumentation resident in a HARPS vehicle, virtual “Black Box” reporting is available and could be used.

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)?

Please see the answer above (to the Question 11).

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?

Please see the answer above (to the Question 11)

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?

In a marketplace where the demand and supply parameters are unknown, intrusive pricing obligations could have an adverse effect on the operations of the HARPS. Notwithstanding, there would be a need to safeguard the consumers from the excessive prices if the supply would be limited, depending on the sunk costs, etc. While the best potential solutions depend on the market-based solutions along with the collaborations to mitigate the potential costs, e.g. both capex and opex, given this fact, instead of an intrusive pricing obligation, e.g. based on a guidance, it would be more workable should a statutory provision be adopted to empower the Secretary of State to mandate HARPS operators to provide the information necessary for the comparability of the services. Likewise, Secretary of State would have certain dissuasive powers against the failure to provide the specified information including withdrawal of licences.

Who should administer the system?

Consultation Question 15 (Paragraph 4.138)

Who should administer the system of HARPS operator licensing?

Along with the PSV requirements being adapted to the HARPS, accumulated information and experience with regard to PSV vehicles becomes quite valuable. Given this fact and that Traffic Commissioners are well placed to run the whole system at the national level in a harmonised way, they appear the best tailored body for administering the system.

Freight transport

Consultation Question 16 (Paragraph 4.140)

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

Our views and opinions stated above are highly relevant to the transport of freight as they could be generalised for the autonomous/driverless cars. To the extent they focus on the distinctive features of the HARPS against the conventional vehicles, comparable outcomes could be drawn for the transport of freight.

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?

Assuming certain responsibilities, e.g. insurance, maintenance, is a significant indicator for the categorisation of HARPS, it then seems to be a rightful approach to acknowledge that the relevant responsibilities are transferrable to the private persons who lease the HARPS for more than a 6 month period. In other words, HARPS responsibilities would ideally continue in the case that the private persons lease the driverless/autonomous cars for a period of less than 6 months, given the need for the parties’ rights and obligations as well as the maintenance of a sustainable transport system.

Any private leasing of a HARPS vehicle should however take into account the capabilities or direct access to the capabilities required of an operator (See Q7 and our added comment about communications).

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?**

Many of the envisaged responsibilities are currently applicable for the conventional cars, and would be adapted to the HARPS context from a holistic viewpoint given the need to ensure sustainability of the applicable rules in general.

On the other hand, HARPS may require a more detailed monitoring because of its complicated nature, particularly when it comes to the context of leasing or private ownership. In such occasions, the user or registered keeper of the car would not be aware of their responsibilities or may not be capable of

managing them as opposed to the conventional cars. Given this fact, an autonomous/driverless car would ideally be handed over to the lessee or its new owner along with a service maintenance agreement to be mandated with the manufacturer/supplier of the car, at least for a period of six months. This would reassure the position of the parties and make them act more freely and responsibly under predictable rights and obligations.

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?

As this is the principle that already applies unless otherwise is proven, the same statutory presumption (that the registered keeper is the person who keeps the vehicle) could be pursued for the HARPS, for the sake of coherency.

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.

Given more sophisticated nature of the autonomous/driverless cars and the fact that the current legislation would not ensure the pursuit of the same obligations itself for this new era, it seems that it is a right decision to mandate the lessor to inform the lessee that the duties listed under Question 18 will be over onto the lessee. Please also see our explanations to that particular question above.

(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?

Based on the same reasons given above, i.e. sustainability and coherence of this emergent system, we would concede with the proposal that there should be clearly understood and signed agreement between the parties explaining the transfer of the abovementioned obligations.

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?

Based on our explanations given to the above questions, we would concede with the proposal that registered keepers should be required to have in place a contract for supervision and maintenance services with a licensed provider. This would safeguard the keepers of the passenger-only vehicles which are not operated as HARPS who may not be capable or aware of the need to fulfil the requirements regarding safety and maintenance. Even though they might know about these requirements, they would not easily and quite capably deal with them. Given this fact, this proposal for the passenger-only vehicles seems workable and effective.

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.

In practical terms, there seem no real difference between the example of parents jointly acquiring the autonomous/driverless vehicles to run for their children and the peer-to-peer lending. In each scenario, the third parties use the autonomous vehicles with the perceived permission of the vehicle owner/lessor, and as long as the responsibilities i.e. abovementioned obligations rest with the vehicle owner/lessor, there seems no crucial breaking point to create a different regime for the peer-to-peer lending.

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 are information requirements and consumer safeguards which are directly or indirectly applicable to the autonomous/driverless vehicles. Given this fact, there seems no need for an additional mandatory mechanism to inform the consumers before they make decision regarding ownership or leasing these vehicles. Instead of prescribing such an additional safeguard, the proposed powers to be entrusted to the Secretary of State under the Consultation Paper could be revisited and expanded where necessary.

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.

Reflecting the spirit that the disabled people need to be granted the same opportunities with others, equal access to the HARPS is of importance as equally as for conventional transport means and vehicles. The accessibility thus needs to be dealt with from a holistic perspective, incorporating the HARPS. As long as HARPS does not require a special requirement for the accessibility, no need would arise for an additional obligation. Notwithstanding, a comprehensive perspective should be upheld involving the envisaged stages of the whole journey with HARPS. From this perspective, all these stages of a whole journey need to be examined with regard to the accessibility.

Among these, the most remarkable part seems to be about the protection of the disabled people during the journey for the potential abusive, discriminatory and anti-social behaviours, given there will be no driver at all. In this new era, drivers will lose their role they used to play in the past, and this fact would pose some additional risks surrounding the loneliness, discrimination and social exclusion. This point first and foremost needs to be taken into account under prospective regulations.

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?

Relying on the well-established and detailed framework of the Equality Act 2010, the same outcomes for the disabled people could be targeted with regards to the HARPS alongside the conventional cars. Given this fact, it would be appropriate that the section 29 of the Equality Act 2010 be extended and implemented accordingly.

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?**

The most noteworthy risk in the absence of a driver seems to comprise anti-social, exclusionary and discriminatory behaviours. Other related issues would also require more reassurance and care from a broader perspective as the old or disabled people may not be capable to cope with the HARPS e.g. during the journey as well as for booking a place. Given this fact, a provision seems necessary to ensure the abovementioned facilities and requirements are in place in order to deliver safe and accessible journeys with HARPS.

The other noteworthy risk is the unacceptably long delay on a motorway resulting from, for instance a major traffic accident. In this situation, some automated announcement of reassurance would not be adequate.

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.

Presumably every licenced HARPS provider will follow the status quo with regard to accessibility for the HARPS unless additional need arises. For instance, on existing trains, accessibility sometimes requires co-operation between train conductor/guard and station staff to provide ramps. In a HARPS scenario the absence of these people may necessitate additional automatic features to fulfil existing standards as an additional need. To check whether any need arises against the specific accessibility outcomes drawn above, implementation might also need to be seen. That is to say, outcome-based level playing field would be sufficient in the first instance. Besides, there would be a statutory provision empowering the Secretary of State with regard to designation of national minimum standards of accessibility for HARPS.

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.

As HARPS might bear some unexpected consequences in the absence of a driver, there would be a need to enshrine a framework under which anti-social, exclusionary and discriminatory behaviours, etc. are dealt with and where necessary responded via further safeguards and/or standards. To that end, data reporting requirements would help policy makers clarify prospective steps as well as spotting the breaches of the Equality Act 2010.

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.

HARPS, bringing out a new dimension to the traffic flow and management, will undoubtedly have an impact over the TROs. Considering the TROs from a broader viewpoint thus seems to be more fitting and acceptable. Having said that, rather than specifically designed TROs, HARPS inclusive more comprehensive TROs would help the coherency and sustainability of the applicable rules for traffic management.

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?

Kerbs could be acknowledged as a scarce resource for the society. Many people from the society need to access to the kerbs for the purpose of parking, and this situation makes it harder to manage these resources efficiently. From a broader viewpoint, revisiting the needs of the society and its members would be necessary with the introduction of the HARPS. Introduction of HARPS, with right policy decisions, would help different members of the society including the disable/old people commute frequently and comfortably. More parking opportunities thus need to be granted to the HARPS vehicles, with the view to balancing distinct individual/societal needs and expand the overall benefits of the members of the society.

In addition, many alternative views and solutions could also be developed. For instance, maximizing the use of the parking areas involving the areas dedicated to residents could be considered. When

considered with the road pricing, the HARPS would need to stay in certain parking areas for short time frames in the city centres, and such parking areas dedicated for residents could be used by the HARPS at a cheaper rate for short waiting periods. The same could be done for the alternative areas possessed by the public/private organisations. To that end, preselecting the areas that will be most likely available for HARPS parking would be considered in collaboration with the stakeholders and the local authorities.

From this point of view, a general policy of promotion for the HARPS parking would rather be taken as a priority to meet the transport demands at cheaper rates. This would be supplemented with further policies like local authorities increasing the parking charges for conventional (non-autonomous) cars should further congestion arise albeit with the congestion charge being proposed in the consultation paper.

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.

Please see the explanations given above to the Question 30.

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.**

Please see the explanations given above to the Question 30.

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?

Such a provision would have unintended consequences as well described in the Consultation Paper. It needs to be born in mind that autonomous/driverless cars will be operated by the firms which are supposed to have a sufficient financial base, good repute, etc. In this new era, while drivers losing their role they used to play in the past, this role seems to be taken by the HARPS operators, which will not face or meet the passengers by and large. That is to say, there might arise some societal impact as well as competition related consequences as a result of this process, e.g. small firms being foreclosed from the market. Given this, number restrictions would augment such potential consequences. To balance any potential impact, any power to be given to the licensing authorities in ODM areas needs to be determined cautiously.

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?

As explained above and well recognised in the consultation paper, road pricing would best serve to the various needs of the society including congestion, air pollution as well as optimising various transport needs from a holistic perspective. Having said that, we would concede with the proposition that should be no powers to impose quantity restrictions on the total number of HARPS operating in a given area.

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?**

Considering it is not farfetched for the HARPS vehicles to be used for mass transport, there is an apparent need to integrate HARPS in this broader picture. Having said that, the proposed step of acknowledging the HARPS vehicles of more than eight passengers under bus regulation seems to be a right decision.

On the other hand, this proposed step should not necessarily mean creating an exception to the PSV-inspired single licensing regime. Within the whole unified licensing regime, HARPS could be subjected to the bus regulation should the envisaged circumstances be met e.g. concerning the number

of passengers, charging separate fares. If such conditions are met, these vehicles could be subject to bus regulation as well as generic (PSV-inspired) HARPS requirements insofar as the latter do not contravene the former. In this context, it is remarkable that the proposed HARPS requirements e.g. regarding insurance, safety, maintenance, would need to be kept even in the case these vehicles are used such as buses, i.e. transporting more than eight passengers at a time with separate fares.

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.

Please see the explanations given above to the Question 35.

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?**

Please see the explanations given above to the Question 35.

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.

As the HARPS would better be seen as one of the blueprints for the whole transport needs, making its use as effective and cheap as possible seems to be a right policy decision. Collaboration with the transport authorities could be seen as an important element of this wider policy viewpoint. Such collaborative steps would however need to be supported with a statutory scheme if it is foreseen there will be lack of demand on part of the HARPS operators to act that direction.

This is also a benefit in that it removes a barrier to setting up MaaS schemes before the HARPS operators start.