(ABP: 1 of 5 – DL5)

Proposed Lake Lothing Third Crossing (TRO10023)

Associated British Ports (20013261)

Response to the Impact of the Scheme on the Port of Lowestoft Report

This document sets out the Response of Associated British Ports ("ABP") to the Applicant's *Impact of the Scheme on the Port of Lowestoft Report* (Document Reference: SCC/LLTC/EX/59) ("Impact Report"), submitted by the Applicant for Deadline 4 (29 January 2019).

Where appropriate, the comments made by ABP have been cross-referenced to ABP's Written Representations and related submissions made by ABP for Deadline 4 and Deadline 5.

This Response is the first of five documents submitted on behalf of ABP for Deadline 5. In addition, ABP has submitted the following documents:

a) Summary of oral submissions made by ABP at the examination hearing held on Wednesday 13 February 2019;

b) Post Inquiry note in respect Compulsory Acquisition Matters;

c) Post Inquiry note in respect of Funding Arrangements; and

d) Comments on the Applicant's Response on Environmental Statement Matters.

For clarity, this Response incorporates the following Annexures:

a) ***Annex 1***: 'Port of Lowestoft, Berth Utilisation Assessment - Years 2015 to 2017', ABPmer (February 2019);

b) ***Annex 2***: 'Off shore Wind Opportunities in the Port of Lowestoft', BVG Associates (January 2019);

c) ***Annex 3***: 'Overview of CTV Characteristics', ABPmer (February 2019);

d) ***Annex 4***: Extract of data from the A47 Bascule Bridge Lift Record Book;

e) ***Annex 5***: 'Vessel Mooring Systems in Tidal Ports', ABP Lowestoft (February 2019), annexing the ABPmer Mooring Analysis; and

f) ***Annex 6***: ABP response to the Justification and Traffic Effects of the draft Scheme of Operation report (Document Reference: SCC/LLTC/EX/60).

g) ***Annex 7***: ABP response to the "Technical Report: Review of central and western bridge options", Appendix B to the Applicant's Response to Written Representations (Document Reference: SCC/LLTC/EX/51).

1. EXECUTIVE SUMMARY

1.1 Following careful consideration of the Applicant's Impact Report, ABP remains firmly of the view that the LLTC will cause serious detriment to the operation of the Port and the Port undertaking. As such, it considers that it has no option, in light of the stance adopted by the Applicant as to the effect of the Scheme on the Port, to address its concerns to the Secretary of State in accordance with Section 127 of the Planning Act 2008.

1.2 It has unfortunately been apparent to ABP since the inception of the LLTC scheme that the Applicant and its advisors have paid little regard to the impact of the Scheme on the Port, and the serious detriment that will be caused to the Port undertaking - irrespective of the very clear evidence to the contrary presented to the Applicant by ABP.

1.3 The ExA should be aware that the exposition provided by the Applicant in the Impact Report fails to address, in any meaningful way, ABP's very real concerns regarding the damaging impact of the Scheme on the Port. Rather, the Impact Report underlines a concern that ABP has already drawn to the attention of the ExA on a number of occasions, namely that of the Applicant's fundamental lack of understanding of both the port industry generally and the Port of Lowestoft specifically.

1.4 Indeed, in light of the worrying inaccuracies and misunderstandings apparent in the Impact Report, ABP is bound to query the quality of the advice and assistance that the Applicant has received from its consultant team, in terms of marine matters and port operational issues. It certainly seems, as far as ABP can ascertain, that the Applicant has failed to secure the technical and specialist assistance required to understand the

evidence provided in ABP's technical reports now before the ExA and consequently be able to respond sensibly to ABP's concerns.

1.5 As such, ABP considers that many of the views expressed by the Applicant in the Impact Report sit in an 'evidential vacuum'.

2. IMPACT REPORT – CHAPTER 2 – SERIOUS DETRIMENT

2.1 **Paragraph 2.1.6** – In the context of future activities forming part of the 'serious detriment test', the Impact Report states that:

> *"…consideration of this issue must be both based on current Port activities, but also its potential for the future; although it is considered that this future must be proven to be at least reasonably likely (for the Scheme's impacts to therefore be considered in the context of whether it has the potential to constitute 'serious' detriment)."* (our underlining for emphasis)

2.2 The Applicant's interpretation of the serious detriment test set out above is incorrect. There is no statutory requirement or precedent which requires ABP to provide evidence that any future activities are at least reasonably likely in order for them to constitute serious detriment – although in light of the evidence before the ExA in terms of the formidable current growth of the Port's business and the future business opportunities that are already revealing themselves, it is suggested that the facts do rather speak for themselves.

2.3 The two principal precedent NSIP decisions which consider the serious detriment test are the *Hinkley Point C Connection* and the *Richborough Connection* Projects. These precedents have been referred to in both the Applicant's and ABP's previous representations.

2.4 To assist both the ExA and the Applicant, however, key points arising from those precedents are as follows:

a) The serious detriment test includes consideration of both current and future activities – this principle was agreed by the Applicant in paragraph 2.1.6 of the Impact Report.

b) The question of serious detriment must be decided on the basis of properly qualified and technically competent evidence. In this regard, the ExA

determined that personnel with intimate knowledge of the port are best placed to provide such evidence. Conversely, where the applicant has not provided any witnesses with relevant qualifications to show that no detriment would result, the applicant will have presented its case in an evidential vacuum.

c) Serious detriment goes beyond detriment - something would be serious if it was 'important or significant' – this principle was accepted by the Applicant's response to ABP's Relevant Representation - Issue Number LD2. The question as to whether any detriment is important or significant, has to be judged having regard to how the statutory undertaker conducts its business. Any answer to the question must take into account how the affected body fulfils the duties and standards that apply to it as a statutory undertaker.

d) In other words, the decision-maker cannot simply separate individual issues, considering them in isolation. On the contrary, the decision maker must in law adopt a holistic approach to the question of serious detriment.

2.5 **Paragraph 2.1.8** – The Applicant's understanding of what constitutes ABP's statutory undertaking, as set out in the Statement of Reasons, is of concern as it is limited by reference only to the Transport Act 1981. Although the Transport Act 1981 sets out the general duties and powers of ABP, as is evidenced in **Section 2 of ABP's Written Representations**, ABP's statutory undertaking comprises a myriad of legislative instruments. For example, there are 25 Local Acts alone that specifically apply to the Port, as well as numerous other legislative instruments such as the Harbours Docks and Piers Clauses Act 1847, which go far beyond the limited legislative scope that the Applicant appears to suggest.

2.6 Accordingly, it follows that the Applicant has failed properly to understand the very real impact that the LLTC would have on ABP in terms of its ability to perform its statutory duties and obligations. As such, the Applicant has vastly underestimated the scope of those statutory obligations.

2.7 **Paragraph 2.1.12** – ABP has always assessed the serious detriment caused by the LLTC in terms of how the Port currently operates and the impact that the LLTC would have on the way in which port operations are carried out, both now and in the future.

2.8 ***Precedent Bridges*** – ABP is concerned that the Applicant has failed to appreciate the fundamental difference between the existing A47 Bascule Bridge and the current proposal for a third crossing.

2.9 In very simple terms, the A47 Bascule Bridge came first. Historically, the Port grew from its coastal activities landwards into Lake Lothing. The only means whereby the land-locked Lake Lothing could be opened to the sea, however, was to cut through the land separating it from the sea -over which crossed the coast road.

2.10 In other words, the Port was developed around the existence of the bridge. The LLTC, however, contemplates the introduction of a new bridge through the middle of an established operational Port.

2.11 The two crossings are entirely separate and serve entirely different functions. The first is a historic inevitably around which the Port has grown – the second, if constructed, would be a historical anomaly around which the Port will diminish.

2.12 Indeed, in the context of the Applicant's attempt to identify precedent bridges – which as ABP has already pointed out in its Deadline 4 representations, the Applicant has patently failed to do – it must be the case that as the LLTC contemplates the addition of a second opening bridge over the Port, it follows that any other schemes that the Applicants purports are 'precedents' must involve an assessment of constraints arising from two bridges over a statutory harbour port, in order to provide a comparable baseline of assessment of the serious detriment caused. As the Applicant has been unable to produce any precedents for even a single bridge, the ExA is asked to disregard the Applicant's statements in this respect, which are patently misconceived.

2.13 The fact is that the only precedent for the construction of a bridge through the middle of an operational port is Welsh Government's proposal for the M4 Relief Road in South Wales, which involves the construction of a bridge through the Port of Newport. Relevantly, in that case, Welsh Government accepted that their scheme will cause serious detriment to ABP's statutory undertaking.

2.14 **Paragraph 2.1.13** – The Impact Report suggests that the serious detriment test requires consideration of the following:

> *"… does the creation of the new bridge change the existing situation so much that ABP would be unable to comply with its statutory duties…"*

2.15 Again, this paragraph highlights the Applicant's misinterpretation and/or misunderstanding of the serious detriment test. The statutory test does not impose a threshold which requires ABP to prove that it is "*unable to comply with its statutory duties*".

2.16 As ABP indicated in paragraph 9.17 of its Written Representations, serious detriment is something that is more than just trivial, but not necessarily severe - something that is 'important or significant'.

2.17 The pertinent and indeed fundamental question that the Applicant has failed to address is how the new bridge will impact on ABP's ability to operate its statutory undertaking – and in tandem with that question, its ability to comply with its statutory duties. Neither question asks ABP to prove that it cannot comply with those duties.

2.18 Again, through its misunderstanding, the Applicant is attempting arbitrarily to impose a restriction that is not required by statute or precedent.

2.19 **Paragraph 2.1.14** – The Impact Report states that:

> *"…it is not enough for ABP to say that because they will have to change the way their duties under legislation are managed, a detriment is caused."*

2.20 ABP has clearly and consistently explained how the LLTC will cause serious detriment to the operation of the Port and its ability to carry on its business and operate its statutory undertaking, both now and in the future, as evidenced by paragraph 9.19 of ABP's Written Representations, and the further representations made by ABP at Deadline 4. This clearly extends far beyond ABP simply stating that the construction and operation of the LLTC will require it to change the way its statutory undertaking is managed – with the result that serious detriment is caused to the Port undertaking. Such a statement by the Applicant is misconceived.

2.21 Additionally, Paragraph 2.1.14 of the Impact Report also states that:

> *"As ABP themselves set out in their representations, ports are subject to a constant level of development over time, and as such compliance with those duties need to adapt to that development (for example, new berthing) – the same would apply to the development proposed by the Scheme."*

2.22 This statement by the Applicant entirely misses the point and underlines ABP continued concern that the Applicant and its advisors do not actually understand how ports operate.

2.23 The ExA will understand that there is a critical difference between developments which the Port has chosen to pursue, compared with a development that is imposed on the

Port by a third party, the impact of which will be to limit the flexibility and future development potential of the Port.

2.24 Development at the Port is undertaken by ABP as and when required with a view to enhancing its commercial operations, thereby positioning itself so as to accommodate both existing and future business opportunities and enabling it to respond to market demand. Such developments do not adversely impact ABP's ability to carry out its statutory undertaking – and to suggest otherwise is disingenuous.

2.25 The reality is that the Applicant is attempting to impose the LLTC on the Port without any consideration being given to its seriously detrimental impact on ABP's statutory undertaking.

2.26 It is not simply a question of ABP adapting to such a constraint, but whether it is appropriate for this type of development to be consented and constructed in the first place.

2.27 Indeed, as a corollary, the LLTC if constructed, would actually impose a restriction on ABP's ability to develop the Port, due to the introduction of a permanent impediment being located by a third party in the middle of an operational harbour.

2.28 Generally, ABP remains of the view that the third crossing would be more appropriately located at the Western Option, as opposed to the central alignment adopted by the Applicant. In this regard, ABP notes that within Appendix B to the Applicant's Response to Written Representations (Document Reference: SCC/LLTC/EX/51), the Applicant has produced a "Technical Report: Review of central and western bridge options". ABP's comments in respect of this Technical Report are set out in **Annex 7**.

2.29 **Page 3, Footnote 2** – the ExA should note that the Applicant has referred to the incorrect statutory instrument. The relevant legislative instrument is the Health and Safety Work etc Act 1974.

3. CHAPTER 3 – PORT OF LOWESTOFT

Port Activity - Current

3.1 **Paragraph 3.2.3** – As set out in the Statement of Common Ground (Document Ref: SoCG001), ABP considers that the Vessel Survey is of limited value, as it only

identifies vessel movements in the Port within the period of the survey. The Vessel Survey data does not reflect current activities within the Port, which have already significantly changed since the surveys were undertaken.

3.2 For example, large commercial vessel movements within the Port are expected to increase from 2018 levels by over 100% during 2019 and subsequent years. One reason for this increase is the introduction into the Inner Harbour of a major new tenant (Peterson) who commenced operations at Lowestoft in January 2019.

3.3 The ExA should note, incidentally, that this significant increase relates to the introduction of a single customer who will be using single berth. The way this business operates, however, is that as logistics provider such as Peterson anticipates that its presence will attract other customers to the Port, who have synergies with its own business. It follows, therefore, that this factor alone will further increase vessel movements within the Port – and the need for berths.

3.4 In practical terms, therefore, the Vessel Survey – even if it did provide an accurate of reflection of Port activity at a given moment in time, which is of itself questionable – is actually of little use in that it fails, as will always be the case, to give an accurate picture of current business in the Port in terms of a business that is always operating in a fluctuating market almost month from month – albeit as ABP has indicated, showing a positive upwards trend.

3.5 Very simply, the fact that the Vessel Survey understandably does not include the Peterson activities, demonstrates immediately the fundamental fragility of such an exercise and the danger of attributing any weight to it.

3.6 **Paragraph 3.2.4** – ABP's figures were based on detailed data of all commercial vessel movements made through Lowestoft Harbour between December 2017 and November 2018, which provides an accurate and contemporaneous account of all commercial vessels transiting past the proposed location of the LLTC during this time. ABP considers that any differences arising between this data and the Applicant's Vessel Survey underlines the potential inaccuracy of the survey data recorded, and consequentially, ABP questions the reliance placed on the Vessel Survey in the context of the Impact Report.

Variability in vessel movements

3.7 **Paragraph 3.2.8** – The Impact Report states that: *"The reduction in CTV movements during the 3rd survey is a result of operations transferring away from the Inner Harbour."* This statement is incorrect - the reduction in CTVs during Autumn 2018 was a result of the Galloper Windfarm operation, based at Shell Quay, completing its construction phase. It is disappointing that the Applicant has failed to acknowledge this fact.

3.8 **Paragraph 3.2.10** – The data obtained from the Department for Transport Port Freight Annual Statistics, which is relied upon by the Applicant in the Impact Report, is of very limited value only, as the statistics only cover vessels of 100GT or more. As such, the size limitations of vessels captured by this data do not include the majority of CTVs that utilise the Port. Consequently, this data cannot provide an accurate comparison of long-term variability in vessel movements between ports in the local area, given that a large number of vessel movements at the Port relate to CTV usage.

Berth occupancy

3.9 **Paragraph 3.2.11** – ABP has previously provided the Applicant with raw berth occupancy data relating to parts of North Quay, however it appears that the Applicant has disregarded this information in the context of the analysis contained in the Impact Report.

3.10 In addition, ABP has provided a comprehensive analysis of berth utilisation relating to both past activities and future use of the Port – see the "Port of Lowestoft, Berth Utilisation Assessment - Years 2015 to 2017 (February 2019)", drafted by ABPmer ("Berth Utilisation Report"), attached at **Annex 1**.

3.11 **Paragraph 3.2.12** – As stated within the Berth Utilisation Report, based on 2017 data, the berth utilisation within the Inner Harbour of the Port was 42.4%. The ExA should note that this figure is more accurate than the assumed "around 35%" figure adopted by the Applicant.

3.12 More importantly, however, this 2017 figure (i.e. 42.4%) is based on historical data and does not take into consideration any new business that has commenced at the Port since this time. As such, the current activity at the Port is significantly higher than is stated within the Berth Utilisation Port - and still has further room for growth.

3.13 Indeed, in this context, ABP would draw to the ExA's attention the fact that the Port is in an entirely different commercial position as at February 2019, compared to how it was at even at the start of the Examination last December – a matter of months. This fact alone demonstrates how quickly Port operations can grow in response to a changing market. It also underlines the fact that any Port must have the essential flexibility to respond to the opportunities provided by the market.

3.14 **Paragraph 3.2.14** – The Impact Report states that the Applicant *"does not consider any additional information has become available since* [the time of the application]" which would cause it to review the current level of activity in the Port.

3.15 In the light of the information provided above, which has been provided to the Applicant, ABP is surprised that the Applicant actually feels able to make such a statement – which is clearly unsustainable.

3.16 For example, ABP advised the Applicant of the arrival of Peterson, a significant new customer at the Port, and provided the Applicant with a copy of the ABP press release on 7 January 2019. It is disappointing that the Applicant has chosen to overlook this new business, and the consequential beneficial impact that it has had on both the current and future level of activity in the Port.

3.17 As such, it is clear that the Applicant's assessment of the impact of the Scheme on the Port, which is based on what it incorrectly considers to be the current level of activity at the Port, significantly underestimates the number of vessels currently operating at the Port. As such, it is not a robust assessment and cannot be relied upon.

3.18 **Paragraph 3.2.16** – As stated above, the Department for Transport statistics only records vessels over 100GT. They do not reflect the level of CTV activity at the Port. As such, this data similarly cannot be relied upon as a basis for predicting trends in commercial vessels at the Port. This is something that is common knowledge in the port industry and the Applicant would perhaps have benefitted from the receipt of specialised advice in this area – particularly as the 2017 statistics are in fact the commencement of an upward trend relating to large commercial vessels over 100GT.

Port activity - future

3.19 **Paragraph 3.3.1** – The Impact Report states that: *"It is the Applicant's view that the Scheme is not an obstacle to the development of the Port of Lowestoft, but in fact a necessary pre-requisite."* In the context of ABP's very clear objection to the LLTC

scheme – and its very clear reasons for objecting – ABP does find this statement somewhat astonishing. The statement is made without the provision of any evidence or justification and in the circumstance, lacks credibility.

3.20 As the ExA will be fully aware, the Port derives no benefit whatsoever from a roadway that over-sails the Port, but does not have any connectivity to it, other than through the existing road network. On that basis, ABP finds it difficult to conceive how the LLTC can in any way be a 'necessary pre-requisite' to development of the Port.

3.21 **Paragraph 3.3.8 –** The Impact Report further states that *"the Port, and its customers and supply chain, will benefit from a reduction in congestion, improved journey times and journey time reliability."* The only customers that may benefit from the Scheme are those located on the seaward side of the A47, due to reduced congestion of the local road network. Activities within the Port estate will not receive any benefit from the LLTC, including the internal Port roads – quite the contrary.

3.22 **Paragraphs 3.3.9** – The responses received during consultation for the Outline Business Case were from local businesses already located within the Lowestoft area. As such, these responses cannot be arbitrarily attributed to the types of businesses the Port is endeavouring to attract (i.e. those involved in the offshore energy sector, argibulks, and aggregates sectors). Future business opportunities – i.e. not existing local businesses captured by the consultation – are unlikely to view with any favour the introduction of a permanent large structure into the middle of the Port from which they propose to operate, particularly as that structure obstructs the navigable channel at a low height.

3.23 **Paragraphs 3.3.11 and 3.3.12** – ABP is disappointed that the Applicant has selectively included excerpts from the Nautilus report which support its case, without providing the ExA with the balanced views contain in that report. Such an approach does rather strike against the collaborative relationship with the NSIP process is designed to engender.

3.24 In response, ABP would simply draw the ExA's attention to Paragraph 14.37 of ABP's Written Representations, which in summary states that, the author of the Nautilus Report has orally indicated to ABP that he is not a marine or shipping expert and has not considered in any great detail matters relating to the operation of the proposed bridge.

3.25 **Paragraph 3.3.14** – ***Bridge lifts*** - The Applicant considers that *"it is implicit if the Inner Harbour were to become busier, additional/longer lifts of the A47 Bascule Bridge would be required."* This assumption is not based on any technical expertise and is unduly pessimistic. Although the frequency for bridge lifts may potentially need to be increased in the future to accommodate additional capacity at the Port, ABP does not consider that an increase in Port activity would result in longer lifts of the A47 Bascule Bridge.

3.26 This is because ABP will not accommodate longer bridge lifts for more than one large commercial vessel at a time on the grounds of navigational safety (i.e. longer bridge lifts would only be required if more than one large vessel was required to transit through the bridge at any one time, and such vessels cannot be corralled together on navigational safety grounds).

3.27 As such, any increase in Port vessel activity would most likely result in more frequent lifts of existing duration – due to larger numbers of commercial vessels – as opposed to longer lifts.

3.28 The Applicant also relies upon the information set out in the accompanying paper "Justification and Traffic Effects of the draft Scheme of Operations" (Document Reference SCC/LLTC/EX/60). ABP's comments in respect of this Justification Report are set out in **Annex 6**.

Evidential base – future activity

3.29 **Paragraph 3.3.15** – In respect of the 4th bullet point, ABP has recently secured new contracts to support the offshore energy sector, as evidenced by the recent arrival at the Port of Peterson, who are offshore logistics specialists servicing offshore gas interests (reference Peterson website: https://energylogistics.onepeterson.com/en/industries/oil-gas).

3.30 Peterson is actively engaged with several offshore energy developers, with a view to an expansion of its activities. As such, although ABP is unable to provide details of what the ExA will appreciate are commercially confidential discussions with potential clients, it is the case that there are a number of realistic and imminent opportunities for new tenants operating within the broad offshore energy field, to locate or relocate to the Port.

3.31 **Paragraph 3.3.17** – The 'Off shore Wind Opportunities in the Port of Lowestoft' report, prepared by BVG Associates ("BVG Report"), is attached at **Annex 2**. To assist the ExA, the key points arising from the BVG Report were set out in Paragraph 14.26 of ABP's Written Representations.

3.32 **Paragraph 3.3.18** – This section omits to mention that only one part of the Southern North Sea Round Three windfarms, equating to 714Mw, is currently in construction. As such, there is still a further 6,300Mw of windfarms to be constructed as part of Round Three. This is a significant amount of work which will need to be accommodated within ports located in close proximity to the Southern North Sea.

3.33 **Paragraph 3.3.19** - The Galloper Operations and Maintenance facility is located in Harwich. ABP has, however, agreed to support Innogy's summer maintenance campaigns, which will be operated from Shell Base in the Inner Harbour.

Evidential base – uncertainty

3.34 **Paragraph 3.3.22** – Demolition of the existing buildings at Shell Quay to facilitate the East of England Energy Hub ("EoEEH") has recently been completed - at a considerable cost to ABP. ABP is currently in discussions with a number of potential tenants, which are necessarily commercially confidential – but the ExA will appreciate that ABP is not in the habit of simply committing capital cost for works within the Port for the simple sake of doing works.

3.35 **Paragraph 3.3.23** – The Applicant considers the EoEEH may not be attractive to CTV operators "*given its distance from the sea*." This is a baffling statement and quite simply, not correct. As far as ABP is aware, this statement is not supported by any actual knowledge or factual evidence – underlining again the Applicant's lack of external specialist advice.

3.36 In fact, the location of the EoEEH, both buildings and landside, has been used to support the construction of the Galloper windfarm, which involved over 2,500 CTV movements. As such, this area has a proven ability to support windfarm projects. Additionally, ABP notes that most of its competitor ports have berths which are less accessible and are located at a greater distance from the sea, than the Shell Quay.

3.37 **Paragraph 3.3.24** – The Vattenfall announcement has no bearing on the certainty of the future of the Port, and only equates to approximately 50% of the Round Three

windfarm developments within the immediate vicinity of both ports (although these particular windfarms are geographically closer to Great Yarmouth). As such, this leaves a significant amount of port-related construction and Operation and Maintenance (O&M) work still to be won.

3.38 In this context, the ExA should note that a Memorandum of Understanding does not preclude Lowestoft from winning some of the inevitable spin-off support work relating to the Vattenfall developments.

3.39 **Paragraph 3.3.25** – The Applicant's suggestion that Network Rail's freight sidings project is "speculative" is simply not correct – and it does little to speed the NSIP process to make statements that are unsupported by evidence and which could have been verified by simple enquiry.

3.40 The ExA should note that Network Rail is currently undertaking works to facilitate the project, and ABP understands the installation of the sidings began during February 2019 (as the ExA will have noted during the Accompanied Site Inspection).

3.41 As a general point, ABP is disappointed that, where investment in development is undertaken without a defined customer, such development is disparagingly dismissed by the Applicant as speculative.

Evidential base – Market analysis of Crew Transfer Vessels

3.42 **Paragraph 3.3.29** – The Impact Report states that:

> *"The development of larger offshore windfarm sites, further offshore with larger capacity turbines has changed the operational model for vessel support. Service Operational Vessels (SOVs) and helicopter support is becoming more common place, reducing the need for CTVs."*

3.43 As far as ABP is aware, the Applicant is not an expert in the offshore energy sector, so ABP questions on what basis this assertion is made. To clarify, SOV's and helicopter support models are more expensive options than CTVs, and as such are usually deployed during the more time critical warranty period of a windfarm, which is typically five years from the commissioning and acceptance of the windfarm. After this phase, the cost of technician transport is usually transferred to the asset owner and, as a consequence, more cost effective transport methods are sought. This means that windfarms often switch to a CTV-led model.

3.44 Additionally, even if a windfarm adopts an SOV-led model due to its location and operational duration at sea far from on-shore support, this will still require CTV involvement, as SOV operations are reliant on CTV's to deliver products/stores/equipment/personnel to the SOV from its port base.

3.45 ***Paragraph 3.3.30*** – The Norfolk Vanguard offshore wind farm is located further offshore then many of the Scottish Power developments, and as stated in paragraph 3.3.24 of the Impact Report, Vattenfall have entered into a MOU with Great Yarmouth. As such, this 'local evidence' is irrelevant to Lowestoft.

3.46 ***Paragraph 3.3.32*** – Regardless of whichever maintenance strategy is implemented for an offshore wind farm, delivery of that O&M strategy will require logistics support and base facilities at a port located within close proximity. The Port of Lowestoft is well-placed to service a large number of offshore wind farms in the Southern North Sea. The ExA should be aware that this is also driven by the Government's desire for high levels of UK content in the construction and operation of Offshore Wind Farms consented on the Crown Estate seabed.

3.47 ***Paragraph 3.33*** – The Applicant asserts that there is *"a degree of uncertainty in the extent of the role of CTVs in serving the growing offshore wind centre,* [and] *the extent to which the Port of Lowestoft will have a role to play"* - again without any clear evidential basis to support this statement.

3.48 ABP has provided the ExA with a copy of the BVG Report at **Annex 2**, which is an assessment of the potential growth in the offshore wind sector at the Port, and consequently, the role CTVs will play in that sector growth. The assessment independently undertaken by BVG Associates, who have considerable experience in the offshore wind sector and serve a global client base, provides a reasonable and proportionate view of these matters, which is based on expert knowledge in the wind sector industry.

3.49 Some of the findings from the BVG Report are summarised at Paragraph 14.26 of ABP's Written Representations. Overall, the report concludes that the Port is well located to benefit from the significant offshore wind developments that are likely to take place in the 2020s, noting however that the LLTC represents a potentially serious threat to the attractiveness of the Port for the offshore wind sector.

3.50 As such, ABP contends that the conclusions reached by BVG Associates should bear more weight than the numerous unsubstantiated and worryingly speculative assertions

made by the Applicant about the offshore wind sector within the Impact Report, which appears to have been made without any technical expert evidence to back them up.

3.51 If, on the other hand, ABP is being unfairly critical, and it is the case that the Applicant has obtained some technical expert advice in respect of these matters, then ABP requests that the Applicant provide copies of this advice and the credentials of any such expert, so that the weight (if any) to be given to such information can be ascertained.

3.52 ***Paragraph 3.3.35*** – The Applicant incorrectly states that the reduction in CTV movements in the third vessel survey *"reflects the movement of operations from the inner harbour to newly built facilities in the outer harbour, confirming the preference for operators to be located in proximity to the port entrance rather than at a remote location"*.

3.53 This is factually incorrect, as the reduction in CTV movements during the third vessel survey directly relates to the end of the construction phase of the Galloper offshore wind farm, and the setting up of the permanent O&M base for Galloper in Harwich. As such, the conclusions stated by the Applicant as to 'operator preference' are inappropriately drawn and cannot be substantiated.

3.54 ***Paragraph 3.3.36*** – The Applicant states that 45 of the 50 CTVs observed during the Vessel Survey had an air draft of less than 11.5m, and therefore would not require a LLTC opening. The ExA should note, however, that a 11.5m air draft is not in fact of any relevance.

3.55 The Applicant's statement assumes that a 0.5 metre clearance at highest astronomical tide (HAT) under the LLTC is sufficient. The air draft clearance, however, has not actually been resolved or adopted as an acceptable margin of safety by ABP as the Statutory Harbour Authority. The safety clearance currently proposed by ABP is 1 metre, which would reduce the effective height of the LLTC to 11 m – this anticipated safety clearance is referenced in Paragraphs 9.19, 11.9, 14.21 and 20.1 of ABP's Written Representations.

3.56 As such, it is clear that the Applicant - who is a County Council with no technical or specialist expertise in this area whatsoever - cannot simply insist that a particular safety clearance margin is adopted. It is also disappointing that the Applicant has chosen this approach, despite clear and consistent views from ABP that a minimum 1m safety clearance margin would be appropriate for this type of proposal.

3.57 It is assumed that the Applicant has chosen to assert its unqualified opinion and subsequent assessment in order to try to support its argument that the LLTC does not cause serious detriment to the Port.

3.58 In fact, in this context, the ExA's attention is drawn to the PIANC Guidance 2014 (Harbour Approach Channels Design Guidelines, PIANC Report Number 121, Maritime Navigation Commission), which is viewed as industry best practice – but appears to have been overlooked by the Applicant. This states that air draught clearance should be "not less than 2 m for 'inner channels'". The Inner Harbour of the Port is an 'inner channel'. Thus, a 2 m air draft safety clearance was adopted at the Port of Newport in respect of the M4 motorway, which crosses the operational port.

3.59 To assist the ExA, further information regarding air draught clearance is provided in the "Lake Lothing Third Crossing, Overview of CTV Characteristics Report (February 2019), prepared by ABMmer ("CTV Report"), a copy of which is at **Annex 3**.

3.60 ABP notes that paragraph 4.2 of the Vessel Survey states that it has adopted an air draft clearance of 11.5m under the LLTC. This air draught clearance, proposed by the Applicant without any apparent technical expertise to justify its approach, has then been applied by the Applicant to the assessments contained in the Vessel Survey Report. Consequently, ABP questions the underlying credibility of such an approach.

3.61 ABP also questions the accuracy of the survey equipment used to compile the data subject of the Vessel Survey, as there is no information provided to evidence how this equipment was measured or calibrated (i.e. for example, the accuracy of the height of the cameras mounted on street lighting columns cannot be evidenced). As such, ABP is of the view that reliance cannot be placed on the conclusions reached in the Vessel Survey in this respect.

3.62 In this context, the ExA will have noted that the Applicant has also failed to give any consideration to the impact of global sea level rise, as referenced in Paragraph 11.9 of ABP's Written Representations. This of itself will further constrain the clearance under the LLTC and which will inexorably worsen over time. Further information on the impact of climate change, sea level rise and storminess on air draught clearance is set out in paragraph 6.3 of the CTV Report.

3.63 Overall, it cannot be assumed that any CTV with an air draft of less than 11.5m will be able to transit under the LLTC without a bridge lift. Until ABP has seen the formal NRA of the LLTC and assessed and approved it, it cannot confirm that the prescribed

accurate air draft clearance will be 1 metre. But at this stage, on a risk assessment basis, ABP's interim view is that a minimum 1 metre air draft clearance may be a reasonable and proportionate safety margin.

3.64 It is clear from the above that ABP has already pushed the boundary to assume a 1 metre air draught safety clearance would be sufficient, and this assumption is made on the basis that mitigation measures will be provided to ensure that any residual navigational risks are reduced to ALARP, for example, provision of an active display, or magic eye system, which actively monitors the air draughts of passing vessels and will sound an alarm if a vessel is unable to transit the LLTC without a bridge lift.

3.65 This also underlines ABP's requirement for the provision of an Indemnity – as is discussed elsewhere.

3.66 ***Paragraph 3.3.37*** – The Applicant states it has observed a "*general arrangement drawing*" for a 24-person CTV which has an "*indicated air draft in the region of 11m*". Importantly, a general arrangement drawing is not a precise technical specification of a vessel, and an "indication" cannot be relied upon as a statement of fact.

3.67 In addition, as stated in ABP's Response to the ExA Question 2.29 (ABP Document 2 of 5 – DL4), vessels often have further pieces of safety-critical equipment, such as radio masts and aerials, added to the vessel post-construction, which increases the overall height of vessel. As a consequence, it is often the case that a vessel's Master does not precisely know the air draft of its particular vessel. Therefore, any reliance on the implication that a 24-person CTV has an air draft of 11m and as such can fit until the LLTC without a bridge lift is very dangerous, given the serious navigational risks arising from the potential for vessel strikes on the LLTC.

3.68 ***Paragraph 3.3.39*** **et seq** – The Applicant has made a number of assertions regarding CTV's specifications, without any clear technical expert evidence to support these statements. In short, the Applicant suggests that the majority of CTVs have an air draft of 10.5m to 11m (except for the largest CTVs with an air draft of 13m), and does not consider that the size of CTV vessels will increase. Are these statements simply based on the Applicant's observations during the Vessel Survey, or some other means of assessment?

3.69 This is a very dangerous assumption to make, as far as ABP can see, in an evidential vacuum. ABP requests clarity in this regard.

3.70 ABP would in any case record that during the Accompanied Site Inspection, 50% of the CTVs present at the Port clearly had an air draft that would not fit under the LLTC without a bridge lift (i.e. the air draughts of those CTVs were approximately 14/15m).

3.71 As referenced in Paragraph 14.21 of ABP's Written Representations, ABP has obtained technical expert evidence about CTV characteristics from ABPmer, which is ABP's independent marine and environmental research consultancy that operates at arms-length from ABP. A copy of the CTV Report is at **Annex 3**. In respect of current CTV usage, the CTV Report provides that:

a) A number of CTVs currently in use at Lowestoft have air draughts over 11.6m, particularly with whip aerials up.

b) Larger CTVs (e.g. 23m+ LOA) which are increasingly being used to service further offshore Round 3 wind farms have masts supporting navigational equipment which exceed 12m.

c) Windfarms are being built increasingly further offshore: as distances from land increase, so to have the overall size of CTVs to reflect the requirement for greater sea-keeping. For Round 3 wind farm projects, the CTVs now in use are generally in the range 20-25 m, with some vessels on the market now approaching 30 m LOA. In general terms, increases in CTV length/ beam will be accompanied by an increase in air draught.

d) As identified in Table 3 of the Report, only 3 of 16 (i.e. 18%) of the larger CTVs (LOA of 21m or above) that are currently servicing the North Sea offshore wind market would fit under the LLTC, once the proposed 1m safety clearance margin is adopted. Additionally, if CTV operators were required to lower aerials (if possible), this number only increases to 4 in 16 CTVs (i.e. 25%).

e) There has been a demonstrable trend towards larger vessels that correlates with the development of higher capacity offshore windfarms that are situated increasingly further from their onshore base of operations. Any analysis of future air draught requirements must recognise this trend.

3.72 ***Paragraph 3.3.40*** – The Impact Report states that:

> *"The selection of vessels for a particular operation is based on a range of factors, including accessibility, which would include consideration of the presence of the Scheme once constructed, therefore selection of vessels that*

avoided the need for a bridge lift would likely be considered. Consequently, the Applicant considers that while it will remain the case that some CTVs may require a Scheme opening, the majority will not, and in any event larger vessels would be able to request an opening on demand outside peak traffic hours."

3.73 It is unclear whether the Applicant's statement is based on any actual engagement with operators of offshore wind farms, or whether this assertion is simply based on the Applicant's preferred view as to how such operators would react to the construction and operation of the LLTC. As a result of ABP's engagement with developers of various offshore energy schemes and their supply-chain customers, which is referenced in Paragraphs 14.18 and 14.20 of ABP's Written Representations, it is ABP's understanding that operators are not prepared to accept the operational and financial risk of operating from a port with two bridges between their berths and the windfarm.

3.74 In this regard, ABP notes the observations the Applicant has made at paragraph 5.2.10 of the Impact Report, which states that the running costs of CTV's are estimated to be £1,200 per hour, due to their fixed schedules and associated operational costs. As such, if CTV operators located upstream of the LLTC were subject to even a small daily delay in their operating schedules, due to the LLTC and the proposed restrictions in the Scheme of Operation, the costs incurred by CTV operators as a result of this delay would add up to a significant financial imposition over the life of a windfarm. For example, a 15 minute delay, twice a day, would cost an operator approximately £600 per day (based on the Applicant's estimated running costs of £1,200 per hour). This clearly demonstrates why such CTV operators and other port customers do not want to be located to the west of the LLTC.

3.75 The ExA should be aware that this is not a question of "vessel selection", but rather whether this critical offshore energy sector work, and consequential benefit to the Lowestoft community, will be lost to other ports.

3.76 Indeed, this appears to be in direct conflict with one of the specific reasons stated in the Direction given by the Secretary of State under section 35 of the Planning Act, which is to support the - "*delivery of the Port of Lowestoft's role in being the hub for the offshore wind farms that are part of the East Anglia Array*".

Evidential base – Future growth scenario

3.77 ***Paragraph 3.3.41*** – ABP disagrees that the assumptions adopted in the Edge Economic report are of an "extreme nature" – these assumptions are based on ABP's discussions with potential developers of Offshore Wind and other energy resource interests. They are also supported by the key assumptions and conclusions of the BVG Report, which has adopted a reasonable and proportionate view based on years of experience in the offshore energy sector. Edge Economics are specialists in the economics of infrastructure, innovation and technology, and have over 15 years' experience in the fields of economic development, regeneration and growth. ABP questions on what basis the Applicant considers it is qualified to disagree with these assumptions?

3.78 ***Paragraph 3.3.42*** – In terms of the Scheme of Operation, the first correction to be made is that the Applicant's proposed scheme does increase the hours during which vessel movements are restricted.

3.79 Secondly, ABP considers that the Applicant's expressed view is not correct and underlines the Applicant's lack of understanding of the conduct of operations in the Port. ABP is firmly of the view, having been so advised – understandably in confidence - that operators of offshore wind farms and their supply-chain customers will not consider land located to the west of the LLTC to be an option. Put simply, the Applicant's proposed Scheme risks driving business away from Lowestoft.

3.80 ***Paragraph 3.3.43*** – The *"geographical remoteness of this part of the Port* [Shell Base] *from the sea*" is not a relevant consideration when assessing the impact of the LLTC on the Port. The historical use of Shell Base as the construction support base for the Galloper Wind Farm evidences that offshore wind farm operators do not consider this distance to be a relevant factor when deciding where to base their operations. It is the introduction of a new and extended constraint on vessel movements (i.e. the imposition of the LLTC bridge) which is the relevant factor. Additionally, many of Lowestoft's competitor ports have berths which are less accessible and are located at a greater distance from the sea than the former Shell Base at Lowestoft. As such, this time/cost balance is a factor for all such UK port operational bases. It is not unique to Lowestoft and as such, it is not a relevant factor.

3.81 ***Paragraph 3.3.44*** – The Applicant has failed to understand the point made by ABP in Paragraph 14.5 of its Written Representations. Any additional delay caused by the

LLTC, which by the Applicant's own omission is more restrictive on vessel movements than the existing A47 Bascule Bridge operating protocol, whether it is a 5 minute delay or potentially more, will result in a very significant operational and financial impediment to offshore wind farm operators located to the west of the LLTC.

3.82 Additionally, the 'example' set out in Paragraph 3.3.44 of the Impact Port is misleading, as the Applicant does not consider that the LLTC should be opened on demand for CTVs outside of peak traffic periods – as set out in the draft Scheme of Operation. Accordingly, the operators of CTVs located to the west of the LTLC will be subject to increased delay as a result of the operation of the bridge, and will suffer significant consequential costs arising from delay over the life of the relevant offshore wind farm project.

3.83 ***Paragraph 3.3.47*** – The Applicant has applied a number of "assumptions" relating to the future growth within the Port. It is not clear on what evidence these assumptions are based, in that as noted, as far as ABP is aware, the Applicant is not a technical expert in this area, nor is it familiar with the operation of commercial ports.

3.84 ABP considers that the assumptions made by the Applicant in this respect are inaccurate and unduly pessimistic, and being delivered in an evidential vacuum, cannot be given any weight with regard to the assessment of future impact of the LLTC on the Port.

3.85 For example, the Applicant's misunderstanding of port operations is highlighted by the following:

a) **Paragraph 3.3.47, first bullet point** – *"Ignoring the practicalities of how berthing for 40 x 30m (1200m) could be created along a quay of 720"*.

In fact, it is common practice for CTV's to be berthed two deep (i.e. one alongside another one). Additional, pontoon berths could be constructed perpendicular to the quay lines to increase berth capacity – this again, is common port practice. As such, there is ample space to provide the required CTV berthing to the west of the LLTC. This highlights the Applicant's misunderstanding of common port operational matters.

b) **Paragraph 3.3.47, second bullet point** – On what basis is the assumption that each CTV vessel will operate "*200 sailings per year*" made? This number is completely unsubstantiated by the Applicant.

c) **Paragraph 3.3.47, third bullet point** – *"A 5% uplift in other commercial vessel movements."*

This assumption is wholly inappropriate. As stated above, based on the recent arrival of Peterson as a tenant at the Port, large commercial vessel movements in the Port will be over 100% higher in 2019, compared with 2018 vessel traffic. Given this significant increase solely relates to one new tenant utilising one berth, it is clear there is significant scope for further growth in other commercial vessels movements at the Port in the future.

3.86 ***Paragraph 3.3.49*** – As stated above, the Applicant's assumption that - "*in the absence of the Scheme, therefore, the A47 Bascule Bridge would open more often and/or for longer, with commensurate impact on traffic conditions"* is not correct and thereby, is designed to mislead. The reality is that whilst an increase in Port operations may potentially lead to more frequent bridge lifts, for the reasons already explained, this will not lead to longer bridge lifts.

3.87 This paragraph also refers to the interrelationship between the A47 Bascule Bridge and the LLTC. ABP is firmly of the view that there is no correlation between the existence of the LLTC and how often the A47 Bascule Bridge will need to open. As the A47 Bascule Bridge is the closest bridge to the sea, all vessels entering or exiting the Inner Harbour must transit through this bridge irrespective of whether or not the LLTC is constructed. As such, the LLTC bridge will not have any impact on the amount of bridge lifts undertaken at the A47 Bascule Bridge.

3.88 ***Paragraph 3.3.51*** – Again, the Applicant's assertion that *"a busier port is assumed to result in longer individual bridge lifts"* is entirely misconceived and uncorroborated. An increased frequency does not correlate directly to duration.

3.89 ***Paragraph 3.3.52*** – The Applicant states that the - "*increased port activity has been assessed in each of the following sections of this report."*

3.90 As it is clear that the assumptions adopted by the Applicant in respect of future growth at the Port are fundamentally flawed, it consequently follows that the assessments set in the rest of the Impact Report which rely on these "assumptions" are similarly flawed. As a consequence, no weight can be placed upon them in the context of any assessment as to the serious detriment that the LLTC will cause to the Port and ABP's statutory undertaking.

4. CHAPTER 4 – OPERATING REGIME OF THE A47 BASCULE BRIDGE

The 1969 Order

4.1 ***Paragraph 4.2.1*** – The A47 Bascule Bridge replaced the original swing bridge in the same location, which was in imminent danger of failure due to mechanical wear and tear, not due to "*traffic demand*".

A47 Bascule Bridge – Small Craft and Yachts Notice 2018

4.2 ***Paragraph 4.5.5*** – The Applicant states that:

> *"It can reasonably be inferred that the purpose of the Notice's introduction was to seek to mediate between the competing and growing demands of both road and maritime traffic, by managing the timing and numbers of openings to a greater extent than the 1969 Order provides for."*

4.3 Further, paragraph 4.5.6 states that "*the scheduled openings in the 2018 Notice are not wholly compatible with the 1969 Order".* ABP disagrees with these assertions.

4.4 The extent of the Harbour Master's discretion to open the A47 Bascule Bridge to vessel traffic is stated in Schedule 4 of the 1969 Order (which is extracted in full in paragraph 4.5 of ABP's Written Representations). Importantly, it states that:

> *"At all other times the bridge shall be closed against vessels except in the case of emergency or after prior arrangement with the Harbour Master to permit a vessel to pass through the bridge on a particular tide".*

4.5 The current 24 hour operating regime of the bascule bridge has been in place since the Port moved to 24 hour operations in the 1970s. The restrictions set out in the 2018 Notice, which facilitate overnight openings, were developed following stakeholder engagement with local customers and suppliers (both within the Port and the local community), to facilitate growth of the Port and consequently, the town of Lowestoft. The rationale for the opening times stated in the 2018 Notice were not based on ABP's aim to mediate between the competing demands of road and maritime traffic, but to support the local economy. It is clear, therefore, that the current bascule bridge operating procedure has developed by custom and practice over the past approximately 50 years, and has been in operation by ABP without any complaint from Highways England or similar statutory authorities during this time.

4.6 The 2018 Notice dated 3 December 2018, and various former iterations of this notice, are issued by ABP to provide relevant information to users of the Port since construction of the bridge. Relevantly, the timings stated in the Notice have not been varied from previous versions, and have been in operation since at least 1987 and ABP understands for some years prior to this time.

4.7 In respect of commercial vessels, ABP currently operates the A47 Bascule Bridge in accordance with Schedule 4 of the 1969 Order, in accordance with the provision allowing openings "*after prior arrangement with the Harbour Master to permit a vessel to pass the bridge on a particular tide*." In this regard, ABP notes that:

a) All commercial vessels are only permitted access to the Port by way of prior arrangement with the Harbour Master.

b) The Harbour Master always operates on the basis that vessels will sail on the next safe tidal period (i.e. where there is enough water to safely sail and it is not restricted by weather).

c) There is a wide discretion as to what constitutes "*on a particular tide*". Relevant factors include consideration as to whether –

(i) there are any weather restrictions, and

(ii) the weather is likely to be more favourable at a different time of day or on a different tide.

d) For example, the Harbour Master may decide to vary the timing of a vessel accessing the Port, due to a weather front, tidal stream conditions or vessel traffic considerations, even though the tide level is of sufficient height to bring the vessel in.

4.8 As such, it is clear that the 1969 Order provides the Harbour Master with discretion to open the bridge whenever he or she considers it is fit for commercial vessels, having regard to the particular tidal factors. Further, this is how the Port has operated since the A47 Bascule Bridge was constructed in the 1970s.

4.9 ***Table 4 (page 23)*** – ABP notes that if the Applicant seeks to restrict the recreational openings of the A47 Bascule Bridge, as is inferred in Table 4, this would significantly and detrimentally impact on the leisure community which pass through the Port and raise objections from the Marina/berth operators and the Royal Yachting Association.

As Statutory Harbour Authority, ABP would support their objections to any additional constraints being imposed on the historical operating procedures of the A47 Bascule Bridge relating to recreational vessels.

4.10 ***Paragraph 4.5.9 and Table 5*** – The information provided by the Applicant is incorrect. In addition, the openings that were undertaken by the Harbour Master during restriction times for the vessel survey period, were either to accommodate an emergency situation or for tidally constrained vessels.

4.11 ***Paragraph 4.6.3*** – As stated above, it is ABP's view that it currently, and has always historically, operated the A47 Bascule Bridge in accordance with the discretion afforded to the Harbour Master by the 1969 Order for commercial vessels.

4.12 ***Paragraph 4.6.4*** – ABP considers that there is no "evidential weight" to be given to the way in which ABP has responsibly operated the A47 Bascule Bridge for the past 50 years, without any complaint from Highways England or similar statutory authorities, apart from identifying that ABP has always exercised its statutory functions in a responsible and consistent manner.

4.13 As such, no justification or factual evidence has been provided to support the inference that ABP would not adopt the same approach to the operation of the LLTC. This alone supports the view that the Scheme of Operation should not be incorporated as a certified document within the DCO.

5. CHAPTER 5 – A47 BASCULE BRIDGE AND SCHEME BRIDGE OPENINGS – EFFECT ON PORT OPERATIONS

5.1 ***Paragraph 5.1.2 and Table 6*** – ABP must question the value of such a table, bearing in mind the detailed design of the Scheme has not been finalised. As such, the exact cycle time of the LLTC is not even known. These assumptions are also subject to the Vessel Survey, the accuracy of which has also been questioned by ABP.

5.2 ***Paragraph 5.1.6*** – ABP disagrees that the restrictions contained in the 2018 Notice are "*self-imposed*", as these periods were developed through custom and practice, following stakeholder engagement with local customers and suppliers, in order to support the growth of the Port and stimulate the local economy. Additionally, the timings identified in the 2018 Notice have been in place since at least 1987 – over 30 years. This of itself suggests that, unless there is some unforeseen exceptional

circumstance, there is no reason why ABP would need to seek to alter the way in which it operates the bridge in the future.

Current port activity – ABP peak 'hour' openings

5.3 ***Paragraph 5.2.8*** – The Impact Report states that:

> *"Collectively, 76 vessel movements were recorded in the 'discouraged' periods over the survey period contributing to 48 A47 Bascule Bridge openings. In the survey period of 175 days, this therefore means that the A47 Bascule Bridge was opened on average approximately once per fortnight in the AM discouraged period and once per week in the PM discouraged period."*

5.4 This statement is factually incorrect and unsubstantiated by the Applicant. Indeed, ABP is bound to question how it is that the Applicant can place such patently incorrect data before the ExA – which does of itself lead ABP to question the underlying credibility of the Applicant's assessment of the scheme in terms of the impact on the Port.

5.5 ABP has reviewed the records set out in the Bridge Lift Record Book. There were in fact only 7 occasions in total (not 76) when the A47 Bascule Bridge had to be opened during the 'discouraged periods'. These were:

a) First survey period – 3 bridge lifts for tidally constrained vessels and 2 emergencies;

b) Second survey period – 1 premature lift (by one minute) due to port entry timing misjudgement and 1 unexplained lift; and

c) Third survey period – No instances.

5.6 Information relating to these bridge lift instances are set out in **Annex 4**.

5.7 ABP also notes that there were 104 additional bridge lift openings that occurred within 5 mins of the restriction times, either immediately before or afterwards. For clarity, ABP ensures there is a sufficient 'buffer period' either side of the restricted period (i.e. when the bridge deck is physically closed), to allow for the bridge opening/closing cycle time (i.e. movement of barriers, bridge leaves, etc.) and to provide time to clear the bridge physically of both vehicle and pedestrian traffic before the bridge leaves are opened. ABP corrals smaller (as opposed to the larger) vessel traffic together during the

restriction period, and then allows these vessels to pass through the bridge as a group, once the bridge is physically opened.

5.8 It would appear that the Vessel Survey has incorrectly recorded a number of these vessels that fall outside of the 'discouraged vessels' in its survey data (i.e. those vessels that have approached the bridge in anticipation of a bridge lift, and are milling about in the harbour in close proximity to the bridge).

5.9 Critically, due to the way the Vessel Survey data was captured, it appears highly likely that the data was unable to differentiate between these vessels waiting for a A47 Bascule Bridge once the restrictions had ended (i.e. those waiting within the Port in the line of site of the camera), and those actually transiting the bridge as part of a "bridge lift", particularly given the method of recording during the vessel survey periods.

5.10 ABP understands that the Applicant's camera was positioned to the south-west of the A47 Bascule Bridge, which is where vessels are corralled within the harbour awaiting the end of the restricted period. ABP also notes that the camera appears to be set back some way from the A47 Bascule Bridge, and the camera utilised a wide angle lens to provide a large field of vision. As such, although these vessels are likely to have ‘cut the beam’ of the Vessel Survey camera, it appears they were not physically transiting through the bridge during the restricted period – this position aligns with the Bridge Lift Record Book.

5.11 This again places a fundamental question mark of the accuracy of the data captured in the Vessel Surveys. ABP has to question the veracity of the conclusions reached by the Vessel Survey, and consequently, the relevance of the Vessel Survey in the context of the Impact Report.

5.12 In light of the above, ABP confirms that it's statement in paragraph 4.10 of its Written Representations (which the Applicant has referred to in paragraph 5.2.1 of the Impact Report), is correct and is further substantiated by the additional data in **Annex 4**, which evidences that the Harbour Master seeks to limit opening the bridge during the discouraged periods as far as reasonably practicable.

5.13 ***Table 8*** - The information contained in Table 8 is wholly inaccurate. As above, ABP suggests the Applicant was incorrectly recording vessels ‘holding station' in the Bridge channel, which were waiting for the restricted period to end. For example, this is likely to be attributable CTVs working on the Galloper project (96 of 104 instances of this

kind occurred during survey periods 1 and 2 while Galloper vessels were operational from Shell Base).

5.14 ***Paragraph 5.2.9*** – The Impact Report states that:

> "'*Tidally restricted' denotes any vessel whose draught is greater than the minimum depth of water (with appropriate under keel clearance) available within the navigation channel on a given low water."*

5.15 This definition is incorrect - tidally restricted may include a vessel that by virtue of a Navigational Risk Assessment needs to enter port over a slack water period (when no or minimal tidal flow is experienced), and not just on the basis of available water depth. The Applicant has misunderstood what comprises 'tidally restricted' and as such, has sought to impose a very narrow definition of these types of vessels in the Scheme of Operation, which is wholly unacceptable to the Harbour Master and ABP.

5.16 In addition, to clarify, the incident which occurred on 4 August 2017 was to enable the RNLI lifeboat to save the life of a person who had leapt from the inland side of the Bascule Bridge in an attempted suicide.

5.17 ***Paragraph 5.2.10*** – The Impact Report states that "*only seven of the 76 movements related to tidally restricted craft."* The numbers quoted in this paragraph are factually incorrect and do not match ABP's records set out in the Bridge Lift Record Book, some of which are extracted at **Annex 4**. These records are kept by the operators of the Control Tower for the A47 Bascule Bridge, and provide an accurate and contemporaneous account of all bridge lifts undertaken at the Port.

5.18 This paragraph further states that:

> *"It is therefore assumed that the principle [sic] driver of these openings is commercial factors. This would be particularly relevant to CTVs due to their fixed schedules and associated running costs, estimated to be £1,200 per hour (as discussed above), and thus costs incurred through any delay."*

5.19 To suggest that the ABP's actions are driven by commercial considerations is both disingenuous and misconceived. As demonstrated above, ABP has always exercised its statutory functions in a reasonable and proportionate manner, and does not simply open the A47 Bascule Bridge for "commercial factors". As it appears that the Applicant has based this accusation on the basis of entirely incorrect data, it follows that the claim is entirely unsubstantiated and cannot be relied upon.

5.20 ***Paragraphs 5.2.11 and 5.2.12*** – ABP considers that the 'analysis' undertaken by the Applicant in these paragraphs is irrelevant and cannot be relied upon, as the figures applied by the Applicant are incorrect.

Peak Hour Openings

5.21 ***Paragraph 5.2.13*** – As stated above, the bridge opening timings set out in the Notice have been in place for over 30 years, and pre-date 1987. During this time, ABP has not received any complaints from Highways England or any other statutory authority about the bridge opening times, its impact on traffic flows, or how ABP operates the A47 Bascule Bridge. As such, this 15 minute window is not, as is suggested by the Applicant, an "omission" by ABP from the discouragement period – this is the historical operating regime of the A47 Bascule Bridge. It is only now that the Applicant is seeking to introduce and impose a full "peak hour" traffic restriction on the operation of the LLTC.

5.22 ***Paragraphs 5.2.16 and 5.2.17*** – The Applicant's statement that the A47 Bascule Bridge "*is being opened with some regularity, which would be expected to increase if activity in the Port were to increase"* is misleading, as it is based on an analysis of bridge openings during what it considers to be the "*full peak hours of traffic"* (i.e. a 60 minute period). This is not how the A47 Bascule Bridge has been historically and currently operated (i.e. by reference to a 'restricted' 45 minute period), and as such, this analysis is irrelevant and the implication drawn by the Applicant as to how ABP operates the bridge is unsubstantiated.

5.23 By the Applicant's own omission, the Vessel Survey shows that the vessel movements within the periods immediately following the A47 Bascule Bridge restricted time periods are "*proportionately higher"* – this is because a number of vessels are often waiting in the harbour for the bridge to open in accordance with its authorised operating procedures. This is also substantiated by the Bridge Lift Record Book data which is extracted at **Annex 4**. ABP agrees with the Applicant's observation that the Harbour Master seeks to mitigate the effects on peak hour traffic.

5.24 The ExA should note, however, that the 15-minute windows are not "*excluded from the peak traffic hour"*. On the contrary, they have never formed part of any formal hour long traffic period, as the 45 minute restriction during peak traffic periods have been in place for well over 30 years.

5.25 This paragraph also states that - *"this data also provides some evidence therefore that vessels (including CTVs) are able to adjust their transit (plan their journey) to avoid the discouraged periods."* ABP disagrees with this assertion; as the (incorrect) figures set out in Table 9 and Table 10 do not provide any evidence that vessels can adjust their transit periods. Further, ABP questions on what basis the Applicant considers this implication can be made based on the factually incorrect "evidence" provided.

5.26 ***Paragraph 5.2.18 and Table 11*** – The Applicant has apparently undertaken an assessment of the effect of the Scheme on peak hour restrictions. This, however, was based on the vessel survey data. ABP queries the value of such a table and the subsequent analysis, bearing in mind that the appropriate air draught safety clearance margin has not yet been established and given that ABP questions the accuracy of the Vessel Survey.

5.27 ***Paragraph 5.2.20*** – The restriction times on the A47 Bascule Bridge have been in place for over 30 years. As such, it is unclear why the Applicant considers that "*vessel activity has responded to the 2018 Notice"*. Additionally, it is also unclear why the Applicant has undertaken a "worst case" assessment, which includes extended restrictions on the operation of the A47 Bascule Bridge, as these times will not change. This further highlights that the 'assessment' undertaken by the Applicant is inaccurate and cannot be relied upon for any meaningful consideration of how the LLTC peak hour traffic periods will impact on the operation of the Port.

5.28 ***Paragraph 5.2.21*** – The Impact Report states that:

> *"The Applicant would suggest therefore that vessels who would otherwise nominally be delayed would, in practical terms, be unaffected by the proposed peak hour restrictions as they would simply adjust transit times by a further 15 minutes (as the effect of the Scheme needs to be seen the context of the existing operation of the A47 Bascule Bridge). While this may appear onerous to CTV operators, the potential effect on CTVs should be understood in the context of the commentary above outlining the financial implications of running CTVs from this location, and that on their likely air drafts of CTVs."*

5.29 ABP questions whether the Applicant is suitably qualified to make any comments regarding the increased operating restrictions of the LLTC and its impact on CTV operations, in that this statement does not appear to be based on any actual

understanding of port operations or discussions with CTV operators as to how the LLTC will practically impact on their operations.

5.30 In this context, ABP would emphasise its above comments in respect of CTV operating costs. If CTV operators located to the west of the LLTC are delayed by 15 minutes twice a day, as is suggested by the Applicant, this would amount to an additional operating cost of approximately £600 per day (based on the Applicant's estimated CTV running costs of £1,200 per hour), simply relating to delay. This amounts to £219,000 over a year, and significantly more over the life of the relevant offshore energy project.

5.31 This significant additional financial liability is clearly a deterrent for any CTV operator to be located to the west of the LLTC. It is plainly unclear, therefore, why the Applicant considers that such operators "*would, in practical terms, be unaffected by the proposed peak hour restrictions"*?

5.32 ***Paragraph 5.2.22*** – ABP's data is based on details of all commercial vessel movements made through Lowestoft Harbour between December 2017 and November 2018. ABP did not need adopt a specific air draft, as the data provided is based on actual vessel details – i.e. it is clear that large commercial vessels cannot fit under the bridge. As ABP has already shown, the Vessel Survey data cannot be relied on, and it follows that the Applicant's assessments made in this paragraph are also, consequently, unreliable. ABP also questions what air draft the Applicant has used to support its "estimate", bearing in mind that ABP is of the view that a 1m air draft safety clearance margin is required to ensure navigational safety within the harbour is maintained.

Future port activity

5.33 ***Section 5.3*** – In response to paragraph 3.3.47, ABP has demonstrated that the Applicant's "assumptions" adopted in respect of sensitivity testing and considering the future Port activity are inaccurate and unduly pessimistic, and cannot be provided with any weight in regard to assessment of future impact of the LLTC on the Port. As such, the assessment undertaken by the Applicant in paragraphs 5.3.1, which is based on the inaccurate assumptions, is completely irrelevant and cannot be relied upon to provide any indication of the effect of the Scheme peak hour restrictions on the future growth of Port activity.

5.34 ABP considers that its evidence, primarily contained in the BVG Report, Edge Economics Report and supported by the CTV Report, provides the only form of

evidence prepared by independent, technically qualified and specialised experts, that can be relied upon to provide an independent assessment of the impact of the LLTC on the Port of Lowestoft, both in respect of current and future activities.

6. CHAPTER 6 – OPERATIONAL IMPACT OF THE SCHEME ON BERTHING

Extent of berthing loss

6.1 ***Paragraph 6.1.4*** – The Applicant considers that the "direct loss" of berthing resulting from the Scheme is 62m. This, however, is associated only with the actual physical footprint of the Scheme. ABP disagrees with this view, as it represents an unrealistic assessment of loss that does not take into account port operations and how they will be directly impacted by the Scheme.

6.2 ***Paragraph 6.1.5*** - The Impact Report implies that the 5m 'rights strip' directly surrounding the bridge piers will generally remain available for the mooring of vessels and tying of ropes (para 6.1.5 of the Impact Report). The Impact Report also provides conflicting statements regarding the purposes for which these the rights are requirements to be acquired by the Applicant:

a) *"the purpose of this strip is to provide the Applicant with some control over operations in this area in order to protect the structure*" (para 6.1.5 of the Impact Report), and

b) "*these rights are for maintenance access only and not intended to limit port operations"* (para 6.1.7 of the Impact Report).

6.3 The two relevant plot numbers relating the 5m 'buffer strip' are 3-03 and 3-36. Relevantly, the Statement of Reasons states that the purpose for which these rights are needed are:

> *"For constructing, protecting, accessing and maintaining the new A12 Lake Lothing Third Crossing."*

6.4 As such, it is clear that this space is not available for any type of mooring of vessels or associated tying of ropes, as it is a free space that is required to protect the bridge. The presence of vessel and mooring ropes within this area would therefore conflict with the specific purpose for which the Applicant states the rights are required. As a

consequence, ABP would not risk utilising this area for any purpose that could potentially impact on the protection of the LLTC.

6.5 ABP, therefore, has no confidence that it can rely upon the Applicant's statement that *"this space will remain generally available for the mooring of vessels/associated tying of ropes"*.

6.6 As ABP is unable to use the buffer strip for any port operations, this area forms part of the direct impact of the scheme on the Port.

6.7 ***Paragraphs 6.1.6 and 6.1.7 and Figure 6*** – The Impact report states that:

> *"The Applicant understands that ABP considers that an allowance of 10m for ships' mooring lines… thus implying that vessels can only berth a further 10m away from the outermost point of the rights strip."*

6.8 In addition, the *"application of this rationale to the existing berths would imply that all berths would in effect lose 20m in length as an allowance for mooring lines."*

6.9 Paragraph 6.1.7 of Impact *Report* states that:

> *"The Applicant considers that there is no impediment to a vessel's mooring lines being closer, or indeed passing over, the areas were rights are sort [sic] as these rights are for maintenance access only and not intended to limit port operations, additionally, while each vessel is different there are options for altering the mooring arrangements that would eliminate the need for head and stern lines, thereby removing the need for this allowance."*

6.10 To support its position, the Applicant has included 'Figure 6 – Alternate mooring arrangement' on page 36 of the Impact Report, which does not include a head or stern line. The Applicant has failed to provide any indication or reference to where it has obtained the 'proposed mooring plan'. ABP seriously doubts, however, that it was obtained from any reputable maritime technical specification. As the ExA will appreciate, ABP is extremely concerned that the Applicant is relying upon deficient technical advice, if indeed it has sought specialist advice, rather than advice from marine experts with a professional knowledge of vessel operations in a tidal environment.

6.11 In the opinion of the Harbour Master, experienced mariners employed by ABP and independent maritime specialists, the mooring arrangement as proposed by the

Applicant is deficient and unsuitable for mooring a vessel in a tidal port such as Lowestoft.

6.12 To support this view, ABP has prepared a report on "Vessel Mooring Systems in Tidal Ports" (February 2019), see **Annex 5**. This analyses the defects with the Applicant's proposed mooring arrangement and provides examples of vessel mooring systems used in non-ABP tidal ports throughout the UK.

6.13 Key points relating to the Applicant's proposed mooring arrangement are as follows:

a) The proposed alternate mooring arrangement is entirely inappropriate for mooring vessels at the Port, which is subject to tidal rise and fall. The figure shows a mooring arrangement that might be suitable for a vessel within an enclosed dock, with relatively small height difference between vessel mooring points and quay elevations and with benign weather and little or no tidal flows.

b) The type of mooring arrangement proposed by the Applicant requires several bollards – 6 bollards would be required to moor as shown in Figure 6. The bollards at the Port are spaced at approx. 12.5 m intervals, over structural members of the suspended deck. As such, additional bollards cannot be arbitrarily added along the deck without consideration of the structural configuration of the quay construction.

c) This mooring arrangement would not be acceptable to vessel Masters, and would only be used in very exceptional circumstances by the Harbour Master over a very limited timeframe.

d) Best practice guidance on the mooring of vessels is set out in the British Standards, Maritime Works, Part 4: Code of Practice for design of fendering and mooring systems (BS 6349-4:2014) ("BS Code").

e) Relevantly, the BS Code states that: *"The optimum pattern of mooring lines for normal alongside berthing is likely to consist of a basic array of breast, head and stern lines extending from or near the extremities of the vessel, together with spring lines from approximately the quarter points of the vessel."*

f) Additionally, the BS Code does not include reference to any mooring arrangements which do not include a head and stern line, or are of a similar configuration to that shown in Figure 6 of the Impact Report.

g) To assist with the ExA and the Applicant's understanding of typical mooring systems used in tidal reports, the Vessel Mooring Report provides a number of Google Map images which illustrates vessels berthed in various tidal ports on the East Coast of the UK, which all utilise head and stern lines.

6.14 In respect of the Applicant's comments regarding the allowance required for such mooring lines, the 10m allowance for mooring lines is the minimum acceptable distance for secure the mooring of vessels. This zone is also the minimum safety margin allowed for vessel lateral movement during manoeuvring and also an allowance for ranging (movement along the quay caused by interaction from passing vessels and other environmental factors) whilst alongside.

6.15 Further, the Applicant's assumption regarding berth lines (i.e. that all berths lose 20m in length for mooring lines) is incorrect – it is customary for vessels at the Port to berth ten metres apart with their ropes crossing within the 10m mooring zone.

Berth No. 4E

6.16 ***Paragraph 6.1.8 to 6.1.10*** – Berth No. 4E is currently a 45m berth, and 10.5m of this berth will be lost to the physical footprint of the Scheme.

6.17 The Applicant considers that, despite the loss of 10.5m from Berth No. 4E, there is still 34.5m that will "*generally remain available for berthing*". This assumption highlights the Applicant's lack of understanding as to how vessels are berthed at the Port, and the risks that may occur if such vessels are not moored in an appropriate and safe manner, particularly in the context of the mooring of small vessels.

6.18 As identified above, the 5m 'buffer strip' surround the bridge, which is sought by the Applicant for the purpose of protection of the bridge (amongst other things), means that ABP is unable to utilise this space for port operations – neither would it want to.

6.19 In addition, the minimum allowance for 10m of mooring lines either side of the vessel must be taken into consideration. Given that Berth No. 4E will have physical constraints on either end of the quay (i.e. on the western end is a fence that reaches the edge of the quay, and on the eastern end is the LLTC), there is no ability to 'cross' mooring ropes with any vessels on adjoining quays.

6.20 Once the 5m sterilized buffer strip is removed from Berth No. 4E, and the 10m for mooring lines on either end of the vessel are taken into consideration (noting that the mooring lines at the western end of the quay may potentially pass across the security

fence to the adjoining berth), this will leave 19.5m of quay space on Berth No. 4E. As such, ABP considers that this remaining space cannot be utilised by any commercial vessel that currently uses the Port, due to factors including the lack of bollards, the suspended quay, height of the tide, etc – these points are considered in further detail below.

6.21 Nevertheless, the Applicant considers that a number of vessels that currently utilise the Port could still access this berthing space, as there are a number of vessels with a LOA of 30m or less. ABP disagrees with that assertion, for a number of key points, which are as follows:

a) As stated above, the 'alternate mooring arrangement' proposed by the Applicant is inadequate and inappropriate, particularly for small vessels. Due to their size, small vessels require long head and stern lines to safely moor them to the quay – 19.5m is simply not enough space to moor a vessel and accommodate the mooring lines necessary to securely moor the vessel.

b) Berth 4E is located on a suspended quay, and only provides 1 existing bollard to tie a vessel onto. The existing bollard must be located in its particular position over the support beams of the suspended quay, due to the structural integrity of the quay. As such, ABP is unable to either move the position of the bollard, or add new bollard within the quay area.

c) The vessel's Master must leave some room to manoeuvre the vessel – this is similar to the 'car park' concept, where a vehicle requires sufficient additional room to manoeuvre in and out a car park. For example, a 19.5m berthing space cannot accommodate a 19.5m vessel (without even taking into consideration the additional space required for mooring ropes).

d) The infrastructure of the quay means that it is unsuitable for smaller vessels in that such vessels may be located between 2 – 4m below the quay line due to the water level in the Port. This gives risk to the risk that a small vessel or part of its structure could be become wedged and consequently damaged beneath the suspended quay.

e) Smaller vessels require increased protection, such as the use of 'sausage fenders' (around 12m long and 1m in diameter) and a large spread of mooring lines (i.e. 20-30m lines) in order to address the rise and fall of the tide. Additionally, with large differences between quay height and vessel decks,

smaller vessel gangways are not long enough to reach the quay, which means there is no access between the vessel and the quay.

f) Best practice is for small vessels to be moored alongside solid quay berths or pontoons.

6.22 Accordingly, by reason of the above factors, it is clear that Berth 4E will be effectively sterilized as a result of the Scheme, as it will be unusable for Port operations. As such, this berth becomes a direct loss to ABP.

Summary of berth loss

6.23 ***Paragraph 6.1.14*** – The Applicant maintains that "*the length of quay which is no longer usable by ABP is 62m, and it is against this figure that the extent of detriment to the Port should be considered."*

6.24 This analysis is clearly incorrect, and does not take into consideration either:

a) Operational restrictions of the Port; or

b) The purpose for which rights have been compulsorily acquired by the Applicant.

6.25 ABP remains of the view that 165m of quay length is rendered unusable as a result of the LLTC, when measured in whole berths (i.e. North Quay 2, 3 and 4E), as stated in ABP's Written Representations and various other submissions. Although ABP notes that a small part of North Quay 2 would retain some minor functionality, this cannot be practically utilised without combining this quay length with North Quay 1 for use by large commercial vessels. As such, in real operational terms, the whole of North Quay 2 is lost as an independent berth space within the Port as a result of the Scheme.

6.26 ABP also notes that this direct loss is in addition to the indirect impact the Scheme will have on berthing to the west of the LLTC, which is discussed by ABP throughout this response.

6.27 Overall, ABP disagrees with the Applicant's approach to calculating berth loss, which completely disregards the impact of berth utility when a large part of that berth is lost to the Scheme and highlights the Applicant's lack of understanding of practical port operations. The Applicant's suggestion that only 62m of quay length is lost to the Scheme is unrealistic and entirely disproportionate to the level of detriment that ABP will suffer as a consequence of the loss of prime quay space.

6.28 ***Paragraph 6.1.16*** – The Impact Report states that:

> "*The distance between the Scheme fenders and the Knuckle is 129.5m, which is just longer than the normal maximum length of vessel accepted in the inner harbour (quoted as 125m on ABP website).*"

6.29 A 129.6m space is not a safe and suitable berth for a vessel of 125m LOA (Length Overall) – this further demonstrates the Applicant's lack of expertise in safe and deliverable vessel operations. During the vessel simulation exercises, it was concluded that the maximum LOA vessel that could be safely manoeuvred and moored in this quay space is 100m.

Current berth occupancy

6.30 ***Paragraph 6.1.18*** – ABP has provided a detailed Berth Utilisation Report at **Annex 1**. As stated above, the Applicant's assumptions regarding berth occupancy cannot be relied upon. ABP also notes that current activity at the Port is significantly higher than is stated within the Berth Utilisation Report - and with further room for growth.

6.31 Overall, however, ABP considers that specific berth occupancy figures are superfluous when considering serious detriment, due to peaks and flows in Port operations – which are evidenced by the significant increase in berth occupancy since the start of the Examination, due to the introduction of a new key tenant.

Future berth occupancy

6.32 ***Paragraphs 6.1.19 and 6.1.20*** – ABP disagrees with the Applicant's assessment of future berth occupancy, as it is clear that the Applicant has failed to take into account the fact that dedicated berths are not available to other traffic and, as a result, have to be regarded as having a utilisation of 100%.

6.33 In addition, paragraph 6.1.20 of the Impact Report states that *"with respect to increases in other commercial vessel traffic* [apart from CTVs] *the Applicant has assumed this could increase by 5%. This would have a limited effect on berth occupancy within the Port."*

6.34 As stated above, the assumed 5% increase stated by the Applicant is wholly inaccurate. The Applicant, as far as ABP is aware, is not an expert in port operations, and the adoption of such a percentage with no evidential or other basis to back it up is reckless at best.

6.35 The Applicant is aware that Peterson commenced operations at the Port at the start of 2019, as ABP sent the Applicant a press release on this new commercial business on 7 January 2019. As such, it appears the Applicant has deliberately overlooked this significant new business and its impact on the current level of activity at the Port.

6.36 Based on the increase vessel movements attributable to this customer alone, there is an anticipated minimum 100% increase in large commercial vessel movements within the Port between 2018 and 2019. This has resulted from the introduction of just one additional customer at the Port, with many further similar customers anticipated to commence operations at the EoEEH at Shell Quay over the near future.

Significance of berthing loss

6.37 ***Paragraph 6.1.21*** – The Applicant states that the loss of 62m is not significant, as it equates to 3% of quay in the Inner Harbour that is currently available. ABP considers that this justification is contrary to precedent. Certainly, it cannot be relied upon in respect of the assessment of serious detriment.

6.38 Importantly, as identified in the *Hinkley* decision, in considering whether the Scheme results in serious detriment to a port undertaking, the amount of area affected by the proposed development when compared with the whole of the area available to the statutory undertaker is not relevant.

6.39 In the *Hinkley* case, the amount of statutory area that was impacted by National Grid's proposed was approximately 2.7% of the Port of Bristol estate. As such, National Grid sought to argue that this small amount of area did not cause serious detriment to current operational requirements, or on the flexibility to undertake future development, due to the "vast scale of land available to the BPC". National Grid also sought to argue that (Paragraph 8.4.176 of the Recommendation Report):

> *"In the context of such a large port and holding, the area affected would be small and the effect upon that small area is limited to a reduction in the height of what could be built in some parts of that small area, assuming that is the form of development that the BPC eventually decides it wants. There is no reason to believe that such development, if needed, could not successfully be accommodated elsewhere within the Port. Whilst it is not disputed that a small reduction in flexibility to develop in one small area is a detriment, it is not properly capable of amounting to a 'serious' detriment to the Port's operation."*

6.40 Overall, however, the ExA in the *Hinkley* case rejected National Grid's argument, and found as follows (Paragraphs 8.5.275 and 8.5.276 of the Recommendation Report):

> *"Nonetheless, it must be borne in mind that the essential infrastructure of the commercial Port of Bristol is nationally important and of great strategic significance to the country. To meet the varying and changing demands of its customers, and world trade, the BPC needs flexibility to develop its land and provide the necessary buildings and facilities upon it. The BPC's senior personnel explained at the ISH, the way in which the Port needs to operate and impact that the proposed development would have on the way in which their operation is carried on.*
>
> *We recognise that the area affected would be relatively small in comparison to the whole of the land available to the statutory undertaker. However, we have been persuaded by those with an intimate knowledge of the Port that the constraints imposed by the proposed development in this particular location would be likely to cause serious detriment to the carrying on of the undertaking. The land affected represents an important part of the resource available to the BPC, and there is a paramount need to retain the ability to use this land in a flexible manner. However, as indicated above, this concern would be overcome by the alternative proposal that provides for an increase in the height of the pylons, and hence ground clearance in this location."*

6.41 ***Paragraph 6.1.23*** – As the Applicant is seeking to impose greater operational restrictions on the opening of the LLTC, as compared to the existing bascule bridge, together with the impacts of the second bridge on the ability for ABP to both retain existing business and attract new business to the berths located to the west of the LLTC, ABP maintains its position that this area of the Port is indirectly impacted by the LLTC Scheme.

6.42 As such, this indirect impact must form part of the overall assessment of serious detriment caused by the LLTC Scheme, which is set out in Paragraph 9.19 of ABP's Written Representations, as individual issues cannot be considered in isolation as part of the serious detriment test (*Hinkley* and *Richborough*).

6.43 It appears that the Applicant has failed to consider other issues arising by virtue of the imposition of a second Scheme of Operation for the LLTC, in particular the 'in-combination' effect that will impact on vessels that need to transit through both bridges

(i.e. the A47 Bascule Bridge and the LLTC) in order to either enter or leave the Port. This is referred to in Paragraphs 11.13 to 11.16 of ABP's Written Representations, and the other submissions ABP made at Deadline 4.

6.44 All of these factors are relevant when considering the significant impact that the Scheme will have on loss of berthing at the Port.

6.45 ***Paragraph 6.1.25*** – For the reasons stated above, ABP disagrees with the conclusions reached by the Applicant, as stated in this paragraph.

7. CHAPTER 7 – IMPACT OF THE SCHEME ON NAVIGATIONAL RISK

Preparation of pNRA

7.1 ***Paragraphs 7.2.1 and 7.2.2*** – ABP provided its detailed views regarding the Applicant's preparation of the pNRA and use of the NWG as part of its Deadline 4 submissions. As such, these submissions are not duplicated here.

7.2 ***Paragraph 7.2.4*** – ABP disagrees with the Applicant's recollection of events at the NWG, at which ABP was represented. An outline of the proposed methodology was shown to the NWG. Some of the major hazards were identified by the group, principally those of particular interest to the recreational boating community, given their level of attendance at the group sessions. This does not, however, equate to the NWG's nor ABP's SHA implicit consent or approval of the outline methodology.

7.3 ***Paragraph 7.2.5*** – ABP has separately commented on the deficiencies in the simulator exercises undertaken by the Applicant. A high-level summary of these deficiencies is also set out in the SoCG between the Applicant and ABP.

7.4 ***Paragraph 7.2.6*** – As identified by ABP at the Issue Specific draft Development Consent Order hearing, the precedents in Silvertown and Thames Tideway DCOs both required the final navigational risk assessment to be approved by the relevant Harbour Authority. This approach has also been taken by applicants in respect of other DCOs, including the Tidal Lagoon Swansea and Hinkley Point C development consent orders.

7.5 As such, there is clear precedent that a NRA must be reviewed and approved by the relevant Harbour Authority, prior to any marine works commencing. This position must be reflected in the LLTC DCO.

7.6 As stated in its Deadline 4 submissions, ABP considers that the approach adopted by the ExA in the Tidal Lagoon Swansea DCO represents, in the circumstances now presented, a possible means to regularise the position – although that said, it is far from ideal. As far as the SHA is concerned, it must have been provided by the Applicant with a properly formulated NRA, which will then be assessed by the SHA, before it can produce its own NRA. Until that exercise has been completed – the Applicant cannot implement its consent – should the DCO be authorised. The fact that ABP finds itself in this position underlines the incomplete nature of the project and what ABP considers to have been a premature submission with the consequential inevitable premature examination.

7.7 ***Paragraph 7.2.7*** – Importantly, the vessel simulation exercises were undertaken on the basis of estimated operational cycle times, as the actual cycle time of the LLTC scheme opening and closing is currently unknown. This cycle time is a critical factor in assessing a range of factors, such as, the utility of the Scheme, the impact on vessel movements, the impact on peak traffic flows, and potential increase in navigational risk. As such, until this critical piece of information is known, and can be accurately simulated, the reliance on the outcome of vessel simulation exercise must be limited, at best.

7.8 In addition, the Impact Report states that:

> *"The Applicant also notes that marine simulators are principally developed to undertake situation management simulations for the training and assessment of ships personnel, as such they are not developed to produce an absolute rendition of vessel response to all external factors, this is particularly relevant to the issue of modelling of wind shear effects and the level of model detail that would be required to simulate this with any level of accuracy."*

7.9 The type of simulator used for the exercises undertaken by the Applicant so far is principally a Navigational Management simulator. Within the UK, there are available simulators which can be configured to model port development and vessel approval situations such as would reasonably be required to support the construction and operational cycle of a large bridge structure through the middle of an operational port. As such, the Applicant's assertion that simulators are unable to accurately assess the impact of external factors, such as wind shear effects, is factually incorrect.

Future development

7.10 ***Paragraph 7.3.2*** – As stated by the Applicant, ABP has provided information regarding its navigational risk assessments, to assist the Applicant in understanding how a robust risk assessment must be undertaken.

7.11 Disappointingly, but somewhat unsurprisingly, the Applicant, who has no technical expertise in this area, considers that ABP's navigational risk assessment system, which utilises the MarNIS software, is "*a bespoke application with a focus on ABP's corporate mitigation measures and would therefore require significant alterations to be compatible with the assessment of the design mitigation measures for this Scheme".* This again underlines the fact that the technical advice provided to the Applicant (if any) is deficient and demonstrates a lack of understanding of MarNIS.

7.12 The ExA should understand that MarNIS is a commercial software programme that is produced by ABPmer (an entity which operates at arm's length from ABP), which is a comprehensive Risk Assessment and Incident recording system. It has been developed and refined by ABPMer over many years, for the port industry generally. It is not a bespoke ABP application. It includes a comprehensive suite of hazards, causes and consequences as well as control measures. Incident reports from MarNIS are accepted as valid documentation by the Marine Accident Investigation Branch.

7.13 MarNIS is currently used by five port groups (in addition to ABP), including the UK Government for its Queen's Harbour Master operations at military ports, and has been sold to a large number of ports around the UK and other parts of the world.

7.14 An illustrative list of the non-ABP ports that utilise MarNIS as their risk management application, are as follows:

a) Queen's Harbour Master (QHM) Ports - Portsmouth, Clyde (Faslane), Plymouth (Devonport), East Cove Port (Falklands), Gibraltar (QHM);

b) Stena Line Ports Ltd - Fishguard, Holyhead, Loch Ryan Port, Stranraer East Pier;

c) Torbay Port Group - Brixham, Torquay, Paignton;

d) Argyll and Bute Council - Oban, Craignure, Port Askaig, Dunoon, Campbeltown, Rothway;

e) Shetland Islands Council - Sullom Voe, Scalloway, Small SIC ports;

f) Littlehampton;

g) Tobermory;

h) Sunderland;

i) Dart Harbour;

j) Salcombe Harbour; and

k) Taranaki (New Zealand).

7.15 As such, it is clear that MarNIS is not a 'bespoke application which focuses' on ABP's corporate mitigation measures. It is an independent commercial operational risk management system that is utilised by a large number of ports.

7.16 ***Paragraph 7.3.3*** - The Applicant considers that *"application of ABP's methodology would not fundamentally change the assessment of risks associated with the Scheme"* and that *"any minor amendments to the pNRA are best addressed during the planned update prior to the construction phase"* (para 7.3.3 of the Impact Report).

7.17 The Applicant is not in a position to assert that ABP's methodology would not change the assessment of the risks associated with the Scheme. Further, any changes required would be 'minor amendments', as it is not an expert in navigational risk. The appropriate assessment and approval of the final NRA can only be undertaken by the Statutory Harbour Authority, who must comply with its statutory obligations to ensure all navigational risk is reduced to ALARP (As Low As Reasonably Practicable). As such, the LLTC Scheme cannot be commenced until a final and robust NRA has been reviewed, amended as necessary, and approved by ABP.

7.18 ***Paragraph 7.3.5*** – Any further vessel simulation must be based on the actual parameters of the LLTC scheme, including accurately simulating the effects of wind shear, wind sheltering, cycle times and meteorological impacts, as it is likely these factors will impact the conclusions of the initial Vessel Simulation Report. It is also imperative that the correct modelling must be undertaken with peer review and used to inform the required NRA.

Commercial Emergency Berth

7.19 ***Paragraph 7.4.2*** – The Applicant states that ABP's response to ExA Question 2.16 only considers inbound movements. ABP's Emergency Berth Report, which has been

shared with the Applicant, covers situations for both inward and outward vessels, and the consequential requirement for an emergency berth. As such, the Applicant is being disingenuous in asking this question, as it is fully aware of the requirements of both inbound and outbound vessels.

7.20 ***Table 14*** – The Applicant's assessment of mitigation measures in bridge failure scenarios is deficient. In particular, for a vessel destined for Shell Quay, if a vessel is unable to turn or go back through the A47 Bascule Bridge, it will have nowhere to go and will be stranded in the navigational channel. This of itself will create an unacceptable navigational risk.

7.21 The Applicant has also noted the Harbour Master's discretion for a simultaneous lift of both bridges – this is somewhat misleading, as currently proposed, the Harbour Master only has discretion to undertake such a simultaneous bridge lift if it has "followed the sequential risk mitigation flowchart". As set out in its Deadline 4 submissions, the proposed sequential risk mitigation flowchart is not operationally practicable. It is overly prescriptive and is not capable of realistic application without serious risk.

7.22 ***Paragraph 7.4.8*** – The Applicant considers that during a Scheme bridge failure event, a "*vessel on approach would retain full navigation control so would therefore be able to take appropriate action to minimise any impacts."* ABP considers that this assertion is incorrect, as a vessel may not be able to retain full navigation control in such circumstances, for example, due to a falling tide, deteriorating weather, etc.

7.23 As such, it appears that the Applicant is hopeful that any such failure would only take place in optimum operating conditions, without consideration of the practicable implications that can arise at a port from day-to-day. ABP, therefore, remains of the view that the mitigation measures proposed by the Applicant to offset the risk of a bridge failure scenario are both insufficient and inadequate, and may actually give rise to serious safety concerns within the Port.

7.24 ***Paragraphs 7.4.9 to 7.4.13*** – The Applicant has attempted to undertake an analysis of the risk scenarios that may arise from a bridge failure. Firstly, ABP questions the technical basis of this analysis, as it does not appear to be substantiated by any technical advice, support documents, etc. In respect of the overall analysis, ABP notes the following:

a) The Applicant has not provided any evidence to substantiate that the "industry recognised precedent for measuring reliability is to target a reliability of

99.99%". ABP requests the Applicant to provide further information to verify this claim.

b) It is not clear how the risk probabilities quoted (i.e. 1 in 5,000 failure and 1 in 2,000 worst-case scenario) are calculated. ABP's technical advisors have been able to follow the method and values through to a 1 in 1,000 failure rate. Hence a 1 in 5,000 is either based on a different reliability measure, or is specifically due to the 'lifting mechanism'. Based on the limited information provided, however, this is currently unclear.

c) The methodology contained in PIANC is comprehensive and covers ship/bridge interaction. It appears, however, that the Applicant has only used a very small aspect of the PIANC methodology (i.e., the probabilistic multiplication). As far as they have used the method, it is broadly consistent with that identified in PIANC Report WG19, however isolating the methodology to such a small aspect may have consequential impacts on the assessment undertaken.

d) The analysis fails to recognise that many vessels that use berths maintained at 3.7m are actually deeper-draughted than this value because they are able to safely to sit on the lake-bed at low water (known as "NAABSA" – Not Always Afloat But Safely Aground). This is relevant to berths with a soft silty harbour bed such as the majority of those in Lowestoft.

e) The 'Risk rating' and the subsequent conclusion that the risk of bridge failure is not 'intolerable' are entirely subjective, which are based on the pNRA risk matrix. ABP considers that this risk analysis cannot be undertaken until the Applicant has completed a formal and robust NRA that has been approved by ABP.

7.25 ***Paragraph 7.4.14*** – As stated above, ABP has already expressed its serious concerns with the sequential operational mitigation process in its Deadline 4 submissions.

7.26 ***Paragraph 7.4.15*** – ABP notes that it may not be possible for a vessel to reverse back to the proposed location of the emergency berth on every occasion, however, this location provides a safer option than attempting to back through a narrow bridge opening in most cases where turning a vessel is not possible.

8. CHAPTER 8 – IMPACT OF THE SCHEME ON STATUTORY PORT SECURITY

Designated Temporary Restricted Areas

8.1 ***Paragraph 8.2.3*** – The Impact Report states that:

> *"It is the Applicant's understanding that any berth within the Port of Lowestoft can be designated as a Temporary Restricted Area if required by the presence of a vessel to which the ISPS Code applies."*

8.2 This is incorrect, as ABP cannot accommodate ISPS vessels on all berth areas at Lowestoft, as not all areas of the Port are designated as ISPS under ABP's Port Facility Security Plan.

Impact of the Scheme on statutory security at the Port of Lowestoft

8.3 ***Paragraph 8.3.1*** – The Applicant considers that the "*main impact of the Scheme on the statutory security of the Port is through the ability of people to walk, at an elevated level, in proximity to an area that has the capability of being designated as a restricted area, on a temporary or a permanent basis"*. This assumes, however, that all security risks require an ISPS vessel to be within a temporary area, which may not always be the case.

8.4 ABP considers that the Applicant has failed to understand the security risks arising as a result of the Scheme. In this context, ABP considers that the Applicant has failed to consider factors such as the ability for persons using the bridge to undertake reconnaissance/surveillance of the Port, and potentially infiltrate parts of the Port's secure areas. In this regard, ABP is concerned that parts of the Port estate that were previously not open to the public, will become very visible to members of the public as a direct result of the location and height of the bridge.

8.5 ***Paragraph 8.3.2*** – In addition to the mitigation measures identified by the Applicant – i.e. fencing and CCTV – ABP considers that additional security staff may also be required.

8.6 ***Paragraph 8.3.4*** – The risk of objects being thrown from the LLTC relates to both vessels that are moored within the vicinity of the bridge, and additionally, to any area of the Port estate. As such, the Applicant's assertion that any moored vessel would be moored at least 22m away from the pedestrian footpath is flawed, as it does not account for objects thrown into the quay area, which is directly adjacent to and under

the pedestrian footpath, nor does it account for the possibility the objects may be mechanically propelled from the bridge onto either a vessel/quay area.

8.7 ***Paragraph 8.3.5*** – ABP disagrees with the Applicant's assertion that the distances that it could reasonably be assumed that an object could be thrown "is around 25m". ABP has obtained advice from the relevant statutory authority, DfT, which has agreed that a safe distance from the bridge structure would need to be 50m – twice that suggested by the Applicant. ABP has also provided this advice to the Applicant, so it is unclear why the Applicant has disregarded the views of the relevant statutory authority in respect of the safety clearance required.

8.8 ***Paragraph 8.3.7*** – The Impact Report states that:

> *"The Applicant is unclear how ABP currently mitigates the risk of throwing of proscribed objects in to areas that may similarly be used as Temporary Restricted Areas, given the proximity between public highway and other berths within the Port."*

8.9 The Applicant mistakenly considers that there is some type of 'precedent' position that could be applied in respect of statutory Port security. It is the case, however, that there are no comparable public roads or paths at an elevated level within 50m of a potential ISPS berth. As such, the mitigation measures requested by ABP, which have been reviewed and agreed by DfT, represent the only available and importantly appropriate evidence available in respect of statutory port security matters.

8.10 ***Paragraph 8.4.1*** – The Impact Report states that:

> *"The Applicant considers the physical extent of the fenders (which the Applicant has already assessed delineates the permanent direct loss of quay) mitigates the risk, though remains receptive to other security measures that would complement this in addition to CCTV."*

8.11 The Applicant's views are not in line with DfT recommendations in respect of statutory Port security and, as such, it is clear that these conclusions are unsubstantiated and cannot be relied upon. ABP considers that the only views that can be taken on these security matters are those of the relevant statutory authority – i.e. DfT.

9. CHAPTER 9 – OTHER IMPACTS

9.1 ***Paragraph 9.1.4*** – The Impact Report states that "*the Applicant is also engaged with ABP over a Side Agreement through which appropriate mitigation measures sought by ABP would be secured."* This statement is entirely misleading. As ABP has advised the ExA, the Applicant provided a skeleton draft agreement at 9:00pm on the evening before the ISH on the dDCO and CA. The agreement itself was in such an incomplete state, that ABP is unable to comment substantively on its contents. ABP has sought further information from the Applicant as a matter of priority, but at this stage, such information has not been forthcoming.

9.2 In addition, based on the limited information available, the draft agreement does not provide ABP with appropriate mitigation measures. To the contrary, nothing in the draft agreement meets the fundamental objections that ABP has to the Applicant's LLTC scheme, in terms of the serious detriment to Port operations, the need for genuine mitigation, the resolution of the scheme of operation, the need for a formal navigation risk assessment, properly accommodating the need for dredging, or address ABP's absolute requirement for an indemnity in relation to a public highway crossing an operational port.

Commercial Road

9.3 ***Paragraph 9.2.1*** – As previously raised by ABP in its various submissions, the Applicant has not sought to include powers for the necessary diversionary route that will be required during closures of Commercial Road. The Applicant simply considers that such a diversionary route will be agreed with ABP. This is a significant assumption in the light of the fact that it may not be possible to release any land to the Applicant, given the commercial pressures on the Port. The Applicant has failed to appreciate the significant impact on Port operations that such a diversionary route will have, and has also failed to provide any swept-path analysis of such a route, or engage with ABP in any meaningful way about the implications of this requirement.

9.4 The Applicant also states that "*it is understood port traffic has been directed along this route previously, though before doing so relevant measures to ensure the safety of all users would be agreed with ABP."*

9.5 This is not technically correct, as the diversionary route has only ever been used by HGV's in one direction only – east to west. It has never been used for two way traffic, nor has it been used for mixed traffic including non-motorised users. As such, without

any further information from the Applicant, it is unclear whether such a proposed diversionary route could even practically work.

9.6 ***Paragraph 9.2.3*** – In respect of harbour mobile cranes, the Impact Report states that:

> *"It is understood that ABP does not own any such cranes, and it is unlikely such cranes would be required in association with the proposed CTV facility to the west of the Scheme. This matter remains under discussion with ABP."*

9.7 ABP does not currently own Harbour Mobile Cranes. One of its principal customers, however, – Peterson – intends to deliver imminently a harbour mobile crane to Lowestoft (March 2019), in order to support their newly created logistics base. Whilst awaiting delivery of the permanent crane, Peterson has had to hire and utilise a temporary crane. The Peterson permanent crane is approximately 40m in height, which means it will be unable to fit under the bridge. This is a serious operational issue, as it is likely that Peterson may utilise berths to both the east and west of the LLTC.

9.8 ABP queries how the Applicant considers this issue can be satisfactorily addressed?

9.9 Additionally, whilst a CTV base is one possible option for land west of the LLTC, it is entirely plausible other operations could co-locate to this area and some of these may require harbour mobile cranes. Those operations would also be impacted by the inability to move a harbour mobile crane around the Port, to utilise different berths, if necessary, for operational reasons.

Construction compound (plot 2-22)

9.10 ***Paragraph 9.3.1*** – ABP notes that the Applicant has referenced a "Construction Compound Lease" in the draft agreement provided to ABP late on 12 February 2019. The Applicant has, however, failed to provide a copy of the draft lease, or any particulars as to what this lease may contain. ABP's position is that, for operational reasons, ABP is not in a position to provide the whole of plot 2-22 as a construction compound.

9.11 ***Paragraph 9.3.2*** – The Impact Report states that:

> *"The Applicant has engaged with Dudmans and understands the principal requirement is for access to its weighbridge. This could be resolved by limiting the size of the compound to the extent that permits access to the*

weighbridge, and potentially reserving space adjacent to Commercial Road for Dudman's HGVs."

9.12 The statement above does not address the conflict between the proposed construction compound and Dudman's operations. For example, it is the case that up to 20 to 30 HGVs can be waiting to tip their load, and the weighbridge forms a small part of the overall marshalling process. It is not just access to the weighbridge that is important, but additionally access to the silo's grain reception facility and an adequate HGV marshalling area – ABP considers any space adjacent to Commercial Road to be insufficient, and potentially dangerous.

9.13 ABP also notes that access to this area would also be subject to the diversionary route during periods when Commercial Road is closed, which will put additional pressure on the traffic routes within this area.

Shed 3 – Impact during construction and operation

9.14 ***Paragraph 9.4.1*** – states that *"Shed 3 is adjacent to the pier on north quay and access to its eastern door would be obstructed during the construction of the Scheme."* This statement is an over-simplification of the facts on the ground. The reality is that, whilst the bridge pier is adjacent to the main entrance to Shed 3, the area of land that the Applicant is seeking to compulsorily acquire (plot 2-23) for the construction of the pier is far larger than the pier. Thus, were the Applicant to exercise their property rights having acquired plot 2-23 from ABP by compulsion and, for example, were then to erect a fence around their land holding (for example to protect the pier and its foundations), then ABP and its tenant would be deprived of this access to Shed 3 in perpetuity.

9.15 ABP notes that, as viewed by the ExA during the Accompanied Site Inspection, Shed 3 is at capacity.

9.16 ***Paragraph 9.4.2*** – Whilst it is noted that "..*it is possible the [entrance] door may need to be adjusted.*.", this again is an over-simplification of the position. In reality, the shed will require some significant engineering work to remodel its entrance (and will probably deprive the tenant use of the shed for the duration of those works, given the nature of cargo being stored there). The Applicant has not considered what alternative arrangements will have to be made for the tenant whilst 'adjustment works' are being carried out.

Temporary possession of Lake Lothing

9.17 ***Section 9.5*** – The Applicant has confirmed that it has sought very wide powers over Lake Lothing, but in short, considers that the "*full extent of potential detriment whether in physical extent or in time is unlikely to be caused."*

9.18 ABP is concerned at the scope of the powers sought by the Applicant, as temporary possession of these plots would preclude the use of the Port and the quay for port activity and for moorings over the entirety of the use of that area, in effect sterilising it, during the period of time provided for by the Order. In addition, it would have the effect, by reason of the temporary possession, of severing the western part of the inner harbour from the remainder of the Port.

9.19 As such, ABP considers the temporary possession of Lake Lothing has the potential to cause a significant detriment to port operations, which must be adequately mitigated and/or compensated, by the Applicant.

10. CHAPTER 10 – DEVELOPMENT CONSENT ORDER AND INDEMNITY

10.1 ABP has separately provided its comments on the draft DCO (Revision 2) and the Applicant's view in the indemnity as part of the Deadline 5 submissions, and relies on those comments in terms of its response to Chapter 10 of the Impact Report.

11. CHAPTER 11 – MITIGATION MEASURES

Emergency Berth

11.1 ***Paragraph 11.2.1*** – ABP remains of the view that a dedicated Emergency Berth is required.

Replacement berthing in the Outer Harbour

11.2 ***Paragraph 11.*3.3** – As stated above, the direct loss of berthing is 165m, when measured in whole berths. ABP requires this lost berthing to be replaced by the Applicant, in order to ensure that port operations, both current and future, retain the required flexibility to meet the changing needs of its customers and a fluctuating market.

11.3 ***Paragraph 11.3.4*** – The Applicant asserts that they have mitigated the effects of the proposal by (i) proposing an opening structure on the bridge, (ii) elevating the structure to 12m HAT, and (iii) proposing a draft Scheme of Operation which restricts opening the bridge for 2 hours per day. It is plain that the Applicant has misunderstood what is meant by "mitigation", i.e. that such works are meant to reduce the severity/seriousness of an impact.

11.4 It is the case, however, that the draft "mitigation" provided by the Applicant puts ABP in a worse position, in particular, by introducing a secondary bridge across the middle of the Port, and then imposing an operating protocol that is more restrictive then that existing protocol that has been in used for the A47 Bascule Bridge for over 30 years.

11.5 As such, it is clear that the Applicant has not provided any practical measures whatsoever to mitigate the effects of the Scheme, despite repeated requests from ABP to provide adequate mitigation to ensure that ABP is no worse off as a result of the LLTC Scheme.

11.6 In addition, the Applicant's assertion that - "*for CTV vessels the Applicant considers that for most vessels the clearance would be sufficient to allow unrestricted access and for those vessels of greater air draft the operator could adjust their sailing schedule to avoid the restricted time periods,"* is wholly unsubstantiated by any technical expert or other formal evidence.

11.7 The Applicant is not qualified to make any assumptions as to future trends in CTV size, and consequently, cannot know with any certainty that CTV's with higher air drafts will not become the norm – as is the current evidential trend for Round 3 windfarms.

11.8 ***Paragraph 11.3.6*** – ABP has provided the Applicant with information regarding berth occupancy and utilisation at **Annex 1**. The Berth Utilisation Report identifies that the implications of the LLTC bridge are significant across all Inner Harbour berths, in particular the berthing of CTV vessels on Shell and Talismans Quays. In this regard, the report states that there is a strong potential for CTV business to be lost at the Port, due to the fact that most of the available CTV berths are located to the west of the LLTC.

11.9 In addition, as the ExA will note, the Berth Utilisation Reports states that there would be an associated loss of business due to constraints on berthing space to the east of the LLTC, where the bridge is to be constructed.

11.10 As such, it is clear that mitigation in form of replacement berthing is entirely warranted to offset at least some of the serious detriment caused by the LLTC to the Port.

Statutory Port Security

11.11 ***Paragraph 11*.5.3** – The Applicant states that it agrees to provide additional statutory security measures that may be required by the DfT as a consequence of the Scheme. ABP queries how genuine this statement is, given that in section 8 of the Impact Report, the Applicant has blatantly either disagreed or disregarded recommendations made by DfT Security Inspectors to date. As such, ABP cannot place any reliance on this statement, and questions whether all necessary mitigation requirements will in this context actually be provided by the Applicant.

Traffic Management Action Plan

11.12 ***Paragraph 11.5.6*** – ABP disagrees that it is currently discussing the content of a Traffic Management Action Plan with the Applicant, and considers this statement is misleading. In the draft skeleton agreement provided by the Applicant on 12 February, reference was made to a TMAP, but provided no draft or any detail as to what such agreement would include. ABP has requested this information from the Applicant as a matter of urgency, but to date, no additional information has been forthcoming.

12. CHAPTER 12 – CONCLUSIONS

12.1 Following detailed consideration of the Impact Report, ABP remains of the view that the LLTC will cause serious detriment to the operation of the Port and the Port undertaking.

12.2 The information provided in the Impact Report does not address, in any meaningful way, ABP's very real concerns regarding serious detriment. As such, ABP remains of the view that the Applicant's assessment of the impact of the Scheme on the Port in terms of serious detriment falls short on a number of counts, all of which derive in practical terms from the required compulsory purchase and from the commercial implications and consequences that then follow – exacerbated by the Applicant's fundamental lack of understanding of the port industry generally, and the operations of the Port of Lowestoft specifically.

12.3 Relevantly, throughout the Impact Report, the Applicant repeatedly disagrees with the information and conclusions provided in the expert reports provided by ABP, including the Edge Economic Report, BVG Report and CTV Report. As the ExA will be aware, all of these have been prepared by independent technical and specialist experts to provide an independent assessment of the impact of the LLTC on the Port of Lowestoft.

12.4 In turn, however, the Applicant has failed to provide any technical or specialist evidence to refute or rebut the evidence provided in ABP's technical reports. Neither has it provided any independent evidence to support its views as stated in the Impact Report. As already indicated, the Applicant seems to assume that it acceptable to promote a scheme which is likely to have far-reaching consequences for a statutory undertake in an evidential vacuum.

12.5 Relevantly, in the case of *Hinkley Port C Connection Project,* the ExA Recommendation Report stated that:

> *"Whether detriment is 'serious' is not a technical matter but rather a matter, necessitating the calling of technical expert evidence, of planning judgement that the Secretary of State would have to make taking into account the full scale of the application."*

12.6 Additionally, in terms of the "evidence" provided by the applicant in the Hinkley Case, the ExA Recommendation Report further states that:

> *"The BPC states that the use of "serious" is relevant not just for the purposes of s127, but also for determining whether or not there is a compelling case in the public interest – the "planning balance". That question must be determined on the basis of properly qualified and technically competent evidence. The Applicant has not produced any witness with relevant qualifications to show that no detriment would result and there is, therefore, from the Applicant, an evidential vacuum... The only basis upon which any decision-maker can reach a decision is by reference to the evidence available."*

12.7 Similarly, ABP is firmly of the view that in light of the lack of any real evidence being provided by the Applicant in its Impact Report, no credible weight can be given to it to support its view that "*this paper has shown that no serious detriment is caused; and*

that therefore the need for large scale mitigation interventions as proposed by ABP does not arise."

12.8 ABP has repeatedly and consistently set out its concerns regarding the serious detriment caused by the LLTC Scheme. In this context, ABP also draws the ExA's attention to its submissions made in Section 9 of ABP's Written Representations, ABP's Comments on the Applicant's Response to ABP's Relevant Representations, particularly in respect of comments made to and those additional comments made by ABP in its submissions to the ExA regarding serious detriment and the need for mitigation.

12.9 As underlined by ABP's numerous representations – substantiated by formal expert evidence - the Applicant has singularly failed to provide any meaningful evidence to support its assertion that its scheme will not cause serious detriment to the Port of Lowestoft.

13. ANNEXURES

Annex 1: 'Port of Lowestoft, Berth Utilisation Assessment - Years 2015 to 2017', ABPmer (February 2019)

Annex 2: 'Off shore Wind Opportunities in the Port of Lowestoft', BVG Associates (January 2019)

Annex 3: 'Overview of CTV Characteristics', ABPmer (February 2019)

Annex 4: Extract of data from the A47 Bascule Bridge Lift Record Book

Annex 5: 'Vessel Mooring Systems in Tidal Ports', ABP Lowestoft (February 2019), annexing the ABPmer Mooring Analysis

Annex 6: ABP response to the Justification and Traffic Effects of the draft Scheme of Operation report (Document Reference: SCC/LLTC/EX/60)

Annex 7: ABP response to the "Technical Report: Review of central and western bridge options", Appendix B to the Applicant's Response to Written Representations (Document Reference: SCC/LLTC/EX/51)