(ABP: 2 of 4 - DL10)

# **Proposed Lake Lothing Third Crossing (TRO10023)**

### Associated British Ports (20013261)

### **Comments on the draft Scheme of Operation (Revision 2)**

This post examination note sets out Associated British Ports ("ABP") detailed comments on the draft Scheme of Operation ("dSoO").

On 17 May 2019, the Applicant provided ABP with proposed further changes to the dSoO – Revision 2 (annexed). In order to assist the ExA with its consideration of the dSoO, ABP has provided its comments on proposed revised dSoO (Revision 2) provided by the Applicant, which are set out below. This ensures that the ExA has been provided with the most up to date position between the parties at Deadline 10 in respect of the dSoO.

## 1. Paragraph 1 – Commercial On-demand Openings

- 1.1 There is some uncertainty as to how a commercial on-demand bridge opening is meant to interact with the time restrictions specified in Paragraph 2. In particular, the Harbour Master must have discretion to open the bridge for commercial vessels, whether or not they fall within the definition of 'tidally restricted' this is in line with the existing bridge operating regime. Circumstances where commercial vessels are unduly impacted when the peak traffic period coincides with high tide represent only one example of the situation where the Harbour Master may have to exercise his discretion to open the bridge during a peak traffic period, so as to not detrimentally impact on port operations. This has been addressed in the proposed amendments to Paragraph 2 of the dSoO, specified below.
- 1.2 The current publicised notice requirement for a commercial bridge opening is 20 minutes, as set out in the 'Small Craft and Yacht Notice 2018'. ABP considers that the minimum notice period for the requirement for a commercial bridge opening will need to be extended to a minimum 30 minutes, or such greater period as may be publicised by ABP as required, in order to allow ABP sufficient time to consider and plan for openings of both bridges.

#### Proposed Amendments to Paragraph 1

1.3 ABP considers that its concerns with, and practical observations in relation to, Paragraph 1 could be satisfactorily addressed if an amendment was made as follows:

"The Lake Lothing Third Crossing will only be opened on demand for commercial shipping over 50 gross registered tonnage, requests for which are subject to the time restrictions in paragraph 2.

A minimum of 30 minutes notice (or any such greater period as is specified in the publicised requirements of the harbour authority) must be given to the LLTC Bridge Operator of the requirement for a commercial bridge lift."

## 2. Paragraph 2 – Time Restrictions

2.1 ABP does not agree that there should be any peak hour restrictions in the dSoO that are more restrictive than the current regime operated by ABP in respect of the A47 Bascule Bridge, and which has been in operation for more than 30 years. To reiterate, the current regime provides that:

"Commercial shipping is discouraged from passage: 0815 - 0900 hours, 1230 - 1300 hours and 1700 - 1745 hours."

- 2.2 Conversely, as currently drafted, the dSoO specifies a prohibition on bridge lifts for any vessels between the hours of 0800 0900 hours and 1700 1800 hours. This has the effect of extending the current restricted period by 15 minutes at either end of the day. As previously demonstrated by ABP (see REP8-024), the 15 minute extension to the AM and PM restricted periods has the potential to result in additional delays to vessel transit times of between 18 to 40 minutes. The overall impact of these additional restrictions would be to impose a significant additional financial burden (due to time and cost implications) on shipping passing to the west of the proposed LLTC, which include the part of the Port most likely to receive additional offshore wind related traffic in the future.
- 2.3 In addition to the actual time delays imposed by the dSoO, there is also an effect on the unhindered transit opportunities caused by a combination of timing sequences and the transit time between the two crossings. This has the greatest potential effect

- over the AM restriction periods for an inward vessel, adding an addition delay of approximate 28 minutes (REP8-024).
- 2.4 Further, ABP disagrees with the current definition of 'tidally restricted' specified in the dSoO, as it is overly restrictive and does not take into consideration the full range of vessels that may be adversely impacted by the proposed AM and PM prohibition period, which is wholly unacceptable to the Harbour Master and ABP. A 'tidally restricted' vessel may include a vessel that, by virtue of passage planning and a 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. As such, the Harbour Master must have discretion to enable tidally restricted vessel to sail on the safest tidal window for the particular vessel in question.

### **Proposed Amendments to Paragraph 2**

2.5 ABP considers that its concerns with, and practical observations in relation to, Paragraph 2 could be satisfactorily addressed if an amendment was made as follows:

"The Lake Lothing Third Crossing is not permitted to be lifted for any vessel during the hours of 08:15 to 09:00 and 17:00 to 17:45 on Mondays to Fridays, unless the Harbour Master determines that a commercial ondemand opening is required or that the vessel seeking an opening is 'tidally restricted' and notifies the LLTC Bridge Operator accordingly.

For the purposes of this paragraph, a vessel is tidally restricted and thus may only be given an opening during peak hours if, due to its arrival or sailing draught or other navigational or meteorological restriction, the safest time for it to enter or leave the port coincides with a bridge restriction period it is unable to proceed safely on that tide at a time outside of peak hours."

### 3. Paragraph 4 – Scheduled Openings

3.1 ABP notes and welcomes the Applicant's views that there is an acknowledgement that due to the transit time between the two bridges there needs to be a degree of flexibility in the scheduled opening of the LLTC bridge for recreational windows. ABP is still concerned, however, that this paragraph does not sufficiently or clearly state who an amendment can be made by, and in what circumstances. ABP

considers that the Harbour Master, Bascule Bridge Operator and the Bascule Bridge operator must have discretion to amend the Scheduled Openings in such circumstances that they see fit, in order to address any issues between the opening windows of the two bridges, particularly given that they will be aware of the impact of the day-to-day interaction between the two bridges.

3.2 In terms of the 'LLTC Bridge Operator', ABP considers that it will operate the bridge under the instruction of the Harbour Master or the Duty Bascule Bridge Operator - who in turn will be acting under the delegated authority of the Harbour Master in managing port traffic movements. As such, it is imperative that the operators of both bridges work cohesively, given the inter-relationship between the timing of operations between the two bridges.

#### **Proposed Amendments to Paragraph 4**

3.3 ABP considers that its concerns with Paragraph 4 could be satisfactorily addressed if an amendment was made as follows:

"In addition to paragraph 3, and subject to prior notification to the LLTC Bridge Operator in accordance with publicised requirements of the harbour authority, small craft and yachts may be given a Lake Lothing Third Crossing opening at the following times, provided that the scheduled LLTC Bridge opening sequence aligns with scheduled opening times of the A47 Bascule Bridge which may be amended having regard to concurrent demand at the A47 Bascule Bridge. Note: the LLTC Bridge openings may be scheduled before or after the specified times and amended to the extent considered necessary by the Harbour Master, LLTC Bridge Operator and/or the A47 Bascule Bridge Operator given the circumstances of each case, which will including consideration of factors relating to vessel transit direction, transit time(s), and other vessel movements ..."

## 4. Paragraph 8 - Height Clearance

4.1 The Applicant is of the view that this paragraph currently provides for ABP to advertise the margin of safety (which would already have been approved by ABP pursuant to the NRA) and makes reference to the real time air draft displays which have been identified as being necessary through the pNRA and would be secured via the ABP approval of the NRA.

- 4.2 Until the final NRA has been completed by the Applicant and approved by ABP, ABP is unable to determine what types of restrictions may need to be imposed with respect to height clearance, in order to ensure that navigational safety is maintained. In particular:
  - a) ABP has real concerns, based on decades of operational experience, that vessels' Masters often do not precisely know the air draft of their vessel.
  - b) Further, vessels' Masters are often unaware of the exact height of additional pieces of equipment (such as radio masts, aerials, etc) that may increase the air draft of their vessel.
  - Recreational vessels are often under the control of persons without expansive, or even any, prior experience of the vessel.
  - d) It may be that a real-time clearance display is not sufficient to act as a measure designed to mitigate the risk of a vessel strike on a bridge, and some further independent means of ascertaining and confirming the air draft of vessels is required.
- 4.3 Further, the LLTC does not have a navigational safe clearance of 12m at HAT in terms of the passage of vessels. Subject to the completion of the formal NRA, ABP anticipates that the actual height for safe passage will be 11m at HAT (incorporating a yet to be formally determined vessel air draft safety clearance value) this vertical clearance will itself be further reduced through predicted sea-level rise over the life of the LLTC bridge. ABP considers that this margin of safety should be specified in the dSoO, to ensure that the actual clearance of the LLTC bridge is clearly stated.
- 4.4 In this context, ABP is unsure of whether the maximum air draft of 12m HAT (without safety clearance) is consistent for the full span of the LLTC Bridge, or whether this is the greatest value at a specific point beneath the LLTC Bridge deck (i.e. over the centre of the span). If 12m HAT is not a consistent value across the navigational channel, it is imperative that the lowest clearance value available is specified.
- 4.5 As such, ABP considers that further amendments to this paragraph is required to ensure there is clarity regarding the process for any vessel that wishes to pass beneath the LLTC bridge without an opening.

4.6 In relation to the proposition that vessels with the ability to safely drop masts and aerials should do so, ABP considers that this is not practically achievable for the majority of vessels transiting the LLTC bridge. As such, ABP questions the utility of including this as requirement in the dSoO, as it is overly prescriptive and is inapplicable to the majority of vessels impacted by the height restriction imposed by the LLTC. In any event, ABP has attempted to address this issue in the proposed amendments specified below.

#### **Proposed Amendments to Paragraph 8**

4.7 ABP considers that its concerns with Paragraph 8 could be satisfactorily addressed if an amendment was made as follows:

"The Lake Lothing Third Crossing has a clearance of 12 metres at Highest Astronomical Tide, which is subject to an air draft safety clearance of 1 metre (or other such minimum air draft clearance as is determined by the harbour authority from time to time).

Prior to passing under the Lake Lothing Third Crossing, all vessels must:

- a) where it is safe and practicable to do so, lower any masts and aerials and which can pass under the Lake Lothing Third Crossing;
- b) have regard to the real time air draft displays advising of current clearance and any further air draft displays or measures that may be implemented by the harbour authority from time to time;
- c) provide the LLTC Bridge Operator with confirmation of the vessel's real time air draft; and
- d) seek prior permission from the LLTC Bridge Operator to pass under the bridge.

Only vessels that are able to safely pass under the Lake Lothing Third Crossing without a bridge opening, taking into account the air draft safety clearance, will be approved to do so by the LLTC Bridge Operator.

The Lake Lothing Third Crossing will not be opened for vessels that may safely pass beneath the bridge, as advertised by the harbour authority."

## 5. Paragraph 11 – Risk of vessels becoming trapped in the Inner Harbour

- Overall, ABP remains of the view that the most appropriate way to address the risks of vessels becoming trapped in the Inner Harbour arising because of a possible failure of one of the two opening bridges at the Port is by the provision of an emergency berth within the Inner Harbour, in order to reduce the risk of allision, contact and collision with the bridge, marine infrastructure and other vessels.
- 5.2 ABP welcomes the Applicant's deletion of the 'sequential risk mitigation flowchart', particularly as the Harbour Master's discretion in respect of navigational safety should not be limited in this way, otherwise it will impede his ability to comply with his statutory duties.
- ABP is still concerned, however, that the paragraph is overly prescriptive, and should not unduly inhibit the Harbour Master's discretion. For example, the availability of a suitable and vacant berth within the Inner Harbour is only one factor that may influence the Harbour Master's decision as to whether the LLTC bridge must be opened early. Although there may be a berth available, it is imperative that such a berth is suitable and safe. It may be that the vessel in question may not be able to access the berth for a variety of reasons, for example, due to the vessel's specification (draught, manoeuvring capabilities, turning circle, etc), lack of available turning space, close proximity of other vessels or structures, or prevailing meteorological conditions (wind direction, wind speed, tides, visibility etc.)
- Although ABP acknowledges that the dSoO relates to operation of the LLTC Bridge only, ABP considers that this paragraph should still address navigational risks arising from both inward and outbound vessel transits through the Inner Harbour, rather than simply address issues that may arise in respect of westward (or inbound) transits, as is currently the case. Outbound transits will relate to circumstances where the Harbour Master is concerned that a vessel that has departed its berth to the west of the LLTC Bridge, and has passed through the LLTC Bridge and is in the mid-section of Lake Lothing, may become trapped if the existing Bascule Bridge is unable to open. If this occurs, and the vessel is unable to safely berth within the Inner Harbour, it would need to either turn around, or reverse back through the LLTC Bridge, in order to return to the berth that it just vacated.
- 5.5 It is unclear why the risks of vessels becoming trapped in the Inner Harbour are solely restricted to 'commercial' vessels in the proposed drafting. Although it is likely that the navigational risks will only arise in respect of deep draughted vessels if

there is any risk arising in relation to navigational safety of any vessel (for example, a large sail training vessel or warship) becoming trapped within the Inner Harbour, it should be able to be dealt with by the Harbour Master, as appropriate, under this provision.

5.6 As stated in the report prepared by the Applicant's contractors, WSP, entitled 'Lake Lothing Third Crossing Commentary on ABP Document LLTC Emergency/Contingency Berth' (reference 2, section 1.2), WSP concludes that:

"We believe that the residual risk [of a vessel becoming trapped between the two bridges] could be entirely mitigated by appropriate operational controls that could be included within the Scheme of Operation (for example to permit the Harbour Master ultimate discretion to open both the A47 Bascule and Scheme Bridges simultaneously in potentially challenging navigation conditions)."

- 5.7 As such, if an emergency berth is not provided by the Applicant in order to address the navigational risks arising in relation to a vessel becoming trapped within the Inner Harbour, it is imperative that the Harbour Master is provided with ultimate discretion to simultaneously open both bridges, as he considers is required for certain inbound and outbound vessel transits, which is the mitigation measure proposed by the Applicant's own contractors, WSP.
- 5.8 Finally, it is imperative ABP receives assurances from the Applicant that this commitment to simultaneous openings of the bridges would be safeguarded in perpetuity, irrespective of the frequency of occurrence in the future and its consequential impact on traffic flows within the local area.

#### Proposed Amendments to Paragraph 11

- Overall, ABP found the current proposed drafting overly complex and difficult to understand. Accordingly, rather than attempting to amend the current wording, which would make the drafting more fragmented, ABP considers it would be more appropriate to replace the wording with the below, to provide the Harbour Master with sufficient discretion in relation to the risk of vessels becoming trapped in the Inner Harbour.
- 5.10 As such, ABP considers that its concerns with Paragraph 11 could be satisfactorily addressed if the current drafting was replaced by the following:

"If, due to prevailing circumstances in the port, meteorological or otherwise, the Harbour Master considers that there is risk that a vessel may become trapped in the Inner Harbour between the two bridges, (with no suitable contingency berth available), the Harbour Master may instruct for both the LLTC Bridge and A47 Bascule Bridge to be opened simultaneously to accommodate the safe transit of that vessel. The second bridge will remain open until the vessel transit through the Inner Harbour has been safely completed."

Where a commercial vessel requires a westward transit through the Inner Harbour and due to prevailing circumstances in the Port, meteorological or otherwise, the Harbour Master, considers that there is a risk that the vessel may become trapped in the Inner Harbour (due to a potential failure of the Lake Lothing Third Crossing to open) with no available berth, the Harbour Master may require the LLTC Bridge Operator to open the Lake Lothing Third Crossing in advance of the commercial vessel passing through the A47 Bascule Bridge to ensure its transit through the Inner Harbour can be completed.

#### 6. Draft Scheme of Operation as a Certified Document

- 6.1 ABP does not consider that the Scheme of Operation should be a 'certified document' under Schedule 14 of the dDCO. The Scheme of Operation is a living document that will need to be updated from time to time, as circumstances may dictate. If this is embodied within the Order, the process of amending it would become unnecessarily restrictive, and may impinge on ABP's ability to carry out its statutory duties if required changes cannot be made within a timely manner.
- 6.2 Additionally, the revised draft Article 40 provides a partial means of amending the Scheme of Operation. It is unclear, however, whether these provisions are intended to override the normal process for amending a certified document forming part of a DCO. As such, at Deadline 10, ABP has proposed a clear means of amending the Scheme of Operation. In circumstances where the parties do not agree an amendment, ABP considers that the disagreement should be resolved using the

existing robust arbitration process, set out in Article 59 of the dDCO. The arbitration process would allow a decision to be made by an appropriately qualified arbitrator, who would be experienced to provide an independent decision in respect of navigational matters (i.e. any amendments to the SoO), in a timely matter.

6.3 Conversely, ABP is concerned that the Secretary of State may not be the appropriate adjudicator of any such dispute, and as there are no timescales relating to obtaining a determination from the Secretary of State, there is a real risk that pressing issues may be subject to a protracted process of resolution – which is not acceptable if the proposed changes have adverse navigational impacts that require quick resolution.

### 7. Other remaining paragraphs of the dSoO

- 7.1 ABP has the following comments in respect of the remaining paragraphs of the dSoO:
  - a) Paragraph 3 (Recreational vessels using commercial openings) Agreed in principle. ABP considers, however, that this should include flexibility to address future potential changes to the Port Control VHF Channel and telephone number. For example, "or such other VHF Channel or telephone number as may be specified by Port Control from time to time."
  - b) **Paragraph 5 (Waiting Pontoon)** The proposed amendments are noted and agreed in principle, subject to a similar comment regarding specification of the VHF Channel as it set out above.
  - c) Paragraph 6 (Navigation through the Lake Lothing Third Crossing) The proposed amendments are noted and are agreed in principle, subject to the provision of a Trinity House Lighthouse Service approved/consented traffic signal system required to control marine traffic and THLS approved/consented navigation marks to maintain safety of navigation.
  - d) Paragraph 7 (Flotillas) As above, agreed in principle, subject to the provision of a Trinity House Lighthouse Authority approved/consented traffic signal system required to control marine traffic and THLS approved/consented navigation marks to maintain safety of navigation.

- e) **Paragraph 9 (Double openings)** The proposed amendments are noted and agreed in principle.
- f) Paragraph 10 (Adverse weather conditions) Agreed in principle.

g) Paragraph 12 (Emergency Response) – Agreed in principle.