

Consultation on the impact assessment for the Merchant Shipping (Bridge Visibility Regulations) (Small Passenger Ships) - consultation responses

Two responses were received for the consultation, these are detailed below:

Canal & River Trust

Response received: [Just to let you know that Canal & River trust will not be responding to the consultation as we do not operate passenger vessels in tidal water. We will still keep an interest in the consultation. We do operate a number of passenger boats on non-tidal waters through our Museums and Attractions teams.](#)

London Duck Tours (LDT)

In each case, the part of the impact assessment that the comment relates to is given in italics. The LDT response is on the left-hand side in [blue](#) text, and the MCA reply is on the right-hand side in black text.

<i>A perceived lack of clarity within the definition of enclosed passenger deck and the use of visual aids when determining sight lines</i>	
1. LDT Reiterates its statements from the original consultation and via various correspondence with the MCA. LDT takes the view that there is no lack of clarity with the regulations, merely that the MCA are unhappy with the current state of affairs in relation to LDT's operation and following a long history are biased against LDT's operations (paragraphs 9 to17 below). The regulations are clear and as such the MCA is changing the law on a flawed premise.	<p>The MCA seeks to make amendments to the Regulations, to address the specific issues of:</p> <ul style="list-style-type: none">- A regulatory gap that exists for vessels with a registered length of 45m but less than 55m (which is the application length (i.e. threshold) for SOLAS requirements)- A difficulty with the definition of 'enclosed passenger deck' and the use of visual aids when determining sight lines such that the intention of the MCA regarding clear lines of sight cannot be enforced. <p>It is necessary to achieve these aims through regulation to ensure that the amendments apply to all vessels that fall under the scope of the regulations. Addressing these issues through non-regulatory means would perpetuate</p>

	<p>the issue with the definition and would not close the regulatory length gap.</p> <p>Whilst it is considered that <u>at this stage</u> LDT are the only operator affected by the changes to the definition of 'enclosed passenger deck' and the prohibition of visual aids for primary sight lines, this does not take into account the possibility of future operators undertaking similar activities to LDT. If these regulatory changes are not made, then the MCA will not be able to achieve the aim of clear sight and would remain open to challenge from any operator in scope of the 2005 Regulations. In order to ensure that the Regulations can be enforced as intended, changes need to be made to the statutory instrument.</p>
<p>2. The MCA has from before 2000 until July 2014 continually certified Dukw vessels as compliant with the legislation, there were no questions about the validity of the legislation and no questions about clarity, before the 2005 change or after. The MCA has ignored over ten years of safe operation, its own surveyor's precedents, and its own approval paperwork. In doing so, it has failed to take into account a significant relevant consideration and has failed to justify the need for the new regulations.</p>	<p>Part of the remit of the MCA is to ensure appropriate and effective safety regulation of passenger ships. Whilst the prior certification is noted the MCA have a duty to ensure continued compliance and to evaluate vessel arrangements. It is noted that standards evolve over time and, as a regulator, MCA also have a duty to ensure standards continue to remain fit for purpose. Where the MCA is aware that existing regulation has an application gap or is not achieving the desired intent, it is their duty to resolve this. The regulations represent a proportionate response to address a regulatory gap and to ensure the definition of 'enclosed passenger deck' can be implemented as intended.</p> <p>Where arrangements are not in compliance, or become non-compliant, then MCA has a duty to act to ensure this is rectified.</p>

<p>3. Members of the MCA's vessel standards branch, who have publicly expressed bias against LDT, continue to contradict their own earlier conclusions. The MCA has not entertained any factual evidence to support their view that there is a lack of clarity in the regulations, and we note from the previous consultation responses that the MCA refuses to justify their position. If there was any actual lack of clarity in the existing regulations, then the consultation would have stated as much rather than referring to "a perception" of a lack of clarity. This belies the lack of evidential justification for the new regulations and is a disingenuous and perverse approach.</p>	<p>The reasons behind the MCA proposal to amend the Regulations have been detailed throughout the consultation process. With regard to the side screens the difficulty which has been recognised is that the regulations could be interpreted as indicating that fixing the screens to anywhere other than the deck of a vessel is acceptable. The MCA's view is that no primary sight line should pass through such a screen on vessels in scope of the Regulations and it is proposed to amend the regulations to ensure that this can be applied.</p>
<p><i>3) To clarify the rules on the use of visual aids when determining sight lines</i></p>	
<p>4. The result is not to clarify the rules on visual aids but to ban all visual aids. We find such an approach to be worse for situational awareness and less safe than the alternatives. A dedicated human watchkeeper is not as diligent as a camera, they are unable to operate at night with the same efficiency as during the day, and frequently will become distracted or bored. This endangers safety, increases points of failure and has frequently been shown to be the cause of multiple collisions on the river. LDT takes the view that this is a fruitless exercise in making a perceived problem an actual problem.</p>	<p>As previously noted, the proposal with regard to visual aids does not ban visual aids - additional visual aids may be used provided that the requirements of the Regulations are otherwise satisfied and that the additional visual aids do not interfere or distract from the all-round visibility required. The MCA does not consider that situational awareness is enhanced by visual aids, rather that they can actually distract from the watchkeeper's understanding of the general environment. It is important to note that if a camera were to be used, this would still require a human to monitor it, and thus the points regarding night effectiveness, diligence, distraction and boredom would apply equally to someone monitoring a camera. These are in addition to issues of potential image distortion and perception that can be caused when viewing through a secondary means.</p> <p>It is important to note that exemption requests for any sort of enhanced technology with regard to bridge visibility</p>

	<p>would be considered on a case by case basis, but such an application would need to be considered equivalent to the human line of sight required. Wing mirrors and cameras are not considered to meet this equivalence standard.</p> <p>No comment is given on the LDT assertion regarding human watchkeepers and their role as causal factors in collisions on the river as no evidence has been provided in support of this claim.</p>
<p><i>The monetised costs of the regulations are likely to affect a single company, with a best estimate of average annual costs of £0.3m. The costs will depend on the company's response to the regulation, with 2 likely outcomes identified by the MCA; removing protective screens or hiring an additional lookout.</i></p>	
<p>5. The MCA acknowledge that this regulation is in effect designed to target LDT specifically. LDT believe that this is a reaction to the MCA being at fault during an arbitration process in 2013. As such while the best estimate of monetising the costs of the impact of the regulations seems low, the net cost is double LDT's annual profits in an average year. Or put another way, an increase in costs of 12.5% at 2016 turnover. This is extreme and puts LDT's business model in jeopardy. Therefore the net effects would be a total loss of LDT's trading activities rather than the costs associated with just the change in the law. Such an approach is unfair and unreasonable.</p>	<p>The need for a regulatory approach has been detailed throughout the consultation process and is further detailed in the MCA response to point 1. The proposed regulatory changes are not only about LDT but are pertinent to any operator of domestic passenger vessels, whether amphibious or not, and are designed with the future in mind. For example, LDT could sell to another operator, or a further operator may start up on the Thames or elsewhere with existing vessels with non-compliant arrangements (perhaps from Category B waters). The history of DUKWs operations bears this out and is the evidence underlying the MCA approach.</p>
<p>6. When operating on the river LDT is a significant employer with nine vehicles operating. It supports roughly 80 jobs and a turnover of at least £2.6million</p>	<p>This is noted</p>
<p><i>Given the limitations of the available evidence base, it has not been possible to monetise any of the benefits</i></p>	

7. Given that there seem to be no benefits to this change in the law, a net negative impact on the economy, and a large impact to LDT's business model, LDT cannot see any justification for this process or for utilising government resources for a non-issue, which has no benefits and very real impacts. The process is therefore irrational.	As has been previously explained, the proposed changes to Regulation are required to ensure that there is no regulatory gap and that all sizes of vessel are covered in legislation, and that the MCA objective with regard to lines of sight and the use of visual aids, can be implemented. The impact assessment has been conducted as part of this process.
<i>1.1 Background into 2005 Bridge Visibility Regulations</i>	
8. The background presented here is a poor reflection of the background and omits certain facts that have brought both parties to this position. The MCA fail to demonstrate their justification "through a robust evidence-based approach". We state that the requirements as laid out by Greg Hands (Business Secretary) emphasised new legislation must be presented for approval by Parliament with "compelling, overwhelming robust evidence". By omitting all documentation during the period 2013 until now, the MCA has fallen lamentably short of this requirement by any definition.	The background given in the Impact Assessment is the background to the proposed regulatory amendments. Whilst the amendments, if brought in, would affect LDT the rationale behind the proposals is not specific to LDT and indeed the regulatory approach is desired precisely because it will enable the original objective of the bridge visibility legislation to be universally enforced.
9. We believe the following background should be introduced:	
10. The LDT vessels were plan approved in 1999 and started operating in 2000. LDT was assessed in accordance with the 1992 SI 2357 until the change in the law in 2005. LDT was and is certified as compliant under the subsequent versions of the SI.	Whilst the prior certification is noted, the MCA have a duty to ensure continued compliance and to evaluate vessel arrangements. It is noted that standards evolve over time and, as a regulator, MCA also have a duty to ensure our standards continue to remain fit for purpose. Operators are expected to be aware of changing regulation and the need to comply with this.

<p>11. The MCA, by their own admission on 4th March 2014, had lost their own documentation on LDT's plan approval. The MCA have ignored over 10 years of safe operation, their own surveyor's precedents, and their own approval paperwork. LDT notes that the consultation states the 2005 legislation is being corrected to bring it back in line with the 1992 legislation. The MCA claims there are errors in 1998 and 2005. These 'corrections' will take LDT into a state of non-compliance. It is not until the misinterpretation of existing compliance initiated by MCA Southampton overriding 13 years of different surveyor approvals with LDT that the issue arose. LDT notes that the MCA are opting to exempt LDT from the legislation that creates the non-compliance. This appears to be perverse and undermines the whole rationale for undertaking this exercise.</p>	<p>This consultation is not intended to address the historic relationship between LDT and MCA. As noted above, where the MCA is aware that existing regulation has an application gap or is not achieving the desired intent, it is their duty to resolve this.</p> <p>It is not correct to say that "the MCA are opting to exempt LDT from the legislation." The amended regulations would make provision for any operator, including LDT, to seek an exemption from certain requirements of the Regulations. Such an exemption will only be granted if the applicant can demonstrate that certain conditions are met and following consideration and approval from MCA.</p>
<p>12. Over the last 15 years the situational awareness and ability of the operators of the Dukw to notice hazards from astern has been demonstrated. No incident where a Dukw has been involved in a collision has arisen due to the inability of the master to detect, and react to a hazard from astern. No evidence has been produced by the MCA to suggest risk will be reduced by the elimination of visual aids. The LDT fleet did not require visual aids and were always secondary for the master.</p>	<p>It is the MCA view that visual aids on small passenger ships should only be fitted as an addition and do not replace primary line of sight requirements. It is the MCA view that visual aids do not confer the same level of situational awareness as line of sight and that the potential presentation of distorted images could reduce the decision makers understanding of the environment and thereby reduce the overall situational awareness.</p>
<p>13. The MCA has failed to act reasonably in its dealings on the issue of Wheelhouse Visibility. The MCA withheld LDT's Passenger Certificates based on an incorrect interpretation of the regulatory requirements for Wheelhouse Visibility in 2014, and then subsequently unilaterally and without reasonable justification the MCA</p>	<p>It would not be appropriate for the MCA to comment on these specific allegations in this context. However, the MCA is committed to maintaining high standards of integrity and impartiality. The MCA Quality Policy Statement is included with this response along with the government's guide to public sector internal audit</p>

<p>doctored LDT's MSF 1261 form dated 27/06/2014 to suit the MCA's position. To change the legislation after acknowledging compliance, withdrawing from the arbitration and without any evidence of increased risk is a disproportionate and vexatious response. We also note the public declarations of officers involved as far back as November 2013 which demonstrate a biased viewpoint.</p>	<p>standards which is the standard that we work to as public servants and of which impartiality is a key component.</p> <p>The MCA's position on the need for these regulations has been clearly stated above.</p>
<p>14. LDT's ability to comply with the regulations had been previously confirmed in writing by two different MCA surveyors and then repeatedly for over 13 years by way of receiving unqualified PCs.</p>	<p>As noted in response to paragraph 10, where the MCA has identified a need for amendments to a regulatory scheme, operators are expected to comply with this.</p>
<p>15. Certification extends to multiple vessels certified by different surveyors over an extended period of time before and after the legislation came into force. All surveyors have stated that LDT complied. After 11 years of full compliance, the MCA incorrectly insisted that LDT was not compliant/ The decision of MCA officers to deliberately ignore documentation is highly suspect. Documentation such as:</p> <ul style="list-style-type: none"> i. Drawings showing compliance in multiple forms by an independent firm of naval architects had been submitted. This firm is accredited as a Certifying Authority. ii. An exercise and study on Wheelhouse Visibility 2004 conducted by the BMT but commissioned by the MCA. The conclusions were that LDT was safe and complied with the spirit and letter of the existing legislation. The MCA state this was an anonymous survey. However, that does not discredit the findings and confirmation of compliance to LDT. MCA should accept its own findings. 	<p>As noted in response to paragraph 10, where the MCA has identified a need for amendments to a regulatory scheme, operators are expected to comply with this.</p>

iii. Compromise documentation via MCA surveyors in 2014.	
16. The MCA is introducing this legislation claiming a perceived lack of clarity when in fact this is an attempt to justify poor management and reticence to accept that MCA Southampton had fundamentally mismanaged their internal certification policies as recorded within the MAIB report dated December 2014.	The MCA denies this allegation, noting that we have clearly set out the rationale for regulatory change throughout the process. The MCA disagree with this assertion regarding MAIB report 32/2014 ¹ , in particular noting that the report makes no reference to MCA Southampton.
17. A policy based entirely on the MCA's unsubstantiated viewpoint claiming a failure by LDT to submit to the MCA's unreasonable demands that are not supported by evidence is not a rational or reasonable justification for a change in the law.	The basis for the proposed regulatory amendments has been clearly set out throughout the process. The basis is a need to regulate vessels between 45m and 55m in length and to ensure that aft visibility is achieved through a clear line of sight.
<i>The proposed regulations also amend the concept of “enclosed passenger deck”, so that relevant sight lines are not permitted to pass through any deck space where side or end screens can be fitted, either to the deck or any other part of the ship. This goes further to clarify that lines of sight for all round visibility must be direct. This amendment is required to address a perceived lack of clarity resulting from a change to the definition between revisions of earlier Bridge Visibility Regulations.</i>	
18. We refer to our earlier consultation responses Item numbers 4,5, 12-22 and points 1,2,3 of this consultation	The MCA have fully replied to all the indicated points and continue to support the responses in respect of the previous consultation.
<i>This IA assesses the additional costs and benefits of the proposed Regulations (Option 1) compared to the “Do Nothing” scenario; the “Do Nothing” scenario represents what would happen if the Government does not take any action</i>	

¹ https://assets.publishing.service.gov.uk/media/54c1722240f0b6158d00002b/MAIBReport_32-2014.pdf

<p>19. There does not appear to be a “Do Nothing” scenario assessed in this impact assessment. The IA immediately goes into assessing Option 1. We would suggest that the “Do Nothing” scenario is the best option for the UK government regarding economics, safety, and impacts on businesses. It should be made more explicit and properly assessed.</p>	<p>This is a misunderstanding of the IA process. The options are all being compared against a 'Do Nothing' scenario, so any impacts from doing nothing are already captured implicitly.</p>
<p>20. LDT only had one contact with the IA assessor and tried follow up emails which were rejected by the IA. We would suggest that the “Do Nothing” option has significant monetary benefits which have not been included in this IA. LDT would wish for a face to face meeting with the IA to explain the monetary benefits of a “Do Nothing” approach. A failure to take this relevant consideration into account is potentially unlawful.</p>	<p>As noted above, this is a misunderstanding of the IA and how the ‘do nothing’ option is assessed.</p>
<p><i>The consequences of doing nothing are that the existing regulations would remain in place, perpetuating the perceived lack of clarity and regulatory gap. This would mean that the application of the current Regulations would remain open to challenge by any operator of a vessel under the Regulations</i> <i>Such a challenge would mean that a space or passenger deck fitted with (flexible) screens without an attachment directly to the deck (e.g. to the top of a bulwark or rail), instead of fixed windows, could be deemed not to qualify as an enclosed deck, even though the visibility is no better, and in most cases, is expected to be far worse, than that provided by a fixed window.</i></p>	
<p>21. LDT disputes the consequences of doing nothing. There is no lack of clarity, doing nothing does not perpetuate a problem that does not exist. In any event, there has been a poor assessment of the “Do Nothing” scenario, so it is irrational to reach such a conclusion without the evidential base. LDT take the view that doing nothing is indeed the correct approach. The legislation is clear, and safety is not jeopardised by doing nothing.</p>	<p>See above response with regard to the ‘do nothing’ approach and how it is reflected in the IA.</p> <p>The MCA approach is that safety is jeopardised by doing nothing, as the MCA is unable to regulate vessels between 45m and 55m in length with respect to bridge visibility and additionally is not able to prevent side screens from being may not be fitted to the ship and so prevent a primary sight line from passing through such a screen. As established, it</p>

	<p>is the MCA view that such screens impede aft visibility and hence pose a risk, regardless of the way in which they are affixed. The amendments would ensure that a passenger deck enclosed by screens attached to any part of the ship would be considered to be “enclosed” for the purposes of the Regulations.</p>
<p>22. If assessed fully in this report, the “Do Nothing” scenario would allow LDT to continue as a viable business model, expand as a company, and return to once again being a safe iconic tourist attraction. The “Do Nothing” option at a minimum would support at least 80 jobs and a turnover of £2.6million (2016) but is predicted to be £4.1 million based upon the original 2012 turnover levels and longer-term £6m when all 13 vehicles are fully operational. The impact assessment has also ignored multiplier effects to LDT’s suppliers due to its investment in the renovation of existing vessels. A failure to take this relevant consideration into account is potentially unlawful.</p>	<p>See above response with regard to the ‘do nothing’ approach and how it is reflected in the IA.</p> <p>It is standard practice to exclude multiplier effects in a regulatory appraisal (and government appraisal more generally), as they distort the outcomes and are highly dependent on where in the business cycle the UK economy is in.</p>
<p><i>The regulation would have primarily affected one company who operated tours of London with a fleet of 9 amphibious vessels. They were the only company operating vessels in the UK which would be affected by the proposed Regulations (Option 1) as their vessels are fitted with flexible screens and therefore do not currently meet the requirements of bridge visibility and line of sight that would be imposed. This means the effects on business of the regulation are likely to only affect the operation of this particular company.</i></p>	
<p>23. If the regulations are brought into effect as envisaged and stated to be the case by the MCA, they would primarily affect LDT and result in the creation of retrospective legislation for this sole operator. Retrospective legislation is not a policy which the UK subscribes to except in emergency situations. There is no</p>	<p>The legislation which is being proposed does not have retrospective effect. Compliance with the updated Regulations is intended to be required only once the amendments come into force.</p>

<p>emergency here; no misunderstanding of the legislation, no improvement in safety, and the impact of retrospective legislation would result in significant damage to the single operator's business model which is being deliberately targeted by this proposed legislation. This is perverse and unreasonable.</p>	<p>It is true that the amendments will alter the regulatory framework which is applicable to existing vessels. As with all areas of regulation, safety regulation evolves over time in order to keep pace with the latest developments in, for example, vessel design, international requirements, and contemporary understanding of safety issues. Operators are expected to be aware of changing regulation and the need to comply with this.</p>
<p>24. LDT would also note that as mentioned in our consultation response that this change will massively affect the design and construction of new APVs. While the IA cannot monetise this at this point the opportunity cost should be noted.</p>	<p>New APVs (built after 2010) operating on inland waterways would not be regulated under these Regulations as they must comply with the requirements of MSN 1823 (which contain bridge visibility requirements). The design of 'next generation' APVs is not relevant to the Regulations under consideration.</p>
<p>25. LDT's previous comments concerning new designs are attached: 26. <i>LDT has previously supplied a copy of independent work on generic next generation APVs. This report by Amgram Ltd, stated that the deck of the ship must be at a height of 1.4m from the keel of the ship or "baseline". When combined with the road regulations an initial canopy height for a single decked vessel will be 2.7m above baseline. Including a 0.3m ground clearance, the canopy will be 3m from the road surface. As such this SI under reg 5(1) demands a head height in excess of 3m. This is excessive. It is the equivalent of having the driver on the top deck of a bus. This poses serious safety hazards to cyclists and pedestrians, contra to DfT policy on 'hierarchy of needs' placing pedestrians and cyclists above coaches and buses.</i></p>	<p>Please see comment against section 24 – these regulations do not govern the requirements for bridge visibility on new vessels operating on UK inland waterways.</p>

<p>27. When coming to their conclusions and recommendations, the MCA has failed to address the recommendations as proposed with the MAIB report by not taking into account the need for joined-up thinking within the Department of Transport.</p> <p>Further their stated comment that shipping regulation must stand alone and take priority completely cuts across the principles of the primary recommendations.</p>	<p>Both this consultation on the Impact Assessment and the original consultation were sent to Transport for London and the Driver and Vehicles Standard Agency and no comments were received.</p> <p>The MCA did not make this statement. The unusual design of APVs means that they are required to comply equally with passenger ship and road traffic regulations.</p>
<p>28. The naivety of the MCA response to LDT (point 40 of the MCA response to consultation) adequately demonstrates the lack of understanding of increased risk and failure to follow the joined-up thinking approach recommended by the MAIB.</p>	<p>Recommendation 2014/153 of MAIB report 32/2014 'Identify single points of contact for amphibious vehicle issues and put processes in place to allow them to work together, in consultation with the industry, to explore potential cross agency synergies, identify regulatory conflicts and agree a coherent approach to the survey and certification of new and existing amphibious passenger vehicles.' has now been closed by the MAIB as the MCA have addressed the issues raised to the satisfaction of MAIB.</p> <p>Whilst road- going concerns have been taking into account where appropriate, for example the cost of re-fitting screens for road use in part 4.3.1.3 of the Impact Assessment, it remains the case that the bridge visibility Regulations pertain to the waterborne part of an APV's operation where it is operating as a small passenger ship and not as a road going vehicle.</p>
<p><i>No other outcomes were identified that would allow the operator to continue to run its current operations in a legal manner. Option 1 is used as the High estimate and Option 2 is used as the Central estimate.</i></p>	
<p>29. An alternative option that was suggested by the MCA was the removal of the canopy roof. We would suggest</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the</p>

<p>that “option 3” is considered by the IA. LDT is happy to have a meeting with the author to discuss this option that has been ignored.</p>	<p>purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>
<p>30. LDT also suggests that the IA assesses the option of utilising technology in that it should assess the impact of not banning visual aids.</p>	<p>We permit assistive technology and would consider any application to use technological means on its own merits. Given exemption applications, on the grounds of technology, need to be assessed on a case by case basis it's not possible to assess the option of utilising technology.</p> <p>As noted previously, visual aids such as cameras and mirrors must still be monitored by a human and can be subject to additional disbenefits to visibility such as spray, image distortion and perception difficulties. The MCA permits visual aids to be used as an addition provided that the baseline requirements are met without their use and that the visual aids do not pose a distraction. The use of more advanced technology to replace human watchkeepers has been previously discussed in this response and would be assessed on a case by case basis.</p>
<p>31. LDT assume the technology currently being used on a commercial passenger carrying basis in Norway dubbed the “Autoferry” being a driverless ferry which is utilising sensor technology which makes it fully autonomous, self-propelled, and fitted with sensors to avoid other river traffic has been fully considered by the MCA before publishing this consultation. Can the MCA now release their evidence why this technology which is now in use on a commercial basis would not be appropriate for the UK river industry?</p>	<p>As noted in the previous consultation response, whilst the Regulations are not written to permit autonomous technology as part of standard compliance, there remains a provision to request an exemption from the Regulations. In this case any exemption request for an autonomous vessel would need to be supported with evidence that the solution being proposed provided an equivalent level of safety and situational awareness. A conversion to an autonomous vessel would likely need to demonstrate compliance or agreed equivalence with other relevant Regulations as well as the Bridge Visibility Regulations</p>

	<p>and would need the agreement of the local navigational authority in order to operate.</p> <p>The MCA is not aware that the 'Autoferry' project in Norway has moved beyond a research phase nor what passenger numbers the vessel is designed for, but as noted above such a vessel wishing to operate on a UK river would need to submit an application against either the existing Regulations (if a conversion) or MSN 1823 (if a new build).</p>
<p>32. As stated on numerous occasions and repeated again the MCA must embrace and welcome new technology when it is better than human intervention as other European Regulators have already acknowledged.</p>	<p>The MCA has a dedicated lead working on the policy behind autonomous technology and the Regulation thereof at an international level; this policy will then be used to inform future domestic policy. At present the use of autonomous or other alternative watchkeeping technology would be subject to the consideration and approval of an exemption request.</p>
<p>33. The MCA has ignored relevant considerations</p>	<p>The MCA considers that all relevant considerations were taken account of during the course of preparing the consultation impact assessment Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019</p>
<p><i>The estimate for occupancy was formulated using figures provided by the operator for revenue, the average ticket price, and the number of tours run. In 2016, 6,565 tours were run, the average ticket price was £21.50 and the operator's revenue was approximately £2,300,000. Using these figures the estimate for occupancy is 16.3 passengers per tour. This was calculated using the formula: occupancy = revenue / (number of tours x average ticket price). As a sensitivity test, the figure of 26 passengers per tour provided by the operator was also used. However, given the aforementioned other figures they provided, this level of occupancy appears unfeasibly high.</i></p>	

<p>34. While it is a matter of discretion, the 3.5% discount rate seems artificially high as inflation rates for the last five years has not been above 3% and the BoE's forward guidance states it projects between 2.7% and 2.1% (May 2018 report). This would increase the net effect of the proposed legislation</p>	<p>The discount rate is not to be confused with the inflation rate. The IA assumes that the ticket price stays constant in real times (i.e. keep pace with inflation, which we typically assume to be 2%). LDT assume ticket prices will rise by 1.9%, which is essentially a slightly more conservative assumption.</p> <p>The discount rate reflects a different concept - that society values money more in present than they do in future, even if the inflation rate is zero. This is due to a number of reasons, but the 3.5% discount rate is set by HMT and is standard for all government appraisal.</p>
<p>35. LDT note that this IA uses a fixed price per ticket, then the IA applies a discount rate of 3.5% to the impacts. It is incorrect to assume that inflation will not affect the ticket price over a ten year period. Historically LDT has increased prices by an average of 1.9% per annum over 15 years. We would suggest that the ticket price is varied per year by an acceptable ticket price increase and then discounted back, not just a flat figure. Such an approach is unfair and unreasonable.</p>	<p>See above with regard to the 'inflation and discount rate' approach taken.</p>
<p>36. LDT dispute the formula used in this IA to calculate occupancy. We attach in our annexe the passenger numbers per year on an FY basis for the IA to demonstrate the actual occupancies. We would state our calculations are based on a realistic prediction about the prospects of the company following the rebuilding from a significant incident in 2013. The 2.6 million turnover is an artificially low value to calculate from. If the IA insists on using this formula, we would suggest the 2012 figure of £4.1million</p>	<p>This is already recognised in the IA. We've used the occupancy provided by LDT as a sensitivity and it doesn't materially change the results (i.e. it's already within the sensitivity range used within the IA).</p>

<p><i>We have assumed the lost revenue for the company is equal to the lost profits as the costs are fixed for a single boat journey. It should be noted that the loss in revenue for this firm will be mostly offset by spending elsewhere in the economy as the passengers who choose not to travel will spend their money elsewhere.</i></p> <p><i>This would be an indirect impact and has not been monetized given the difficulties in calculating it without conducting primary research.</i></p>	
<p>37. LDT's client base has a significant proportion of international tourists. We would highlight that a proportion of these tourists would save the money and utilise it back in their home country. As such there would be an effective loss to the UK economy.</p>	<p>Although not crucial to the IA, we might expect tourists to spend their money elsewhere in the UK during their visit.</p>
<p>38. Without an in-depth study, this would be difficult to model. LDT would state roughly up to 30% of our client base was from overseas.</p>	<p>See above.</p>
<p><i>Under current operations, the crew already take time to prepare the vessel before entering the water; the vessel does not just drive in directly from the road. The removal of screens could add some additional time to this procedure. Although there is no evidence to estimate how long such a procedure could take, we have assumed 5 minutes to remove or attach all the screens on the vessel, totalling ten minutes per journey</i></p>	
<p>39. LDT would state that this assumption is not entirely correct. The predominant reason why vehicles stop is that of licensing. The road based qualification (PCV) and the water-based qualification (BML) are not usually dually held by a pilot. As such the driver and Boatmaster must swap to allow for the correct competencies to be onboard the vessel. LDT has employed dual licensed people, and these people have driven straight into the water in the past with safety announcements being made before splash down but en route.</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>

<p>40. The cost of the removal of the screens proposal which is in practice wholly unworkable is significantly higher than the IA assumptions. This evidence is spelt out from point 41 to 51.</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>
<p>41. While undergoing this swapping, visual checks are carried out such as is the “is there an anchor” before entering the water and provide time for a safety announcement. These, however, are not intended to assess fundamental compliance with legislation. Vehicle sea and roadworthiness is assessed at the beginning of each day by a specialised staff in a specifically designed maintenance facility. There is little or no “preparing of the vehicle” at the slipway as this is done at the start of the day.</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>
<p>42. We would suggest that the Irish model is investigated and translated into a London context to show the requirements to “prepare the vessel”. Specifically how it fails in a London context, namely the requirements for a dedicated area, dedicated storage, and dedicated staff. In central London, the area and the storage are not possible given the security requirements imposed by other agencies. This would significantly affect the assumption of no one-off costs.</p>	<p>The regulation is not location specific therefore we cannot take into account specific location impacts.</p>
<p>43. Extra staff would be required outside of the direct tour vehicles staff to add and remove the windows. We would estimate two persons all day 360 days per year on an 8-hour basis this would require an extra 5760 person hours.</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>

<p>44. It is clear that the MCA's proposals have been undertaken as a desk exercise based on poor assumptions, with little sense of reality and have not understood any real-world implications. Such an approach is perverse.</p>	<p>The MCA do not agree with this statement. The analysis was carried out by DfT Economists in line with established procedures and was reviewed and cleared internally by DfT peer review. The finalised IA will be cleared through the Regulatory Policy Committee (RPC).</p>
<p>45. The MCA has completely overlooked the implications of the working at height regulations. The removal of side screens requires ladders or permanent bespoke gangways built to enable staff to operate within the existing law. This is a relevant consideration which must be taken into account.</p>	<p>The working at height aspect is specific to LDT and will also depend on operating location. As the Regulations are not location specific, we cannot take into account specific location impacts. LDT would need to adapt their operation to ensure compliance with all relevant Regulations.</p>
<p>46. Putting aside the other objections, the recommendations by the MCA are wholly unworkable because of the lack of space and the adjoining buildings of MI6. Dukw operations must remain under the height of the MI6 compound, items such as ladders would be considered a security risk. This is a relevant consideration which must be taken into account.</p>	<p>The regulation is not location specific; therefore, we cannot take into account specific location impacts.</p>
<p><i>The cost of the ten minutes per journey is assumed to be the opportunity cost of the crew's time, which is based on their hourly wage. The median gross hourly wage in the water transport sector according to the Annual Survey of Hours and Earnings is £13.79 in 2017 prices, meaning a cost per trip of £2.79, once nonwage labour costs have been included. These costs do not vary based on the occupancy scenario used, therefore over the ten year period, this has an average annual cost of £31,096.</i></p>	
<p>47. While the cost of 10 minutes per journey is considered, we point out that the tours run a regulated service with a usual turn around time of 15 minutes to account for traffic and disembarkation. A delay of ten minutes per trip</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>

reduces the capacity to run tours throughout the day. The most logical solution would be to extend tours to 1 hour 25 minutes.	
48. In general, each vehicle runs six trips per day, and this action would require an additional hour of work. The vehicles are limited to daylight hours only, and a vehicle trip is currently one hour 15 minutes, this in effect means the company would be sacrificing one trip per vehicle.	Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.
49. We would state that a reduction in the capacity of 16% is a significant extra factor that has not been accounted for. If we are to use the 2.6million turnover of 2016, this is a cost of 430k. This would cause the LDT business model to be unviable.	Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.
50. In August 2013 LDT employed five qualified Boatmasters with one part-time to cope with demand and ensure ongoing, seamless access through the Lacks Dock slipway. This evidences that at any one time there could be six dukws on the slipway about to enter or exit the water with three others operating on land. To administer a procedure of removal and reinstatement of six vessels at any one time has not been thought through within the IA. Regretfully while the MCA has taken 15 months to respond to LDT's initial submission only 28 days has been granted to study and comment on the IA. The flaws in the IA assumptions are so large it would simply not be possible within such a timescale to rework the numbers to be certain of the increased costs. We would state that multiple persons would be required. We attach a google photo demonstrating multiple ducks on the slipway at once.	Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.

<p>51. The MCA's failure to understand and properly take into account these operational constraints constitutes a further failure to take into account a relevant consideration.</p>	<p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>
<p><i>To satisfy the requirements of Outcome 2, the operator has stated that 4 additional full time crew members, trained as lookouts, would have to be hired by the operator. The operator also added that 3 additional part time workers would also need to be hired during high season to meet the increased demand. This season is assumed to last 22 weeks between April and August. These assumptions came from the consultation provided by the operator and can be reasonably considered to be correct. Although the operator operates 9 vehicles, they are not all in use concurrently, therefore each vehicle will not require additional crew.</i></p>	
<p>52. The assumption that the vehicles do not concurrently work is incorrect. LDT has multiple issues:</p> <p>I. Firstly, traffic can cause bunching of vehicles and as such multiple tours are on the river at the same time.</p> <p>II. Secondly, LDT receives a significant amount of private hires where multiple vessels are expected to be on the river at the same time.</p> <p>III. LDT believes that this new requirement would be restrictive to LDT's ability to deal with delays in traffic or requirements from clients. LDT cannot monetise this, but we fully expect a loss of tours and bookings from not being able to operate concurrently.</p>	<p>The Impact Assessment does not assume that the vehicles do not operate concurrently; rather it assumes that all nine won't operate concurrently. This information was provided by LDT.</p>
<p>53. LDT would also wish to highlight that humans are not machines and will not always turn up to work or be at their most optimal. While disciplinary measures can be in place,</p>	<p>As noted previously, visual aids such as cameras and mirrors must still be monitored by a human and can be subject to additional disbenefits to visibility such as spray,</p>

these are never full proof. As such this legislation places the LDT business model on weaker foundations as it is wholly reliant on a member of staff who will be undertaking an exceptionally monotonous job. Safety should not have to rely upon motivation and discipline but on the best available resources. Technology would be safer and a better use of resources. The MCA's viewpoint on visual aids is archaic.	image distortion and perception difficulties. The MCA permits visual aids to be used as an addition provided that the baseline requirements are met without their use and that the visual aids do not pose a distraction. The use of more advanced technology to replace human watchkeepers has been previously discussed in this response and would be assessed on a case by case basis.
<i>Median gross hourly wage in the water transport sector (£; 2017) 13.79</i>	
54. While using the annual wage on the water is useful, and LDT agrees with this approach. LDT's median wages for BML holders is higher than this median. This is because of the local circumstances in London with a shortage of BML holders. LDT's average pay per BML holder was roughly £24 per hour based upon a 37.1 hour working week and 46 weeks a year. We would expect that for such a vital but boring job the going rate for the job would be between £13.79 and £24 dependant on the level of experience the watch keeper would have.	<p>LDT's previous comments suggested a lookout would be an apprentice with an hourly wage of ~£15 an hour. This isn't significantly different from £13.79 an hour, for which we used national survey data. Whilst recognising that London wages may be higher, a wage of £24 an hour is significantly higher than that. No evidence of this wage level has been received. It also contradicts previous evidence.</p> <p>Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.</p>
<i>Lost capacity costs The extra employee on each voyage would reduce the capacity for passengers on each tour by 1 seat, potentially leading to a loss of revenue. The lower capacity would only cost the operator when the full 30 seats would have otherwise been occupied by paying customers. In their consultation response the operator stated this would be approximately 50% of their tours. This was under the assumption of an occupancy of 26 therefore it is maintained in the maximum cost scenario estimates. Under this assumption 5,383 tours would be affected annually on average.</i>	
55. LDT again points towards our annexe of the average occupancy which demonstrates that the calculations used by the IA are incorrect.	Should you wish to provide any further evidence or information, we will review and assess its relevance for the

	purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.
56. There are significant numbers of days where 30 passengers are utilised. The majority of these are concentrated on weekend days. LDT believe our calculations are realistic and if requested will produce a full analysis for the IA.	LDT assumptions on passenger numbers were used in the consultation IA. Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019
<i>We have assumed, as part of the monetised costs, that the ongoing costs of the process of removing and reattaching the protective screens would be the crew time only.</i>	
57. LDT would disagree with this assumption; LDT would have to modify the screens on each vehicle. This would most likely require a rail system of custom design. LDT has not undertaken detailed design work as part of this consultation, but from initial studies, we would estimate roughly £1,500 per vehicle. LDT has 13 vehicles, and as such we would estimate a one-off	Should you wish to provide any further evidence or information, we will review and assess its relevance for the purposes of the final IA. We can consider evidence and other information submitted prior to 31/01/2019.
<i>The response to this consultation from the operator primarily affected by these regulations led DfT and MCA to agree that a full impact assessment was a more appropriate means of assessing the impacts of these Regulations. The evidence submitted both during the consultation and through follow-up discussions with stakeholders is reflected in this impact assessment.</i> <i>While the costs remain low in absolute terms, the MCA will continue to work within industry to minimise unnecessary impacts, and will review the Regulations within five years.</i>	
58. While a full impact assessment has taken place very little contact was made with the only stakeholder affected. In addition, the evidence base on which this consultation has been founded should be fully available for proper scrutiny. The failure of the IA to collate and fact check	The IA makes clear where the figures were not used and why and also provides comment (for example occupancy). The IA will be finalised following this consultation, when all additional relevant evidence will be taken into account.

easily available data could constitute a failure to take into account a relevant consideration.	
<p><i>The Regulations will create a “level playing field” among UK vessels with an enclosed passenger deck preventing one business from gaining an advantage over another because of a regulatory inconsistency.</i></p> <p><i>Extending the scope of the 2005 Regulations will harmonise regulations for vessels of various lengths which also promotes fair competition.</i></p>	
<p>59. LDT does not understand this concept in this context. If there is no one affected except one operator, there is no concept of a level playing field. This is using a sledgehammer to crack a nut. Therefore, there should be a dialogue rather than legislation.</p>	<p>This excerpt from the IA concerns the application length difficulty. At present there are no applicable bridge visibility Regulations for vessels of between 45m and 55m in length as they are both above the cut off for the UK Regulations and below the application point for SOLAS requirements. Extending the applicability of these Regulations to bring such vessels into scope will remove any perceived or actual competitive advantage that exists for the 45m-55m vessels. The Regulations will also affect any future operators.</p>
<p><i>c) It is not considered proportionate to collect new data as the costs of these Regulations are minor.</i></p>	
<p>60. While regarding an IA the costs are considered minor, they are so high for this small business they would cause LDT to no longer be a viable business model. If it is not cost-effective to establish the data required to justify its assumptions fully then there should be grounds for compensation. The government should base its approach to new regulation on the highest standards and it is unacceptable to have this much impact on small businesses without collecting the correct data. To do otherwise constitutes a clear bias against LDT.</p>	<p>The overriding driver for Regulatory amendment is safety, even taking into account the economic impact we cannot regulate based on the business model of a single operator. We must also take into account the possibility of future operators undertaking the same activities.</p> <p>There is recognition in the consultation IA (section 4.1 and 6.3) that the regulation would primarily have affected one company and it is likely that costs will be mostly borne by small firms.</p>