

IMMINGHAM EASTERN RO-RO TERMINAL



Terminal Capacity Statement
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1. Introduction and Context

- 1.1. This Terminal Capacity Statement has been prepared in relation to the application (the “Application”) by Associated British Ports (“ABP”), made under the provisions of Section 37 of the Planning Act 2008 (“the PA 2008”), for a Development Consent Order (“DCO”). If approved, the DCO will authorise the construction and operation of the Immingham Eastern Ro-Ro Terminal (IERRT) in the Port of Immingham.
- 1.2. The IERRT development as proposed by ABP falls within the definition of a Nationally Significant Infrastructure Project (“NSIP”) as set out in Sections 14(1)(j), 24(2) and 24(3)(b) of the PA 2008.
- 1.3. Various commentary has been provided by two Interested Parties (IPs) in relation to terminal capacity as the Examination has progressed. The current position of CLdN is set out in their ISH5 commentary **[REP7-040]** and Appendix 1 in particular (as prepared by Volterra on behalf of CLdN). GHD on behalf of DFDS have also prepared their own assessment of Terminal Capacity at **[REP7-056]**. Both DFDS and CLdN seek to argue that the IERRT facility as designed does not have the capacity to achieve a throughput of 660,000 Ro-Ro units per annum.
- 1.4. The Applicants position in relation to terminal capacity matters is set out in **[REP5-032]** and Section 6 in particular. This further report provides a concluding view on IERRT terminal capacity and the relevance of it to the consideration of the DCO.

2. Terminal Design and Throughput

- 2.1. The clear position that has been confirmed by the Applicant during the examination is that the maximum assessed level of activity for the proposed IERRT development equates to 1,800 Ro-Ro units per day. This upper limit of activity will be controlled in the DCO.
- 2.2. This level is, however, not a specific target or even an aspiration to be achieved, rather an upper daily limit on the level of throughput that the terminal would be permitted to accommodate. There is no annual throughput limit proposed (or indeed needed) and clearly daily throughput could be below this level.
- 2.3. The identification of this maximum daily level of activity has been made to ensure that the various environmental and related assessments that accompany the DCO application have considered a ‘reasonable worst case’ position in terms of potential adverse effects. For the purposes of the ES (which relies in areas on annual or average annual throughput levels) this daily level has robustly been multiplied by 364 days per year and then rounded up to provide an annual level of 660,000 units.
- 2.4. It is often common and accepted practice, and necessary in order to produce an Environmental Statement compliant with relevant legislation, to identify the notional maximum level of activity of a proposed development in this way.

- 2.5. As explained below, the ultimate level of throughput that the terminal will in reality accommodate will vary based on a range of different parameters and necessarily (as is common with all Ro-Ro terminals) management will be required to ensure the terminal operates affectively.
- 2.6. Ultimately, the only relevance of capacity matters to the consideration of the acceptability of the IERRT development is whether the operation of the terminal (up to this maximum) can be undertaken without unacceptable impact on the adjacent highway network in terms of queuing or disruption on local roads (with reference to Paragraph 5.4.22 of the NPSP) and other associated effects.
- 2.7. For the avoidance of any doubt, the Applicants position is that the achievement of a specific level of throughput at the terminal (which will clearly vary depending on market requirements) is not necessary in order for the need for the development to be demonstrated - as discussed in detail in, for example, **REP1-009** and **REP5-032**.

3. Overview of Operational Factors (and Interaction with Transport Assessment)

- 3.1. The overall capacity of a Ro-Ro Terminal is determined by a number of different factors including matters relating to:
 - Vessel size able to be handled;
 - Berth capacity and capability, and
 - Landside storage capacity and capability..
- 3.2. Other assessments and information provided by the Applicant discuss the implications of vessel size and berth capacity and capability, but in terms of terrestrial impacts and the Transport Assessment that has been undertaken, the only relevant consideration is landside storage capacity and capability.
- 3.3. This is turn is influenced by a number of inter-related factors, including the following.

Gate and Check in Capacity

- 3.4. The capacity and throughput of the proposed check in and security gate systems to be provided at the IERRT facility is provided in detail in **[REP5-032]**. It is noted that none of the IPs have raised any concern or counter assessment in respect of this information and, therefore, the conclusion that has been reached – that the capacity of the entry gates and processing facilities have no impact on the ability of the terminal to accommodate the peak throughput of 1,800 units per day without impact on the existing port road network – is assumed to be agreed.

Dwell Times

- 3.5. The number of trailer slots, container slots or waiting lanes required on any terminal to meet a certain level of throughput is mostly influenced by dwell time. Lower dwell times means that less space is required on the terminal to achieve a certain level of throughput.
- 3.6. Dwell times generally vary between import and export movements. As explained in **[REP5-032]** import accompanied units generally leave the terminal (after passing through the necessary controls) as they disembark the vessel. Their dwell time is therefore minimal (less than 2 hours). Import unaccompanied units have a dwell time on the terminal more likely to be measured in days. The precise length depends on the type of cargo with fast moving consumer or perishable goods having lower dwell times.
- 3.7. Terminal operators also have the ability to influence dwell times through arrangements and discussions with hauliers.
- 3.8. These affects are reflected in the dwell times SOCG **[REP6-020]**, which shows CLdN currently observe dwell times of 1.4 - 0.93 days for import cargo. DFDS also currently record variations ranging from 1.3 days to 2.7 days.
- 3.9. Typically, as recorded in **[REP6-020]**, Stena Line's current dwell time (at Immingham) is towards the upper end of these variations.
- 3.10. Export units (whether accompanied or unaccompanied) normally have a much shorter dwell time because they are generally loaded onto vessels the same day as they arrive.
- 3.11. The assessment provided by the Applicant at **[REP5-032]** adopts the Stena rates of 2.45 days for import unaccompanied units and 0.35 days for unaccompanied export units. As discussed below, the assessment carried out by DFDS assumes a range of dwell times around the average (see Table 6 of **[REP6-056]**) and that has been agreed with the Applicant.
- 3.12. The profile of arrivals and departures of HGVs on a daily basis are shown at Table 8 of the TA **[AS-008]** and reflects the differences between unaccompanied and accompanied movements.
- 3.13. Dwell times will clearly vary but this does not affect the conclusions of the Transport Assessment because it assumes that 1,800 units will enter or leave the terminal every day. Whether the import units have been on the terminal for one day or two days does not change the number of units or the profile of HGV departures across the day.
- 3.14. Furthermore, contrary to the suggestion of CLdN at ISH5 **[REP7-040]** Page 14 there has been no change in dwell times by the Applicant. The process for defining traffic generation and profile across the day is clearly set out in the Transport Assessment (**AS-008**) at Section 5.3. The data was derived from existing Stena operations. This is confirmed in the SoCG on Dwell times. This

averages (as CLdN put it) to a dwell time of 1.4 days. The data sets are wholly consistent and have been consistently applied throughout the assessment process.

Unaccompanied / Accompanied Split

- 3.15. Related to the dwell time is the split of unaccompanied and accompanied import units. As the number of unaccompanied cargo units increases more storage is required for any given dwell time. Therefore, if the ratio of unaccompanied cargo increases, then either more slots would be required or the dwell time would need to be reduced to accommodate the same overall throughput.
- 3.16. In terms of the Transport Assessment **[AS-008]**, it has been agreed in the Transport Statement of Common Ground (item 1 of **REP6-011**) that changes in the ratio of Unaccompanied / Accompanied cargo have no material impact on the outcome of the assessment.

Layout of Terminal

- 3.17. As set out in the Changes Application, the current iteration of the layout of the terminal has been set out to nominally include the following provision:

Table 1: Slot provision

Ground Import Slots	1,446
Trade Unit Import Slots	25
Container Slots	195 (65 at ground level)
Total	1,663

- 3.18. The container slot capacity assumes stacking containers 3 high and, therefore, the 65 ground level slots result in an overall capacity of 195 containers.
- 3.19. In addition to these elements the terminal also has additional space at the pre-gate check in area (50 slots) and in the Marshalling Lanes (65 slots).
- 3.20. As discussed above, this layout meets the current needs and expectations of Stena and will accommodate the capacity requirements as assessed at Appendix 4 of **[REP5-032]**.
- 3.21. There is clearly scope for what would be white lining changes to accommodate changes in demand or cargo demand. As was confirmed at ISH5, the Applicant believes that there is scope to readily increase the number of import slots by at least 100 as a result of minor white line changes.
- 3.22. In a practical sense the export slots only accommodate minimal demand. These generally fill up overnight until the vessel loading activities commence and then the units are discharged from the slots onto the vessels. Once the vessels are being loaded (at around 70-80 per hour) the rate at which further

export units arrive at the terminal itself are at around the same rate as those being loaded onto the vessel. For export units, overall demand is expected to be less than 100 trailer slots for most of day.

Management

- 3.23. **REP7-072** sets out Stena Line's view on the management of the terminal. As that submission confirms, terminal management is a key function of any Ro-Ro Terminal, and that as with all terminals there will be variations in throughput across the year and from day to day.
- 3.24. Typically, and because of the dwell times of import goods in particular, any increase in throughput towards the maximum throughput level identified will take several days to impact on the general capacity of the yard and, therefore, the operator can monitor and manage such increases appropriately to mitigate any congestion issues.
- 3.25. In addition to managing freight flow through booking procedures, there are a number of ways in which Stena Line (and any other operator) would deal with this internally within the Terminal as follows:
- (i) Block stowage on the terminal of export trailers – based on the current layout it is estimated that this could deliver an additional 80 spaces on site for import trailers.
 - (ii) Use parts of the pre check in and pre boarding lanes for trailer parking. It is estimated that this could provide an additional 115 slots.
 - (iii) Trailer parking to one side of the the terminal road carriageways along with the subsequent control of traffic by marshalling. This, it is estimated, could provide an additional 50 – 70 slots
- 3.26. On the basis of the above, at times of high demand towards the upper end of the identified maximum level of activity at the terminal, at least 1,900 slots could be made available.

Table 2: Peak Demand Maximum Slots

Ground Import Slots	1,446
Additional ground import slots through refined marking	100
Trade Unit Import Slots	25
Container Ground Slots	65
Export Slots (available for imports due to block stowage)	80
Pre check in and boarding potential slots	115
Trailer parking on carriageway	70
Total	1,901

Overall

- 3.27. Against this background the following sections consider the specific issues raised by CLdN and DFDS.

4. Response to DFDS (REP7-056)

- 4.1. **REP7-056** provides an update to the GHD assessment of terminal capacity as originally presented at **REP6-038**. The original assessment included a number of incorrect input assumptions and those have subsequently been discussed with GHD.
- 4.2. It is confirmed that the input assumptions reported at Section 2 of **REP7-056** are, for the purposes of the exercise, considered to be reasonable by the Applicant.
- 4.3. As explained at ISH5, the detailed internal assumptions within the GHD model and the way in which it forecasts demand and usage of slots has not been provided. It is not, therefore, possible to fully analyse, or comment on the appropriateness of it for the purposes of the examination.
- 4.4. The approach taken by the Applicant and the approach taken by GHD (on behalf of DFDS) are different, with the Applicant considering overall annual capacity, and GHD considering the impacts on a peak 3 day period (with the terminal operating at 1,800 units per day during that 3 day period).
- 4.5. That said, the outputs of the GHD model are considered to be consistent with the Applicants own assessment at **REP5-032**.
- 4.6. As confirmed at Section 4 of **REP7-056** the peak demand assessed by GHD for a peak day (operating at 1,800 units) for unaccompanied Ro-Ro imports is **1,709** slots. The equivalent demand for the average day is a peak of **1,411** slots.
- 4.7. As set out above in Table 2, there are **1,446** slots available in the layout for unaccompanied UK imports. This will, therefore, without any modification or management, accommodate average day demand adopting the GHD model approach.
- 4.8. For a peak demand day, through management as described above, a total of **1,901** slots could be made available on the terminal. This is well in excess of the **1,709** slots that GHD assess as being required.
- 4.9. As suggested by GHD on Page 9, periodic review of the layout to accommodate changing demand / markets will be required and undertaken over time. This is something which is reflected in the Freight Management Plan and Stena Line's Operational Statement (REP7-072)

- 4.10. There is, therefore, no conflict between the outcomes of the two approaches. The GHD assessment supports the conclusions reached by the Applicant.

5. Response to CLdN (REP7-040)

- 5.1. At ISH5, CLdN made a number of submissions on the basis that they did not consider that the IERRT facility could achieve a throughput of 660,000 units per year for the stated dwell time and ratio of accompanied and unaccompanied units. This is reported on Pages 8 to 12 of **REP7-040**. This position has been supplemented by a Post Hearing Note prepared by Volterra on behalf of CLdN provided at Appendix 1 of **REP7-040**.
- 5.2. For the reasons set out above, the 660,000 units per year is an input to the assessment to ensure both the Transport Assessment and the Environmental Impact Assessment adequately assess likely transport and environmental impacts. If that throughput is ultimately not achieved for any reason then the traffic and environmental impacts will of course be less than assessed.
- 5.3. There is an accepted need to demonstrate that 1,800 units could be acceptably accommodated per day for reasons of transport impacts. As set out above, both the Applicants and DFDS's assessments confirm this to be the case.
- 5.4. CLdN's assessment is unrelated to those considerations. Indeed, they do not confirm what the purported harm would be even if they are correct that the capacity of the IERRT was 528,363 (Scenario 1) or 527,905 (Scenario 2) per annum.
- 5.5. The only suggested harm is confirmed at page 12 which concludes "*this supports CLdN's view that IERRT should be seen as the relocation of an existing operation, rather than the creation of new capacity and certainly not the scale of capacity claimed by the applicant*". As a matter of fact and based on their own evidence that conclusion is clearly non-sensical. This claim, along with the broader need issues have already been responded to at length by the Applicant – see for example, paragraphs 7.25 to 7.29 of **REP5-032**.
- 5.6. On this basis, CLdN's assessment and analysis is clearly not relevant to the Decision Maker in terms of either considering need matters or the transport impact of the proposed development.
- 5.7. Even if, however, it were for some reason considered relevant to the decision maker, no weight can be given to CLdN's assessment (at pages 8 to 12 and Appendix 1) for several key reasons.
- 5.8. The Updated Volterra Calculations (at Appendix 1 of **REP7-040**) is based on a fixed schedule of sailings and a fixed size of vessel. These are reported at Table 1.2 and 1.3. The DCO is not promoted on the basis of a fixed type of vessel nor a firm sailing schedule. The navigation related information and evidence confirms the Applicant's position that specific vessels were tested as proxy's to test the maximum physical size of vessel that will be able to be satisfactorily accommodated at the IERRT facility. The Applicant has never

promoted nor confirmed the use for example of the DFDS Jinling vessel for the terminal.

- 5.9. The Applicant's evidence and submissions demonstrate that a vessel up to the size of the design parameters specified has been appropriately considered within all relevant and necessary assessments, which conclude that the use of vessels up to this size would be appropriate and acceptable.
- 5.10. Adopting specific vessels in the assessment in the way CLdN have done is a wholly inappropriate and unevidenced assumption to make. As discussed above the terminal is designed to provide flexibility and resilience for at least a 50 year design life. Through that time markets will change and the operator will utilise vessels that meet those market demands, including providing an appropriate proportion of cabins for accompanied freight.
- 5.11. The Volterra assessment provides just two examples of that the vessel split and timings which are based on assumptions are neither reasonable nor realistic.

Abbreviations and Acronyms

Acronym	Definitions
ABP	Associated British Ports
DCO	Development Consent Order
DfT	Department for Transport
ExA	Examining Authority / Examining Panel
IERRT	Immingham Eastern Ro-Ro Terminal
NELC	North East Lincolnshire Council
NPSfP	National Policy Statement for Ports
NPS	National Policy Statement
Ro-Ro	Roll-on / Roll-off
TA	Transport Assessment
UK	United Kingdom