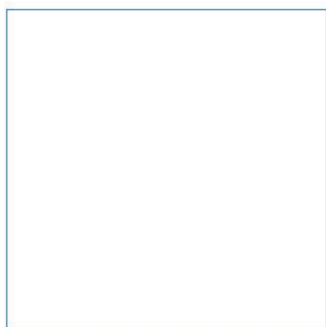
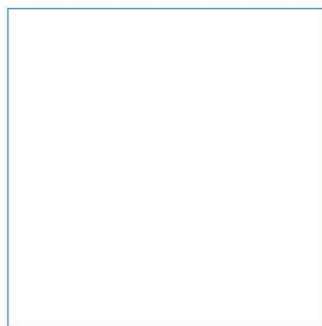


**ABP Port of Lowestoft**

## **Port of Lowestoft Berth Utilisation**

Rebuttal to Suffolk County Council submission REP8-005

May 2019



Innovative Thinking - Sustainable Solutions

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# Port of Lowestoft Berth Utilisation

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# Document Information

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# 1 Introduction

## 1.1 Overview

Suffolk County Council (SCC) has proposed the Lake Lothing Third Crossing (LLTC) Bridge ("the Scheme") as a way of alleviating road transport congestion issues in Lowestoft. The proposed LLTC Bridge will span Lowestoft harbour in the vicinity of North Quay Berth 3.

ABPmer completed an assessment of the usage and occupancy of berths within the Port of Lowestoft and the potential implications of the proposed LLTC Bridge on berth utilisation. This assessment was presented in the berth utilisation report (BUR), submitted as part of Deadline 5, document reference REP5-026. Errors were subsequently identified in the presented berth utilisation average summaries for the Outer Harbour and for the whole port, which were corrected. No corrections were required for the utilisation estimates for individual berths or for the averages in the Inner Harbour.

An updated BUR was therefore submitted in which the affected average summaries were revised and further clarification was included to satisfy the requests arising from the Issue Specific Hearing on Navigation Matters, on 1<sup>st</sup> April 2019. The revised BUR, document reference REP8-018 was submitted as part of Deadline Submission 8 on 12<sup>th</sup> April 2019.

SCC presented its response to the BUR (REP5-026), and an alternative analysis of berth utilisation in its document *"Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019"*, (termed "summary of oral submissions"), reference REP8-005. Following a number of misconceptions and erroneous assumptions presented in the summary of oral submissions (REP8-005), representatives from ABP and SCC met via a telephone conference on 10<sup>th</sup> May 2019. The purpose of the meeting was to clarify understanding on the approaches and assumptions applied in ABP's berth utilisation assessment REP5-026 and the alternative assessment presented by SCC in the summary of oral submissions, REP8-005.

This document sets out ABP's rebuttal to SCC's document REP8-005 and also provides clarifications to further comments received from SCC during the 10<sup>th</sup> May meeting. The main topics on which ABP disagrees with SCC's presentation in REP8-005 and which are recurring issues throughout this rebuttal are:

- The assumptions and approximations used by SCC to determine the vessel time at berth and berth utilisation estimates;
- The inclusion of North Quay 4 East in SCC's analysis with the Scheme in place, when the available quay length renders the berths unusable;
- Unfounded assumptions by SCC on the percentage of CTV operators that would want to relocate following implementation of the Scheme; and
- Excluding the dedicated berths and recent business growth within the Port in SCC's analysis.

## 1.2 Reference documents

The documents referenced in this rebuttal are:

1. Suffolk County Council (SCC), 2019. Summary of the Applicant's Oral Submissions at Issue Specific Hearing on Navigation Matters of 1 April 2019. **PINS document reference: REP8-005**. Document stated as the summary of oral submissions within this rebuttal document.
2. ABPmer, 2019. Berth Utilisation Assessment, Years: 2015 to 2017, ABPmer Report No. R.3126. A report produced by ABPmer for ABP Port of Lowestoft, February 2019. **PINS document reference: REP5-026**. Referred to as the 'BUR' within this rebuttal document.
3. ABPmer, 2019. Berth Utilisation Assessment, Years: 2015 to 2017, ABPmer Report No. R.3126. A report produced by ABPmer for ABP Port of Lowestoft, April 2019. **PINS document reference: REP8-018**. Document stated as the revised BUR within this rebuttal document.
4. ABP, 2019. The Port of Lowestoft Master Plan Consultation Draft, April 2019. **PINS document reference: REP9-012**. Document stated as the port master plan within this rebuttal document.
5. BVG Associates, 2019. Off shore Wind Opportunities in the Port of Lowestoft. January 2019. **PINS document reference: REP5-027**. Document stated as the BVG report within this rebuttal document.

## 1.3 SCC commentary

This rebuttal addresses SCC's response and revised/alternative views presented in Sections 3.1 (Berthing – Berth space lost as a result of the Scheme) and 3.2 (Berthing – Consequence of the lost berth space to current and future berth usage) of REP8-005.



## 2 ABP Response

The following responses are provided under common reference to the order used by SCC in REP8-005.

### 2.1 Berth space lost as a result of the Scheme (Section 3.1, REP8-005)

Section 1.1 of the BUR (REP5-026) sets out the following potential implications of the LLTC Bridge:

*“With the bridge in place, there will be a reduction in available quay face along North Quay. The loss implications of the proposed LLTC Bridge are:*

- *North Quay 2: effectively lost due to its limited utility;*
- *North Quay 3: lost in entirety; and*
- *North Quay 4 East: effectively lost in entirety.”*

In Paragraph 3.1.5 (REP8-005), SCC considers that the stated potential implications of the LLTC Bridge are a gross exaggeration. It also assumes throughout the remainder of REP8-005 and in the presented alternative utilisation estimates that only North Quay 3 is completely lost, and that North Quay 2 and 4 East remain operational, with a reduced quay length.

ABP maintains that the North Quays 2 and 4E are lost, for the following reasons;

- A total of 92 m of mooring quay length is lost due to the Scheme, which includes the bridge footings, fendering, safety zone and a manoeuvring area to account for the bridge fenders, as represented in Figure 2 of the BUR (REP5-026);
- North Quay 2 is a berth that is frequently used by vessels that can exceed 50m LOA. Such vessels also rely on the adjacent berth areas (North Quay 1 or North Quay 3) to accommodate moorings. A decrease in berth length as a result of the Scheme means vessels (with a longer LOA) that would ordinarily use the berth would not be able to. In addition, there would be restricted room to manoeuvre due to the presence of the LLTC Bridge fendering. For these reasons the berth is lost with respect to its original utility. The only available option would be to combine its operation with North Quay 1 so that larger vessels would extend across both North Quay 1 and 2 berths. This would restrict the combined berth area of North Quays 1 and 2 for use by one large vessel only. This is what is proposed within the BUR to accommodate the potential marine aggregate opportunities in the future scenarios (Scenario 3 and 4).
- The loss of North Quay 3 is not in question.
- With respect to North Quay 4E, the length of the berth is greatly reduced with the Scheme and without any reorganisation of the berths and the supporting landside infrastructure. SCC assumes a total quay length of 34.5 m, however with safety margins the maximum available quay length is only 29 m. This is too short for CTV vessels, which usually have a LOA of around 25 m and require a reasonable spread of mooring lines fore and aft.

During the teleconference meeting of 10<sup>th</sup> May 2019, SCC stated that it had applied an underlying assumption that Quay 4 East (4E) would remain operational as a result of future redevelopment. This is pure assumption on the part of SCC since there is not currently any agreement on the redevelopment of this berth. In the absence of any agreement between ABP and SCC on the nature of any potential redevelopment and the associated cost, this rebuttal can only take the position that the use of North Quay 4E is indeed, lost in entirety.



## 2.2 Consequence of the lost berth space to current and future berth usage (Section 3.2, REP8-005)

Section 3.2 of REP8-005 addresses the following topics as set out by SCC:

- Average berth occupancy;
- Berth dedication;
- Berth reassignment;
- CTVs;
- Unpublished port masterplan; and
- BVG Associates, 2018. Offshore wind opportunities in the Port of Lowestoft.

This section again addresses each topic in the order used by SCC in REP8-005.

### 2.2.1 Average berth occupancy

ABP confirms that calculation errors in the average berth utilisation estimates for the berths in the Outer Harbour and the berths in the port were identified in REP5-026. These errors were corrected in a revised BUR (REP8-018), which was included in ABP's Deadline 8 submission. There were no changes required for the utilisation estimates for the individual berths or the averages for the Inner Harbour.

### 2.2.2 Berth dedication

Section 2.3 of the BUR (REP5-026) describes that there is an increasing demand for dedicated berths by operators and commercial users. The practice of allocating dedicated berths within the Port does have commercial implications, since those berths are then restricted from common use. It is important to note that berths within the Port are only really dedicated when it is necessitated by the demands of commercial operators.

SCC frequently disputes the use of dedicated berths within the BUR and suggests that the effect of the Scheme should be based on the past situation and scenarios. The importance of Port development objectives requires inclusion of future scenarios as a basis for berth utilisation analysis, to account for new business, such as the recent success in winning a contract with Petersons. The Port is actively seeking further opportunities and so the future scenarios are a more representative basis for the assessment of future berth utilisation and the resultant impact of the Scheme.

#### Paragraphs 3.2.2 to 3.2.4

SCC correctly states that Silo Quay, Hamilton Dock, Trawl Dock and Waveney Dock are all identified as having dedicated berths, but that the berths were not excluded from the assessment, as is the case for CEFAS Quay and SLP North and South.

ABP confirms that this difference is intentional to account for the difference between berths that have been dedicated, but which may still be available for common use (included in analysis) and those that are managed by an independent operator (excluded from analysis). Such berth areas could be considered as 'preferred' use as opposed to completely dedicated. The following should also be noted from the BUR:

- The first two bullet points in Section 2.3 of the BUR describe that the Outer Harbour contains both dedicated and common use berths;
- Silo Quay is a dedicated berth for the grain facility. However, the infrequent but short notice visit of these vessels means that the berth was occasionally considered for common use subject to other vessel occupancy being short term only. This function was described in Section 5.4.2 of the BUR;
- In order to best represent the utilisation at berths that operate for dedicated and common use, the berths were included in the analysis for all scenarios, i.e. Tables 3 to 6 of the BUR (REP5-026); and
- The berths managed by independent operators, although they are owned by ABP (i.e. CEFAS Quay and SLP North and South) are correspondingly excluded from the analysis.

#### Paragraphs 3.2.4.2.1 to 3.2.4.2.3

Paragraph 3.2.4.2.1 of REP8-005 refers to North Quays 6 and 7 and Town Quays 2 and 3 as all being dedicated for the Petersons opportunity.

This is incorrect, as described in Section 5.4.1 of the BUR. North Quay 6 and 7 were dedicated for the Petersons opportunity (opportunity 1), whereas Town Quays 2 and 3 were dedicated in relation to a second opportunity (opportunity 2). Although Petersons have expressed a desire to relocate to Town Quay 2 and 3, as stated by Mr Harston during the 1<sup>st</sup> April ISH, this is not represented within the BUR, which accounts for two distinct opportunities.

Paragraphs 3.2.4.2.2 and 3.2.4.2.3 of REP8-005 questions the validity of how the probability of success is applied in the BUR.

For simplicity, the applied approach was to state the probability of success with respect to the dedicated berth and utilisation estimate. Each opportunity would require the full berth space, due to the size of vessels involved. North Quay 2 would remain operational when combined with North Quay 1, to service the larger vessels associated with the marine aggregate opportunities, as described in Section 2.1 above. Due to the reduced length North Quay 2 with the Scheme in place, it would not be able to fulfil its original utility, in isolation.

#### Paragraphs 3.2.4.3 and 3.2.4.4

Paragraph 3.2.4.3 of REP8-005 suggests there is a double benefit to dedicating berths and assigning 100% utilisation estimate to the dedicated berth.

The statements described in paragraph 3.2.4.3 of REP8-005 are simply part of port operations. The practice of dedicating berths, as set out in Section 2.3 of the BUR, means that the selected berths are allocated to specific operators, giving priority to those operators. Although other vessels may be placed at the berth, it is not pre-planned and is generally managed at the specific point in time it is required. It should therefore be assumed that a dedicated berth is effectively removed from common use. If that berth is not available for common use, the appropriate utilisation to apply is 100% because it is fully utilised by a dedicated operator. Dedicating berths naturally involves the relocation of berths for other users, which is part of how the Port manages its operations.

Paragraph 3.2.4.4 questions why Shell Quay is not assigned as a dedicated berth.

It is the Port's preference to retain berths for common use wherever possible, to maintain commercial flexibility. Shell Quay is not assigned as a dedicated berth because it principally had mixed use during the 2015 – 2017 period for which the vessel sailing data was available. Although the quay has had dedicated use for CTV operations in the past, this was for a time-limited period. The berth has principally served and continues to serve as a common user berth. In terms of the function assumed in the future scenarios, it was anticipated that Shell Quay would be used for CTVs, but may not necessarily be dedicated to a single operator.

### Paragraph 3.2.6

Paragraph 3.2.6 of REP8-005 suggests that berths are dedicated and a 100% utilisation estimate is used in order to inflate the average utilisation across the harbours and port.

This suggestion is incorrect. To remove the 100% utilisation applied to the dedicated berths as suggested in Tables 3 and 4 of REP8-005, will have no effect or change the utilisation estimates for the individual berths (Tables 3 to 6 in REP5-026). The berth utilisation estimates for the individual berths (Tables 3 to 6 in REP5-026) still demonstrate an increasingly busy port with future opportunities and restrictions as a result of the Scheme.

The potential opportunities that associated with the dedicated berths amount to a substantial increase in vessel activity through the Port, which would not otherwise be represented in the scenarios. The increase in activity associated with the Petersons opportunity (opportunity 1) is already realised, with North Quay 6 and 7 being dedicated for use only by Petersons. With SCC's suggestions in Table 3 and 4 of REP8-005, the actual and present status of the Port is discounted.

## 2.2.3 Berth reassignment

### Paragraph 3.2.9

Paragraph 3.2.9 of REP8-005 discusses the principal effect of the Scheme on the Port and suggests the effects of the Scheme need to be considered only in the context of the past situation.

Section 6 of the BUR (REP5-026) discusses the effects of the Scheme on the Port, including the loss of CTV business, as correctly identified in Paragraph 3.2.9 of REP8-005. However, contrary to SCC's view, the potential effects on the Port as a result of the Scheme must be considered in the context of the future scenarios and not only the past situation. The Port is actively seeking growth and one of the recent opportunities being targeted has been realised early in 2019, demonstrating that past scenarios are no longer properly representative of Port operations. On this basis, the additional effects on the Port as a result of the Scheme include:

- The significant increase of utilisation across other berths within the Port, whereby the Port becomes too busy, with a risk of declining services, efficiency and output; and
- Reduction in the availability of common use berths and the ability to accommodate ad hoc vessel calls.

### Paragraph 3.2.10

Paragraph 3.2.10 of REP8-005, questions the use of North Quay 4 West (4W) in the displacement of vessels.

It is important to note that both quayside and landside infrastructures dictate the suitability/viability of certain berths and how they are utilised in port operations. Therefore, North Quay 4W is not more

highly utilised due to partially restricted access to the berth area (fenced off), and the position of adjacent landside sheds, which restricts crane operations. Therefore, without redevelopment of the landside infrastructure, this quay will remain constrained and be less favourable for operations.

### Paragraph 3.2.11

Paragraph 3.2.11 of REP8-005 states North Quay 4E should not be considered a lost berth.

A large proportion of North Quay 4E is lost with the Scheme in place, since only 29 m of safely operational quay length remains (Figure 2, in the BUR). In Paragraph 3.2.11, SCC suggests this berth is still usable with over 30 m of quay length. It is not apparent how a quay length of "over 30 m" (i.e. 34.5 m taken from Paragraph 3.2.13, REP8-005) was determined.

Based on the information presented in Figure 2 of the BUR, a quay length of 29 m is not considered appropriate to safely berth any vessels, resulting in the berth becoming unusable. North Quay 4E was deemed lost in the BUR and was not included in the analysis for this reason. The restrictions on crane operations present at North Quay 4W frequently makes North Quay 4E a preferred alternative berth, which is an option that will be lost with the Scheme in place.

### Paragraphs 3.2.12 and 3.2.13

In Paragraphs 3.2.12 and 3.2.13 of REP8-005, SCC questions the percentage of CTV operators and their vessels that would want to relocate due to the Scheme and suggests only 25% would want to relocate.

ABP's "Post Hearing Examination Note - Justification of Assumptions of Future Development at the Port of Lowestoft Document", document reference REP8-020, submitted as part of Deadline 8 provides a comment from existing CTV operators within the Port. The view presented in REP8-020 is that the Scheme would place additional constraints on the business of these operators. It is on this basis that the relocation of CTV operators and their vessels from Shell Quay to Talismans Quay is founded and it is the basis for the berth utilisation assessment presented in Section 5.3.1 and 5.5.1 of the BUR (REP5-026).

SCC's assumption that only 25% of CTV operators would want to relocate is contrary to what ABP has identified in discussions with CTV operators, the findings of which are presented in REP8-020. From the meeting on 10<sup>th</sup> May 2019, it is understood that SCC's assumption that only 25% of operators would want to relocate from Shell Quay to the eastern side of the Scheme, is simply an alternative for comparison and is not based on any particular evidence. SCC has reassigned berth utilisation estimates at Shell Quay, North Quay 4E and Talismans Quay on the basis of this assumption and presents its result in Table 5 of REP8-005. It is therefore ABP's position that the reassignment of berth utilisation presented in Table 5 (REP8-005) is incorrect for reasons described below:

- There is no evidence to support SCC's underlying assumption that only 25% of the CTV operators/vessels would relocate from Shell Quay to a berth east of the LLTC Bridge. However, the 50% relocation rate stated in the BUR is founded on discussions with operators; and
- North Quay 4E should not be considered as operational as without berth development the quay length is not adequate to safely support smaller vessel mooring requirements. Although the remaining (29 m) length could be considered as an extension of North Quay 4W, as suggested by SCC. However, this arrangement does not constitute an additional berth, but just a longer North Quay 4W, which would be subject to the landside constraints as described above (see Section on Paragraph 3.2.10).

### Paragraphs 3.2.14 and Table 5

Paragraph 3.2.14 and Table 5 of REP8-005 present SCC's alternative berth utilisation estimates based on assumptions about North Quay 4E and the percentage of operators that would want to relocate.

It is ABP's opinion that the results presented in Table 5 (REP8-005) are incorrect, due to inconsistencies in the calculation method.

In an email dated 8<sup>th</sup> May 2019, SCC provided an outline of the assumptions and calculations used to obtain its berth utilisation estimates. SCC's calculations used the percentage utilisation presented in the BUR and the number of vessels and berths (also taken from the BUR) to estimate the average vessel time at berth. There are several issues with this approach that ultimately result in incorrect berth utilisation estimates. These include:

- The berth utilisation assessment presented in the BUR is calculated using actual time at berth, taken from Port records (except in the case of the dedicated berths, where an estimate of 100% is applied), SCC has used the number berths to derive the number of vessels;
- The SCC calculations assume Shell Quay was only occupied by CTVs, which is not the case as explained in Section 2.2.2 above;
- There are inconsistencies in the calculations to obtain the average vessel times at berth. This greatly reduces the credibility of the derived berth utilisation estimates as the average vessel times at berth are erroneous; and
- North Quay 4E is not an operational berth as explained in Section 2.1 above.

For the above reasons, the information presented in Table 5 of REP8-005 should be disregarded.

### 2.2.4 CTVs

It is important to note that the berth utilisation assessment and the results presented in the BUR (REP5-026) are based on the times recorded in the vessel sailing data described in Section 3.1.1 in the BUR. In the past scenarios, both CTV and common use vessels are included in the analysis. Where CTV vessel activity has been used to develop the future scenarios in the Inner Harbour (i.e. predicting future CTV use of Shell Quay in Scenarios 3 and 4), only the time exclusively associated with CTV vessels is applied.

SCC's discussion of Shell Quay, presented in Paragraphs 3.2.15.1 to 3.2.15.15, is based on the number of vessels a berth can accommodate, which leads to a misrepresentation of the likely utilisation. However, it is understood from the meeting on 10<sup>th</sup> May 2019 that SCC adopted this approach due to a lack of data from which to make a more accurate assessment. SCC also confirmed that the calculations completed for Shell and Talismans Quay, were based on the assumption that these berths were only used by CTVs, in all the scenarios.

Simply using the number of berths and the number of regular CTV callers to determine the berth utilisation estimates is incorrect and would result in discrepancies with those values presented in the BUR. The berths at Hamilton, Trawl and Waveney Docks in the Outer Harbour and Shell Quay in the Inner Harbour, are designated for both CTVs and common user vessels, as described in Section 2.3 of the BUR (REP5-026) and Section 2.2.2 above and the calculated berth utilisation presented within the BUR takes account of this mixed use.

### Paragraph 3.2.15.1

Paragraph 3.2.15.1 of REP8-005 questions how the percentage allocation of CTV berth space is determined.

The origin of the capacity percentages presented in Section 2.2 (bullet 1) of the BUR (REP5-026) has been clarified in the revised BUR (REP8-018).

### Paragraph 3.2.15.2

In Paragraph 3.2.15.2 of REP8-005, SCC describes what it considers to be the BUR method to determine the utilisation estimate for Shell Quay.

The assumption set out in Paragraph 3.2.15.2 of REP8-005 is incorrect. The analysis of berth utilisation in the BUR is based on the documented vessel times at berths. The 50.6% utilisation of Shell Quay stated for the past scenario without the Scheme (Scenario 1, Table 3 in REP5-026) is based on the actual timing of CTV and common user vessel calls rather than the assumption a CTV is at berth 50% of the time and at sea the other 50% of the time, as SCC suggests. The utilisation for Shell Quay presented in Table 3 (REP5-026) also does not relate to just nine CTV vessels using the berth. SCC's assumption that 18 vessels double-banked would equate to 100% utilisation because there are only nine berths is incorrect. In the instance Shell Quay is redeveloped for CTV use and to enable double banking, Shell Quay would have up to 18 berths. Using the logic presented by SCC in REP8-005, the utilisation would remain at 50%, even with 18 vessels double-banked at Shell Quay, as all the vessels would have the same schedule of being out during the day and in port at night.

### Paragraph 3.2.15.3

Paragraph 3.2.15.3 of REP8-005 questions the number of CTVs that would be relocated due to the Scheme.

As stated in Section 5.3.1 (third bullet) of the BUR (REP5-026), the assumption is applied that half of the CTV operators and their vessels would relocate from Shell Quay to Talismans Quay due to the Scheme, as described above. The resulting berth utilisation assessment assumes only five operators remain. Even with the relocation of half of the operators and their vessels away from Shell Quay, the number of berths along the quay will remain the same. Therefore up to nine single-banked CTVs could still be accommodated on an ad hoc basis if required.

### Paragraph 3.2.15.4

Paragraph 3.2.15.4 of REP8-005 asks if CTV vessels could be adequately berthed at Town Quays 2 and 3.

It is not considered to be good berth management to berth CTVs at Town Quays 2 and 3. This is because these are deep water berths, so they are generally kept clear for the larger and deep draught vessels visits. This was the assumption applied in the berth utilisation assessment and BUR.

### Paragraph 3.2.15.7

Paragraph 3.2.15.7 (REP8-005) states that *"50 CTVs do not necessarily require 50 berths: it is a question of scheduling as to how many berths are required at any one time."*

This is incorrect and demonstrates a lack of understanding of port operations and how CTV vessels operate. The majority of CTVs will be operating during daylight hours due to the nature of the work in

which they are engaged, and so will be all be berthed at night. CTVs are also subject to weather restrictions for working at sea and there are occasions when all vessels will be in port at any one time. Conversely, during periods of good weather, all of the vessels may be at sea at any one time. It is not simply a question of scheduling operations, as SCC suggests.

#### Paragraph 3.2.15.10

In Paragraph 3.2.15.10 of REP8-005, SCC questions the validity of the applied berth utilisation assessment method.

The applied method, which is based on time, is a recognised industry standard used by the United Nations Conference on Trade and Development (UNCTAD) in Mwasenga, (2012), and was therefore deemed appropriate. The method still accounts for the instances when there are multiple berths and vessels being berthed, because the time is still divided by the number of available berths.

SCC repeatedly assumes that operators can implement schedules in association with other berth users or vessel operators, which again demonstrates a lack of understanding of port operations. Vessel operators would not accept berths that could only be used a percentage of the time and would not operate a schedule governed by another port user's requirements. Therefore, SCC's assumption is grossly incorrect.

#### Paragraphs 3.2.15.11 and 3.2.15.12

In Paragraphs 3.2.15.11 and 3.2.15.12 of REP8-005, SCC describes what it assumes is the approach used to calculate the berth utilisation estimates for the Outer and Inner Harbour berths, and questions the results obtained for Shell Quay.

The approach used to calculate the berth utilisation estimates for the Outer and Inner Harbour berths and presented in the BUR is contrary to what is described by SCC in Paragraphs 3.2.15.11 and 3.2.15.12. This is because the berth utilisation assessment approach presented in the BUR used the time represented in the vessel sailing data, including both CTV and common user vessels. Up to 24 CTVs regularly used the whole Port but were mainly located in the Outer Harbour. Therefore, although Shell Quay could accommodate nine CTV vessels, this did not mean it always accommodated nine CTVs because it also had a common use function for ad hoc vessel visits, which is represented in the vessel sailing data that is used to inform all the scenarios.

To represent the future CTV operations across the Port in the future scenarios (Scenario 3 and 4), the analysis used the at berth times from a subset of CTVs (i.e. Windcat vessels) from the Outer Harbour and copied it to Shell Quay. The copied time from the Outer Harbour to Shell Quay, actually related to a maximum of 18 Windcat vessels in any single year (about half of which were regular callers and recognising that there were other CTV vessel types that used the Outer Harbour). The analysis allocated all the time associated with the Windcat vessels to Shell Quay on the basis that Shell Quay could be redeveloped to accommodate up to 18 CTV vessels on a regular basis. Therefore, the approach presented for the future scenarios in the BUR, best represented the most likely use and occupancy of Shell Quay with the expansion of CTV operations within the Port.

#### Paragraph 3.2.15.13

Paragraph 3.2.15.13 of REP8-005 questions the change in utilisation at Shell Quay between 2015 and 2017.

For the past situation without the Scheme (Scenario 1), the year on year changes in the utilisation estimates copied into Table 6 of REP8-005, is simply a portrayal of the changing use at Shell Quay as



represented in the vessel sailing data between 2015 and 2017. No vessels were displaced to Shell Quay in the past scenario, so the change in 2017 relates to increased use of the berth by CTVs and other ad hoc vessel visits.

For the future scenario, with the Scheme in place (Scenario 4) the time (represented in the vessel sailing data) from a subset of CTVs from the Outer Harbour, were added to Shell Quay (as described above), after which, 50% of the time associated with those vessels was displaced to Talismans Quay due to the Scheme.

#### Paragraph 3.2.15.14

Paragraph 3.2.15.14 of REP8-005 questions the legitimacy of the double-banking assumption applied at Shell Quay.

It is the case that different CTV operators may not want to double-bank their vessels as stated in Section 6 of the BUR. This would be more of an issue if multiple operators used the berths, as double-banking could have implications on their specific schedules and operations. In this instance, a maximum of nine CTVs would be berthed at Shell Quay at any one time, so the Scheme would not have any effect on the CTV business within the Port. However, the reality is that the requirement to double-bank would be less of an issue for the vessels owned by the same operator. Furthermore, double-banking of CTVs is the approach being promoted by the Port and is what future growth within the Port is based on, as identified within the Port masterplan (REP9-012).

### 2.2.5 Unpublished port masterplan

The Port of Lowestoft masterplan has now been submitted as part of the Deadline 9 submissions on 29 April 2019 with document reference REP9-012.

### 2.2.6 BVG Associates 2018

In Paragraphs 3.2.17.1 to 3.2.17.3 SCC referencing the BVG report questions the number of CTVs that would regularly use the Port and proposes a peak demand of 36 CTVs.

The assumption stated in Paragraph 3.2.17.1, regarding the Port winning the entire CTV requirement from a number of offshore wind developments is incorrect. Instead the Port aspires to win 50% of the total CTV requirement, which would equate to approximately 50 CTVs regularly using the Port. It is therefore not clear what SCC's assumed peak demand of 36 CTVs is based on.

### 3 ABP Position

ABP does not agree with many of the opinions and statements presented by SCC in their summary of oral submissions (REP8-005), especially the reinterpretation of the berth utilisation assessment and results presented in the BUR (REP5-026). Section 1 summarised the main topics on which ABP disagreed with SCC. These are restated here with a concluding statement on ABP's position:

- Assumptions and approximations to determine the vessel time at berth and berth utilisation estimates – Section 2 above explains how the berth utilisation assessment and results presented in the BUR are based on time of vessels at berth and not simply on the vessel count. Furthermore, the utilisation estimates for the Outer Harbour and Shell Quay represent both CTV use and ad hoc vessel calls. Therefore SCC's assumptions and reinterpretation does not fit the underlying properties of the data.
- The inclusion of North Quay 4E in the analysis with the Scheme in place – SCC suggests that only 62 m of quay length is lost as a result of the Scheme, with minimal implications to port operations. ABP does not agree with SCC's assessment. The total lost quay length is 92 m (or 165 m when measured in whole berths), which includes allowances for the LLTC Bridge fenders, a safety zone and manoeuvring area. The lost quay length equates to one full quay (i.e. North Quay 3), a large part of North Quay 4E and 10 m of North Quay 2. With the Scheme in place, it renders a total of three quays within the Port impracticable for use in isolation. Without extensive berth redevelopment North Quay 4E would also become too short to safely berth any vessel, including CTVs.
- SCC's unfounded assumptions on the percentage of CTV operators that would relocate – SCC applies assumptions that do not appear to be supported by any underlying evidence. SCC has assumed 25% of CTV operators would want to relocate, without substantiating the basis for this assumption. Conversely, ABP has assessed that 50% of CTV operators would want to relocate from Shell Quay with the Scheme in place, based on discussions with the operators.
- Discounting dedicated berths and the recent business growth within the Port – SCC's analysis uses only past scenarios to assess the effect of the LLTC Bridge scheme and does not acknowledge the present growth within the Port. The Port recently won an opportunity to provide services to Petersons, with operations commencing in early 2019. The Port is also actively seeking to realise further opportunities, so the future scenarios applied in the ABP BUR (REP5-026) provide a more realistic basis for analysis.

## 4 References

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BVG Associates, 2019. Off shore Wind Opportunities in the Port of Lowestoft. January 2019. PINS document reference: REP5-027. Document stated as the BVG report within this note.

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## 5 Abbreviations/Acronyms

ABP	Associated British Ports
BUR	Berth utilisation report
BVG	BVG Associates
LLTC	Lake Lothing Third Crossing
LOA	Length Over All
SCC	Suffolk County Council

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

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