

IMMINGHAM EASTERN RO-RO TERMINAL



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Contents

1. Executive Summary	4
2. Introduction	5
3. The Humber Shortsea Unitised Market Update	6
4. The Humber Port Competitive Environment Update	17
5. Capacity Considerations	24
6. Humber Shortsea Projections Update	30
Abbreviations and Acronyms	38

1. Executive Summary

- 1.1. This report is designed to act as an update to certain sections of the Humber Shortsea Market Study [APP-079] that was submitted as part of the Immingham Eastern Ro-Ro Terminal (IERRT) DCO application. The purpose of this update report is simply to ensure that the Examining Authority (ExA) is in possession of the most recent available market information at the close of the IERRT examination.
- 1.2. In respect of the Humber Shortsea Unitised Market, the update, amongst other things, explains that in 2022, total shortsea tonnage in the Humber increased by 2% to over 22 million tonnes. The Lo-Lo segment recorded a decline in volumes of over 19% in 2022. This was, however, balanced by an increase in unaccompanied Ro-Ro volumes of 6% in 2022 and 17.4% in the MAFI type cargo transport. In terms of units the 2022 volumes were almost equal to the 2021 figures with the same shift towards unaccompanied and MAFI type transported containers.
- 1.3. In respect of the Humber Port Competitive Environment, the update clarifies the position which, in general terms, is that the shortsea unitised market on the Humber consists of:
 - (i) Ro-Ro and Lo-Lo facilities at the Port of Immingham (the Ro-Ro facilities serving DFDS and Stena Line),
 - (ii) Ro-Ro facilities at the Port of Killingholme (serving CLdN's shipping lines and Stena Line), and
 - (iii) Ro-Ro and Lo-Lo facilities at the Port of Hull (the Ro-Ro facilities largely being geared more towards the accompanied and passenger market serving P&O).
- 1.4. In terms of capacity matters, the update considers the likely position on the Humber having regard to information which has been submitted to the Examination, and which considers more than just potential storage yard capacity matters.
- 1.5. In respect of forecast growth projections, the update similarly considers the latest position having regard to information which has been submitted to the Examination or which has been updated due to the passage of time since the submission of the original Market Study. All forecasts referred to and considered indicate considerable growth in Ro-Ro trade and volumes on the Humber in the period to 2050. The forecasts produced for the Applicant can be summarised as:
 - a. **Unaccompanied Ro-Ro traffic** - is expected to see continued and strong growth as a consequence of the set of drivers previously detailed. The facilities on the Humber are ideal for serving the captive hinterland of the central and north of the UK. A clear growth is therefore expected for the

unaccompanied Ro-Ro and MAFI segment in the Humber region in respect of the number of units with a CAGR of 3.6% in 2023-2028 and a CAGR of 2.5% in 2028-2032 (in comparison to 2.1% in 2012-2022). The CAGR between 2032 and 2050 is expected to be 1.6%. Growth in the short term in tonnage is lower having a CAGR of 2.7% in the period 2023-2028, 1.9% in 2028-2032 and 1.3% in 2032-2050. In the period between 2020 and 2032 the CAGR is expected to be 4.0% (in units), which is in line with the historic CAGR between 2018 and 2022 of 4.2%.

- b. **Accompanied Ro-Ro traffic** - in the region will remain the smallest of the shortsea traffic flows. Growth (CAGR (in units) for this trade is predicted to be 1.8% in the period 2023-2028, 1.6% in 2028-2032 and 1.2% for 2032-2050. This in comparison to an overall CAGR between 2012 and 2022 of -0.5%, which is largely as a consequence of Covid related travel restrictions and HGV driver shortages.
 - c. **Shortsea Lo-Lo traffic** - Albeit in smaller volumes, the Humber facilities will also see increased shortsea Lo-Lo traffic. The Humber is well placed for this sector in relation to key centres of production and consumption. Growth in the Lo-Lo segment (in units) is expected to reach a CAGR of 2.9% in the period 2023-2028 and 1.7% in 2028-2032. In the period from 2032 to 2050 the CAGR is 1.1%.
- 1.6. Having regard to these matters and considering the demand-supply balance for the Humber region, the update demonstrates that additional Ro-Ro capacity is required to meet demand. While this analysis only considers the position up to 2050 – albeit demonstrating that additional capacity is needed sometime before 2050 - it is further highlighted that there will be further growth in this sector beyond 2050.

2. Introduction

- 2.1. This report is designed to act as an update to certain sections of the Humber Shortsea Market Study [APP-079] that was submitted as part of the Immingham Eastern Ro-Ro Terminal (IERRT) DCO application.
- 2.2. It provides an updated market analysis and forecast having regard to the most recent market information now available since the original Market Study was published. In producing this update the opportunity has been taken at the same time to make appropriate corrections to data previously provided in terms of historic port statistics (corrections required as a result of Department for Transport (DfT) reporting issues) whilst also taking account of information made available through the Examination.
- 2.3. The updates provided relate to the following:
 - (a) The shortsea unitised traffic position - section 3.
 - (b) The competitive environment position – section 4.
 - (c) Capacity matters – section 5, and
 - (d) Updates in demand projections - section 6.

- 2.4. The Applicant emphasises that the purpose of this update report is simply to ensure that the Examining Authority (ExA) is in possession of the most recent available market information at the close of the IERRT examination.
- 2.5. This report does not revisit the question of need. As the ExA is aware, the Applicant has already identified during the course of the examination (for example, most recently in section 3 of **[REP7-023]**) the nature of the compelling and urgent need for the type of infrastructure that would be provided by the IERRT development as established in the National Policy Statement for Ports (NPSfP) itself.
- 2.6. Without prejudice to the need already established by the NPSfP, the Applicant has also provided evidence in the materials submitted both before and during the examination as to the need for the specific IERRT facility beyond the need already established by the NPSfP.

3. The Humber Shortsea Unitised Market Update

- 3.1. This section takes into account the following matters:
- (i) Revised accompanied Ro-Ro data for Harwich from 2021. The Applicant has established that data previously provided by the DfT was incorrect and it was this which caused an apparent jump in market share and traffic in the Humber. The DfT is now clarifying the position with the Port of Harwich.
 - (ii) Inclusion of 2022 actual traffic figures as reported by the DfT.
 - (iii) Revised accompanied Ro-Ro data for imports in Hull in 2022 relative to DfT published data. The DfT had, it transpires, erroneously copied over the raw statistics provided to them by ABP. Although acknowledging this error, DfT have indicated that this data cannot be updated online in the short term.
 - (iv) Additional unaccompanied 'MAFI' type volumes – as reported by CLdN in Table 5.1 of the First Volterra report **[REP2-031]** during the IERRT examination - handled at the Port of Killingholme and to a lesser extent at other Humber facilities which appear to have been reported under traffic code 63 in the DfT data, which are considered to be Ro-Ro traffic flows but which were not included in the original Market Study.
 - (v) Additional volumes as apparently handled at the Port of Killingholme based on Table 5.1 of the First Volterra report submitted to the IERRT Examination by CLdN (section 5 of Appendix 1 of **[REP2-031]**) which, for some reason, do not seem to have been reported in the DfT statistics (see paragraph 4.17 and following of **[REP5-032]**).

Humber Shortsea Unitised Traffic Overview

3.2. In the updated charts below (Figures 3.1 and 3.2) the volume of cargo in containers which is loaded and unloaded using MAFI type equipment has been added as a separate group to the charts and is identified (coloured yellow) in addition to the volumes presented in the original Market Study ([APP-079] Figures 3.15 and 3.16). Just under 20% of the unitised traffic on the Humber is loaded/unloaded from Ro-Ro vessels in this way.

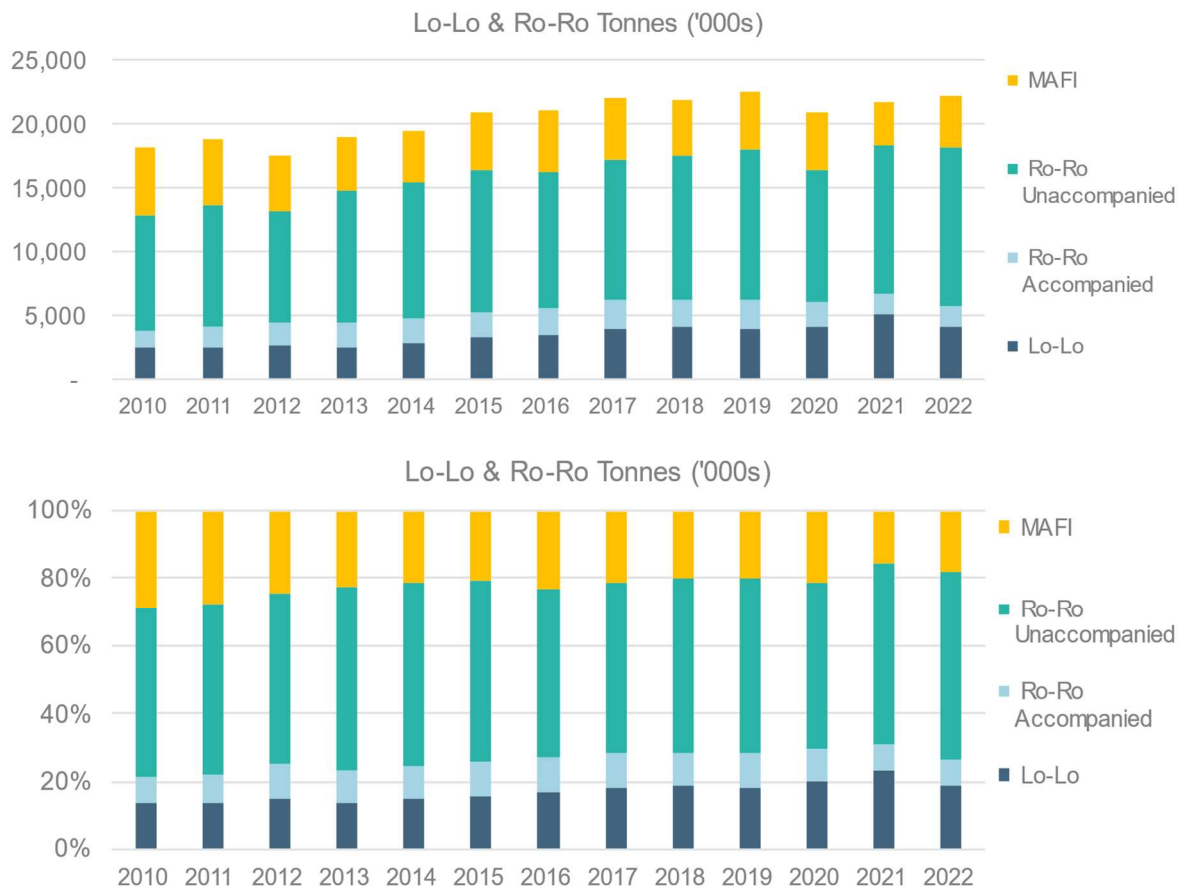


Figure 3-1 Shortsea traffic Humber estuary in tonnes (source: DfT, Volterra/CLdN, Rebel) – Update of original Market Study Figure 3.15

3.3. In 2022 total shortsea tonnage in the Humber increased by 2% to over 22 million tonnes. The Lo-Lo segment recorded a decline in volumes of over 19% in 2022. This was, however, balanced by an increase in unaccompanied Ro-Ro volumes of 6% in 2022 and 17.4% in MAFI type unaccompanied volumes. In terms of total units the 2022 volumes were almost equal to the 2021 figures with the same shift towards unaccompanied units and MAFI type transported containers.

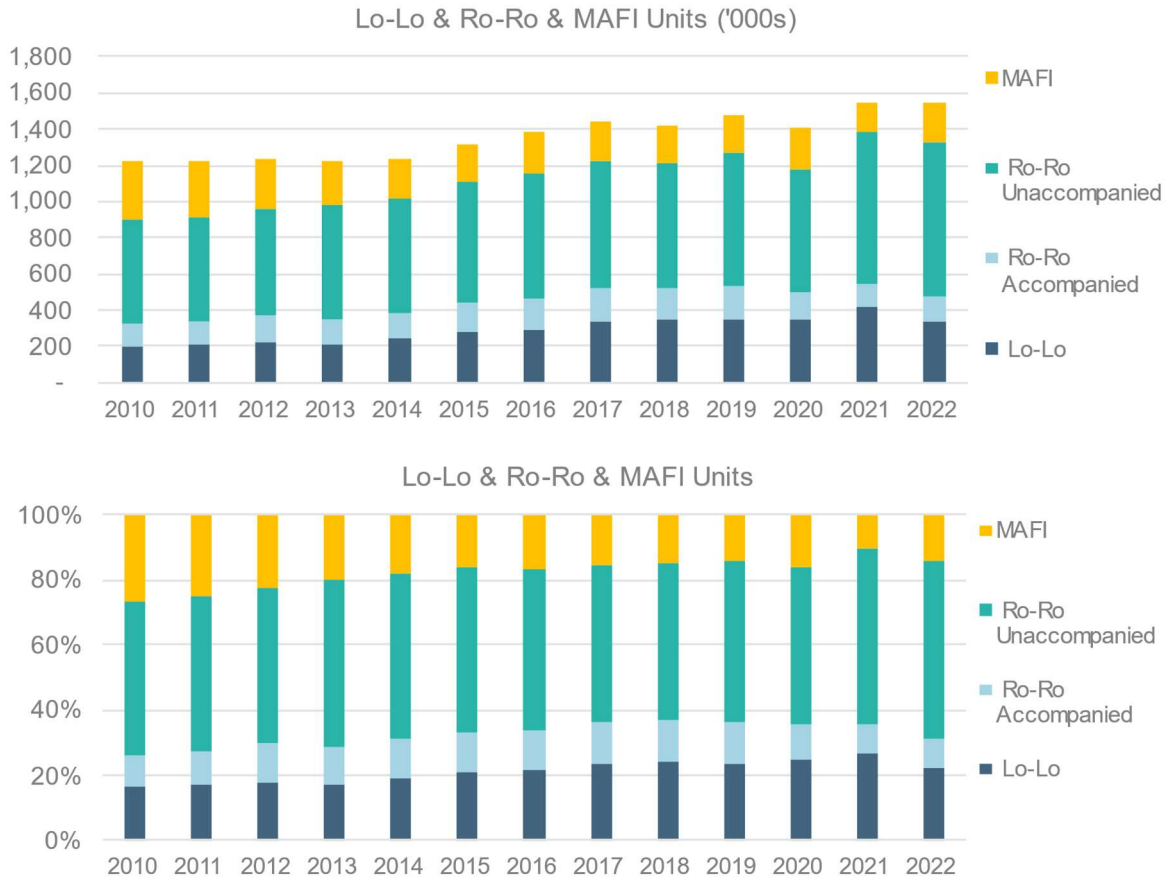
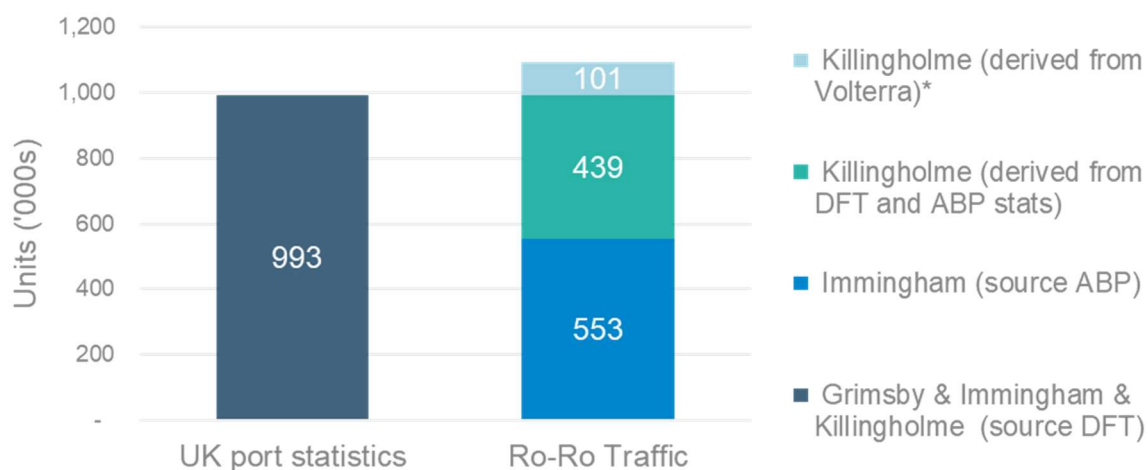


Figure 3-2 Shortsea traffic Humber estuary in units (source: DfT, Volterra/CLdN, Rebel) – Update of original Market Study Figure 3.16

3.4. As the original Market Study explains, for the UK maritime freight statistics from the DfT, the figures for Immingham and Killingholme are combined within the statistical group 'Immingham & Grimsby'. The ports of Immingham and Killingholme, however, are the only two facilities within this group which provide significant Ro-Ro services. By separating the Ro-Ro volumes for Immingham provided by ABP, it is possible to determine the Killingholme Ro-Ro volumes for the period 2018-2022 as shown in Figure 3.3. This update report, therefore, takes into account all Ro-Ro traffic handled in the Humber Estuary, including domestic and non-EU traffic.



*derived from Volterra report table 5-1 minus "Killingholme (Derived from DFT and APB stats)"

Figure 3.3 Ro-Ro volumes for Immingham and Killingholme (2022) – Update of original Market Study Figure 3.23

3.5. As already explained (see **[REP5-032]**), the Humber traffic data reported by the DfT utilised and used for the original Market Study did not include all relevant cargo flows. The reason why there are differences in the data when compared with the original Market Study is because:

- (i) The Applicant's Market Study analysed three typical shortsea trades, namely Accompanied Ro-Ro (DfT code 51); Unaccompanied Ro-Ro (DfT code 61); and Lo-Lo (DfT codes 31-34). From CLdN's submissions it is now understood that Killingholme uses code 63 for containers carried on Ro-Ro vessels and which are transported using MAFI type equipment.
- (ii) In the DfT statistics Immingham and Killingholme are grouped together. When the DfT reported figures are taken (including code 63) and the volumes submitted by ABP to DfT for Immingham are subtracted, there remains a difference between the CLdN Killingholme reported figures and those reported by the DfT for both ports minus ABP's figures. This difference is 8.6% of traffic in terms of units on average for the last five years (2018 – 2022).

3.6. In 2022, the combined volume which was reported under code 63 together with the unknown volumes referred to above at (ii) represented 199,000 units in the Humber. This represented a 14% share in the Humber. By taking into account this cargo flow the total Humber traffic volumes increase by 222,000 units and 242,000 units by 2030 and 2040 respectively.

3.7. The resulting CAGR for the individual Humber terminals over the period 2013-2022 are distorted by the fact that one Stena service was required by CLdN to vacate the Killingholme facility in early 2022. This has inevitably resulted in a drop in 2022 figures for Killingholme which does not reflect the actual underlying

organic growth of the market that has occurred. To provide an accurate updated market assessment, this update, therefore, takes the traffic mix for the Humber as a whole into account.

- 3.8. The detail that can be provided in this market study update is necessarily affected by the fact that data provided by the Port of Killingholme only provides the total number of units handled for import and export. No data is provided by the Port of Killingholme in relation to the modality or whether these are full or empty units. This means that the data does not allow for checking quoted growth rates or trends by reference to the modality level for the unknown cargo group. As a consequence, it is not possible to provide a comprehensive consolidation with DfT statistics.
- 3.9. For the purposes of this update it is assumed that the excess volume of cargo over that provided by the DfT statistics is spread evenly in line with the DfT reported traffic statistics for Killingholme for unaccompanied, accompanied and MAFI type traffic (the only trade flows reported by Killingholme).

Humber Shortsea Unitised Traffic by Modality

- 3.10. This section updates the position in respect of certain key modes within the shortsea market on the Humber (relevant parts of section 3.5.2 through to 3.6.1 of the original Market Study **[APP-079]**). The analysis considers a time range since 2010. For this period no detailed data is available to separate Immingham from Killingholme.

Humber Unaccompanied Ro-Ro Traffic

- 3.11. Since 2010 there has been an average growth rate of around 2.6% per year in tonnage and 3.2% in terms of units. In 2022 844,000 units were routed over the Ro-Ro facilities on the Humber. It should be noted, however, that a large part of this growth was reported since 2020, with a renewed focus on shortsea trades and reshoring.

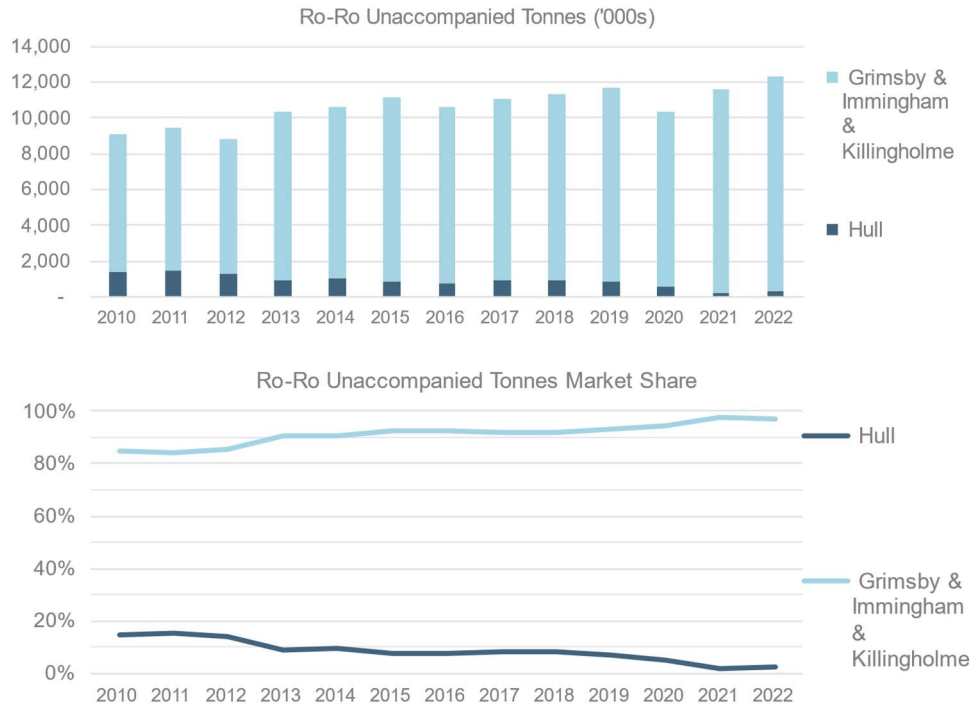


Figure 3-4 Shortsea unaccompanied Ro-Ro traffic Humber estuary in tonnes (source: DfT, Volterra/CLdN, Rebel) – update of original Market Study Figure 3.17

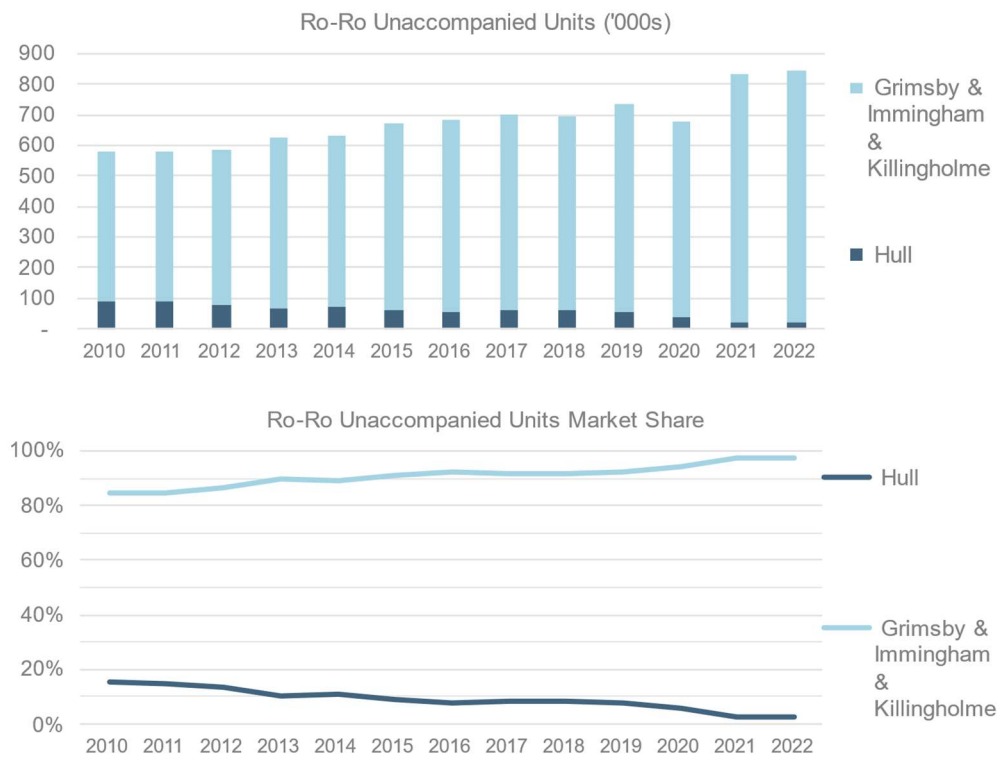


Figure 3-5 Shortsea unaccompanied Ro-Ro traffic Humber estuary in units (source: DfT, Volterra/CLdN, Rebel) – update of original Market Study Figure 3.18

Humber MAFI-type Container Ro-Ro Traffic

3.12. As already indicated, the Port of Killingholme reports part of its traffic flows under a different DfT code. Killingholme handles the largest volume of containers using MAFI type equipment (further referred to by reference to the term ‘MAFI’ in this report) as compared with other facilities on the Humber. In the chart below (Figure 3.6) such cargo volumes have been plotted, including, as already discussed in paragraph 3.5(ii) above, an 8.6% surcharge for non-reported volumes at Killingholme.

3.13. The overall declining trend in MAFI type tonnage and units can be clearly seen from Figures 3.6 and 3.7. This is considered likely to be as a result of containers moved away from being transported on Ro-Ro vessels (and loaded/unloaded using MAFI trailers) to being transported on container vessels or to facilities where the containers can be handled by mobile equipment which Ro-Ro berths are unable to accommodate.

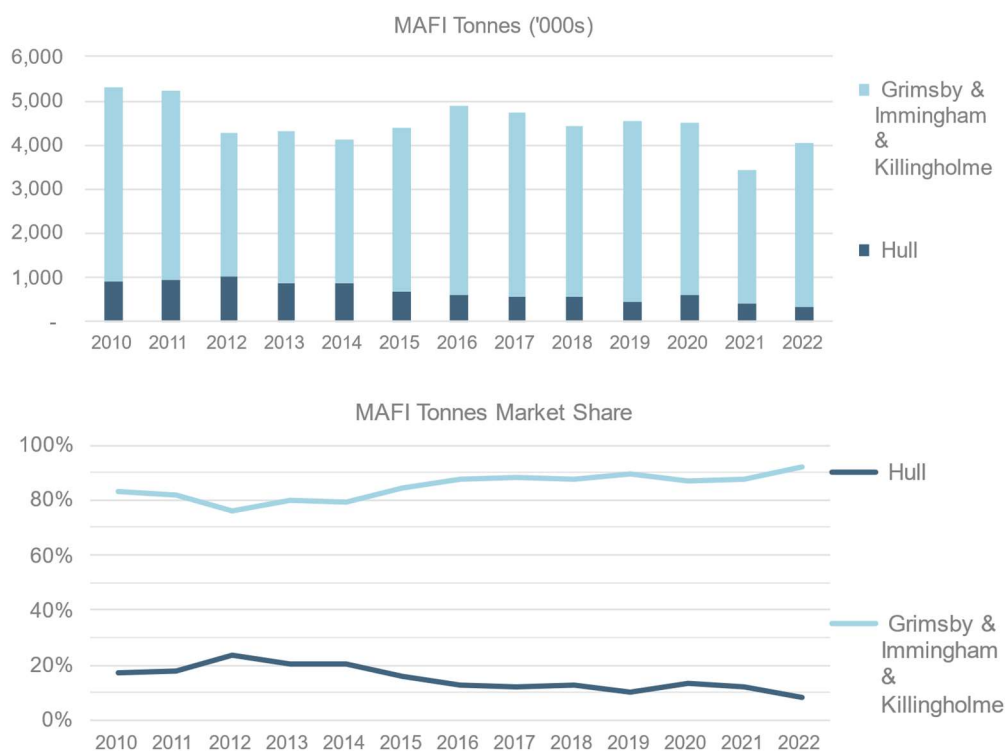


Figure 3-6 MAFI Container Ro-Ro traffic Humber estuary in tonnes (source: DfT, Volterra/CLdN, Rebel)

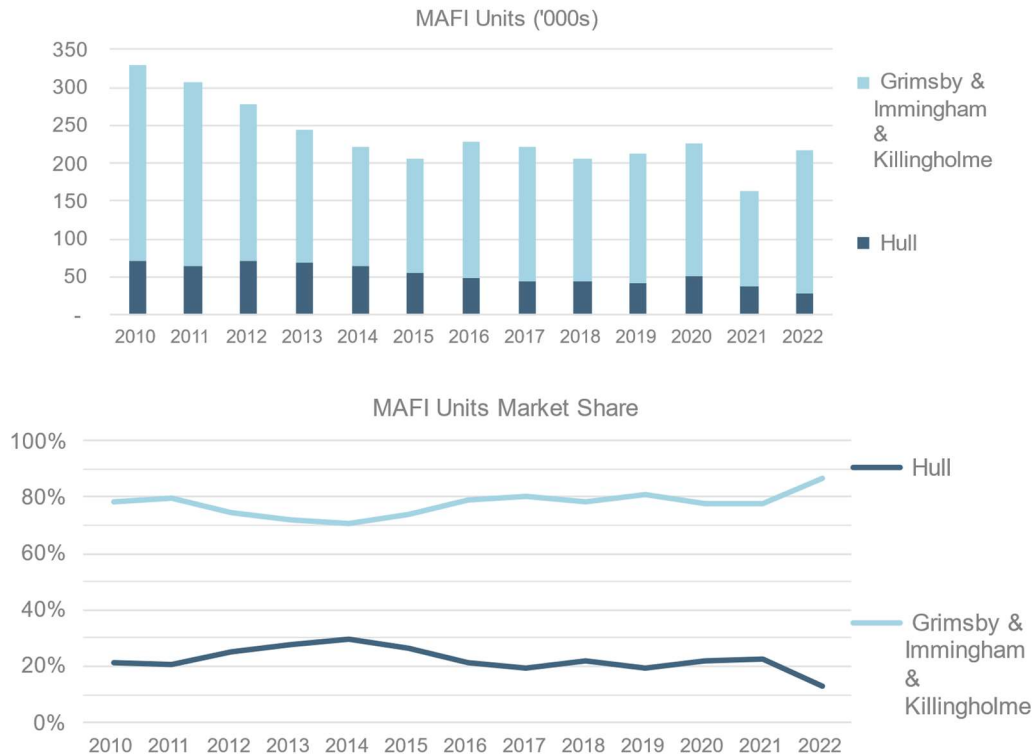


Figure 3-7 MAFI Container Ro-Ro traffic Humber estuary in units (source: DfT, Volterra/CLdN, Rebel)

Humber Accompanied Ro-Ro Traffic

- 3.14. In 2019, accompanied Ro-Ro traffic in the Humber was, in terms of tonnage, just over 10% of total shortsea volumes, declining to 7.3% in 2021 and 7.7% in 2022. This was largely as a consequence of Covid related travel restrictions and HGV driver shortages. Over the pandemic, accompanied Ro-Ro volumes were most affected and generated most of the decline in the overall Ro-Ro segment for the region. In 2022 the share of accompanied Ro-Ro volumes recovered but only partially. This illustrates the impact which different logistic related conditions and issues can have on shortsea trades.

- 3.15. Likewise, since 2019, accompanied Ro-Ro traffic on the Humber has declined by 23.4%, dropping from 2.2m tonnes in 2019 to 1.6m tonnes in 2021 and to 1.7 m tonnes in 2022. Figures 3.8 and 3.9 illustrate the role of the Port of Hull in serving the accompanied trade segment. However, despite the accompanied traffic handled in Hull, the South Humber ports still have a market share of over 60%.

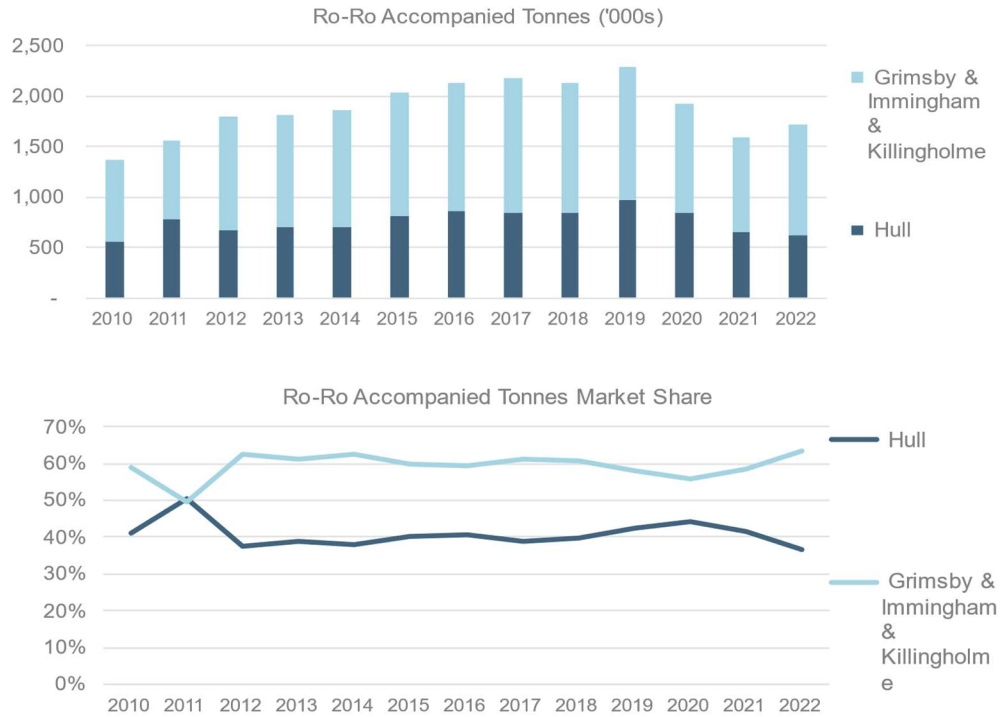


Figure 3-8 Shortsea accompanied Ro-Ro traffic Humber estuary in tonnes (source: DfT, Volterra/CLdN, Rebel) – update of original Market Study Figure 3.19

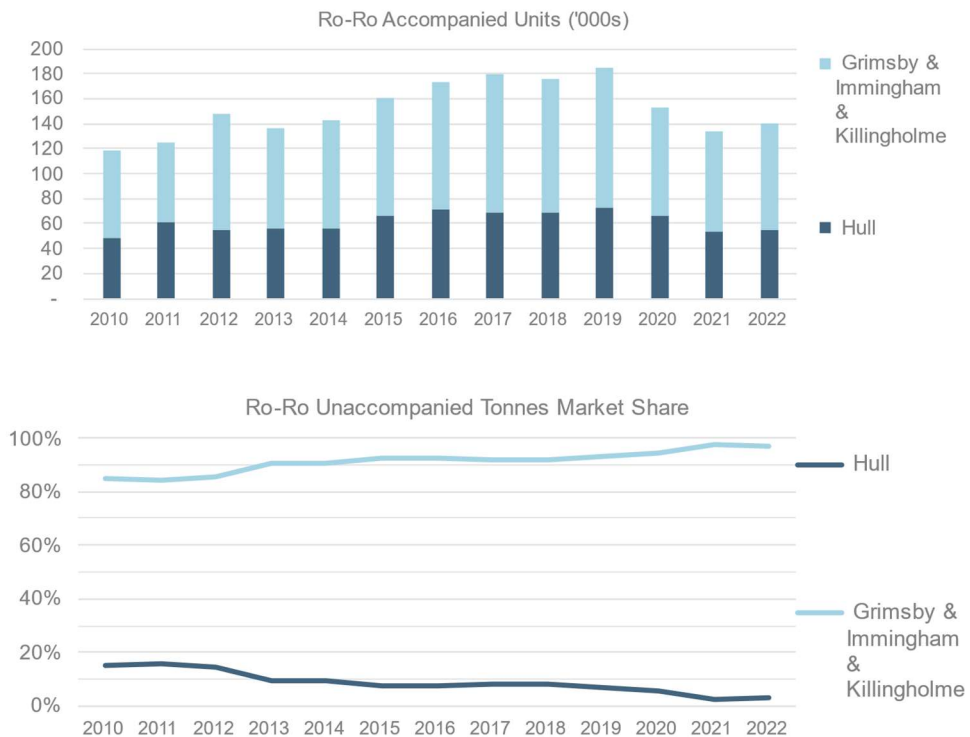


Figure 3-9 Shortsea accompanied Ro-Ro traffic Humber estuary in units (source: DfT, Volterra/CLdN, Rebel) – update of original Market Study Figure 3.20

The Humber Estuary Ro-Ro Traffic by Terminal

3.16. In terms of tonnage, Immingham handled the largest Ro-Ro volume of the Humber Estuary facilities with a market share of 48.9% in 2022. Over the period 2018-2022, Hull has seen a significant decline in its Ro-Ro tonnage and units which has resulted in a CAGR of -13.7%. Killingholme saw an increase in volumes handled in 2021 in comparison with 2020 and the port had the largest market share in terms of units in 2021. However, with the relocation of Stena to Immingham, as noted, tonnage and unit volumes handled at Killingholme declined reflecting this relocation. Nevertheless, the combined Ro-Ro volumes across the Humber in terms of units, exceeded 1.1 million for the first time in 2022.

3.17. The volumes of cargo handled at the Port of Killingholme which for some unknown reason do not appear to have been reported to the DfT do not include any information on tonnage. The same tonnes/unit ratio as for the other Killingholme traffic has, therefore, been used to adjust the tonnage on the Humber.

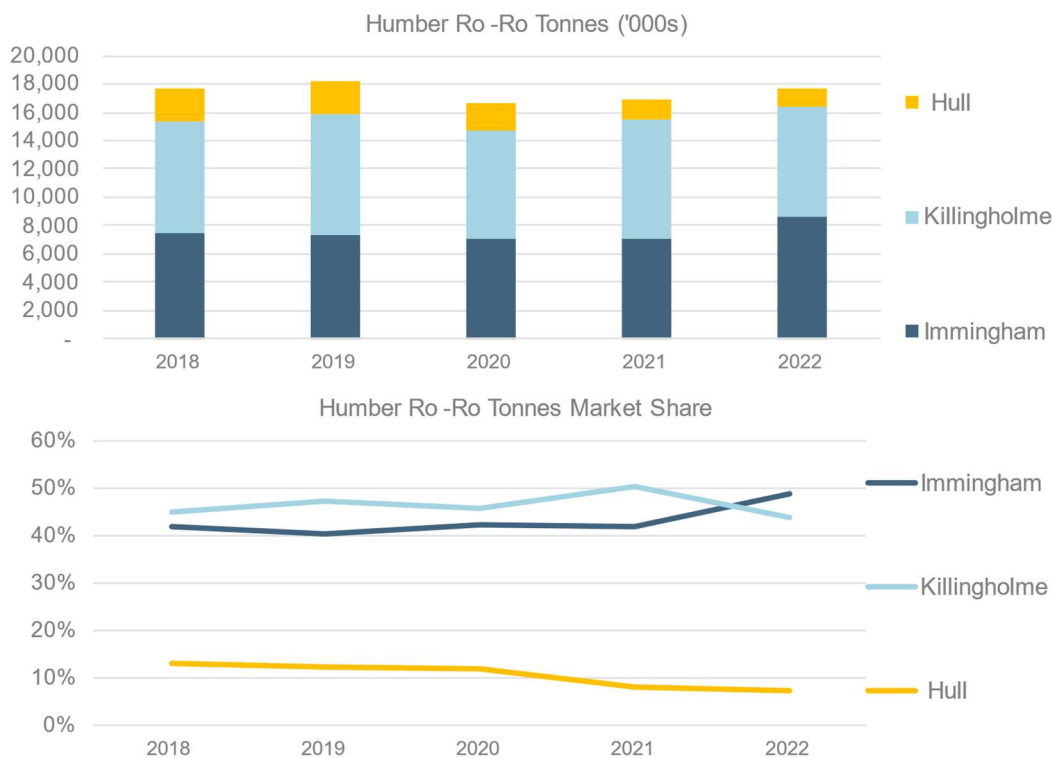


Figure 3-10 Ro-Ro traffic Humber estuary in tonnes (excl Lo-Lo) (source: DfT, Volterra/CLdN, Rebel) – update of original Market Study Figure 3.24

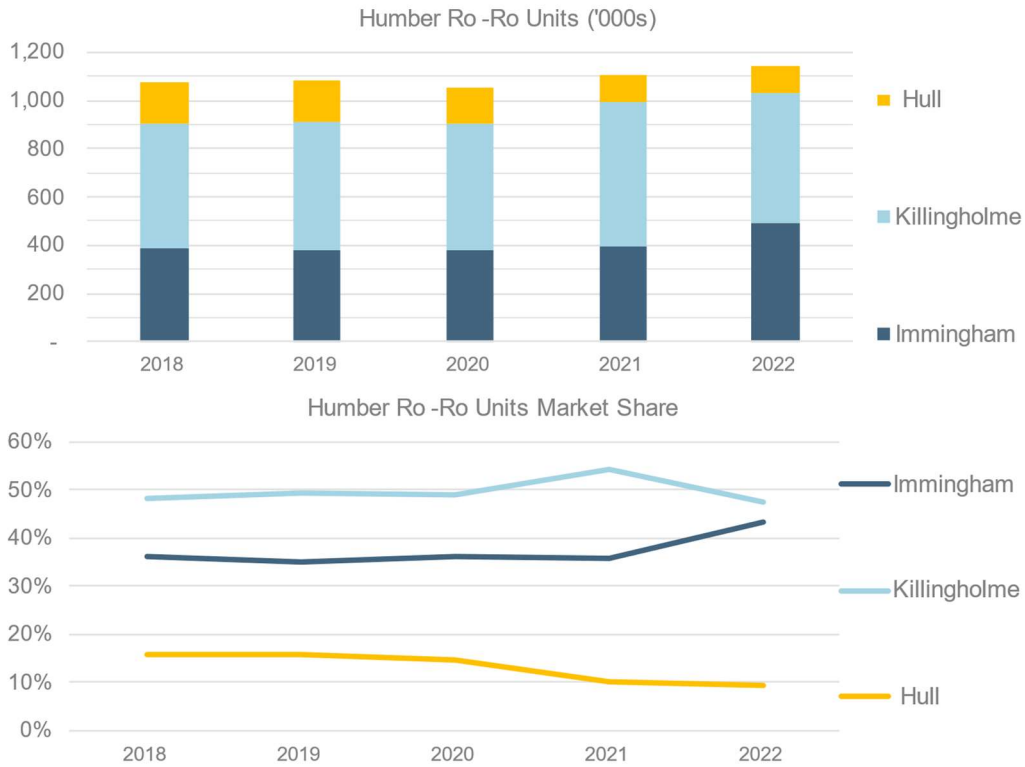


Figure 3-11 Ro-Ro traffic Humber estuary in units – update of original Market Study Figure 3.25

3.18. Figure 3.12 shows the growth in the unaccompanied and MAFI handled volumes. In 2022 these traffic elements amounted to 1.036 million units. Over the period 2018-2022 the CAGR for these elements was 3.75%, significantly higher than the overall UK market or the overall shortsea segment in the Humber. The impact of one of the Stena services being required to relocate can also be seen.

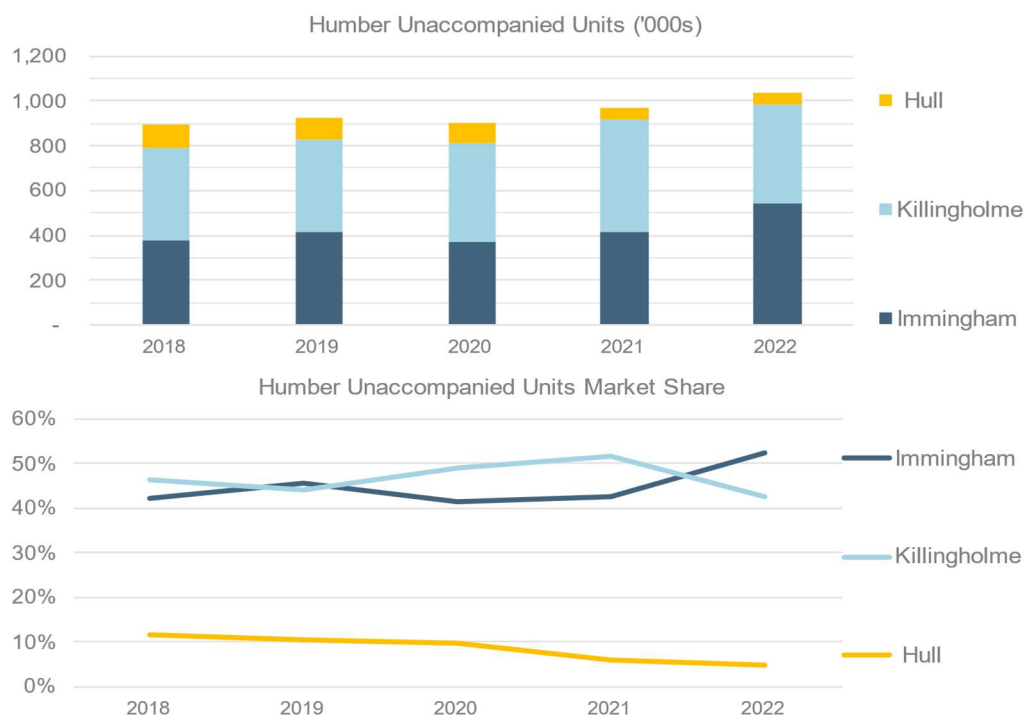


Figure 3-12 Unaccompanied Ro-Ro and MAFI traffic Humber estuary in units (source: DfT, Volterra/CLdN, Rebel)

4. The Humber Port Competitive Environment Update

4.1. This section provides updates for parts of sections 4 and 6 of the original Market Study. However, for ease of reference a comprehensive explanation – which includes large parts of the same information taken unchanged from the original Market Study – has been provided.

Port of Immingham

4.2. The Port of Immingham is owned and operated by ABP. It is located in an area not heavily constrained by residential or commercial areas. It is a key international gateway for the UK and handles a variety of different cargoes from both its in-dock and in-river facilities. The existing Ro-Ro facilities at the Port of Immingham serve two major Ro-Ro freight shipping lines – DFDS and Stena Line.

4.3. **DFDS:** The area occupied by DFDS within the Port is shown indicatively on Figure 4.1. Some of the characteristics of the terminals used by DFDS are summarised in Table 4.1. DFDS’ activities are largely split between activities occurring at the Riverside Terminal and the Dockside (Nordic) Terminal. The facilities are used to handle a variety of unaccompanied and accompanied Ro-Ro cargo along with trade cars.

- 4.4. The Riverside Terminal is located within the Immingham Outer Harbour on the western side of the Port estate. The terminal benefits from lock free marine access and has three Ro-Ro berths. The two main berths are located either side of a single finger pier and the third berth uses a fender arrangement which allows for a vessel to be berthed alongside a vessel already moored on the most southerly of the two main berths. These berths are collectively supported by an area of trailer storage and warehousing immediately adjacent to the berths. The Riverside Terminal accommodates Ro-Ro vessels that are approximately 237m length overall (LOA), 33m beam and with a draught of 7m.
- 4.5. The Dockside Terminal is located within the enclosed dock area at the Port. The normal maximum size of vessels that can be accommodated within the inner dock is 198m LOA, 26.2m beam, 10.36m draught and 38,000 dead weight tonnes (DWT). The facility benefits from three berths and is supported by an area of trailer storage and Ro-Ro container storage in close proximity to the berths. A variety of warehousing and trade car storage is provided in locations further away from the berths. The Dockside Terminal has direct rail access, although this is considered a limited competitive advantage as virtually all Ro-Ro traffic is transported by road.
- 4.6. **Stena:** The area occupied by Stena Line is shown indicatively on Figure 4.2. The Stena Line operations within the Port of Immingham currently consist, albeit on a temporary basis, of a single berth terminal within the enclosed inner dock. As with the DFDS Dockside Terminal the size of Ro-Ro vessel that can be accommodated at this terminal is restricted by the inner dock limitations. The Stena berth is supported by trailer storage areas located at three different locations that stretch away from the berth. This facility currently serves Stena Line's Immingham / Rotterdam daily liner service which recently moved to the Port from the neighbouring Killingholme facility.
- 4.7. **Immingham Container Terminal:** In the context of the inner dock, reference should also be made to the Immingham Container Terminal which is located adjacent to the Dockside Terminal within the inner dock (see Figure 4.1) and which can accommodate smaller shortsea container vessels. The terminal has recorded increased container volumes over the past decade resulting in high utilisation rates. There is, therefore, limited potential for significant expansion at this location with the current arrangement of surrounding port uses.

Table 4-1 Port of Immingham terminal characteristics

	DFDS Dockside Terminal	DFDS Riverside Terminal	Stena Terminal	Immingham Container Terminal
Type	Ro-Ro/Lo-Lo	Ro-Ro	Ro-Ro	Lo-Lo
Estimated Ro-Ro / Container storage area	15.8 ha	17.9 ha	5.8 ha	19.1 ha
No of Ro-Ro berths	3	3	1	0
Maximum Size of Ro-Ro vessel able to be accommodated	198m LOA 26.2m beam 10.36m draught	237m LOA 33m beam 7m draught	198m LOA 26.2m beam 10.36m draught	198m LOA 26.2m beam 10.36m draught



Figure 4-1 Port of Immingham – Indicative DFDS areas and container terminal (source ABP)



Figure 4-2 Port of Immingham – Indicative Stena areas (source ABP)

Killingholme

- 4.8. The port facility at Killingholme is owned and operated by CLdN Ports Killingholme (CLdN). It is a terminal on the Humber Estuary that predominantly handles unaccompanied and accompanied Ro-Ro freight, including containers, as well as trade car imports.
- 4.9. The facility has six in river berths, one of which (berth 6) is currently unused. The five berths range from 208 to 262m in length. The facility currently accommodates the largest Ro-Ro vessels operating out of the Humber estuary – the Celine and Delphine – but CLdN indicate that these are restricted to just berth 3 (the outer most northern berth).
- 4.10. The main Ro-Ro shipping line services handled at the facility are those of the terminal operator’s shipping line CLdN (Cobelfret). In addition to the CLdN (Cobelfret) services, Stena Line currently operates one daily Ro-Ro liner service to and from the Hook of Holland.
- 4.11. The Killingholme facility is indicatively shown in Figure 4.3. From information provided by CLdN to the IERRT examination the facility at Killingholme covers in the region of 107 hectares. Of that area CLdN indicate **[REP4-021]** that:
- (i) 14.09 ha is currently normally in use for Ro-Ro trailer storage;
 - (ii) 11.35 ha is currently normally used for container storage; and
 - (iii) 30 ha is currently normally used for trade car / vehicle storage.

- 4.12. The areas utilised for Ro-Ro trailer and container storage are all located in relatively close proximity to the berths. In addition, it is understood that some flexibility exists in the terminal layout such that some parts of the terminal can be used for either Ro-Ro trailer storage, container storage or trade car storage. Of the 30ha currently used for trade car / vehicle storage, CLdN have stated that 3.74 ha has the ability to be used for Ro-Ro trailer or container storage.
- 4.13. From publicly available land ownership information the Killingholme facility is bordered by the site of the proposed Able Logistics and Business Park development to the north and the west and the Able Marine Energy Park to the south.

Table 4-2 Killingholme terminal characteristics

General	
Type	Ro-Ro
Estimated Ro-Ro / Container storage area	29.21 ha
No of Ro-Ro berths	6
Maximum Size of Ro-Ro vessel able to be accommodated	Up to 262 m LOA Up to 38 m beam Up to ~8.4 m draught



Figure 4-3 Killingholme – Indicative current Ro-Ro / container storage areas (source CLdN)

Hull

- 4.14. The Port of Hull is owned and operated by ABP and is a facility which handles a variety of different cargo from its in-dock and in-river facilities. An indicative overview of the port is shown in Figure 4.4 and in Table 4-3. The main Ro-Ro activity occurring at the Port of Hull is in respect of a daily service operated by P&O to / from Rotterdam. In addition to freight this service also handles passengers and passenger vehicles. The P&O vessels operating on this service are, therefore, passenger / Ro-Ro vessels (Ro-Pax). The terminal from which this service operates benefits from a single in-river berth which can accommodate a vessel up to 214m in length, 29m beam and 6.5m draught. This berth is, in effect, fully utilised by the P&O service.
- 4.15. The available storage area for the terminal is more limited than the Ro-Ro terminals located on the south bank of the Humber, but the larger share of accompanied and passenger use of this service helps in reducing the storage requirements needed by this service. The port itself is located on the eastern periphery of Hull which has the potential to generate issues over traffic congestion in that routes to the major hinterland lie to the west of Hull.
- 4.16. In addition to the P&O services the Port of Hull also supports a weekly service to Helsinki operated by Finnlines. This service utilises a berth within the locked Queen Elizabeth Dock which accommodates a variety of different cargo types including unaccompanied Ro-Ro trailers, container and break bulk cargoes. The locked entrance into the Queen Elizabeth Dock and King George Dock restricts the maximum size of vessels that can enter to those which are 199m LOA, 25.5m beam, 10.4m draught and 34,000 DWT.
- 4.17. Thor Shipping operates from two in-dock areas in the port of Hull with a Lo-Lo/multi-purpose service. The areas are multi-purpose areas.
- 4.18. The Queen Elizabeth Dock is also the location of the Hull Container Terminal. This facility serves as a major shortsea Lo-Lo terminal for the North of England and currently handles in the order of 264,000 TEU per annum.
- 4.19. The Ro-Ro facilities within the Port of Hull are surrounded by other port uses and activities, which makes potential expansion difficult.

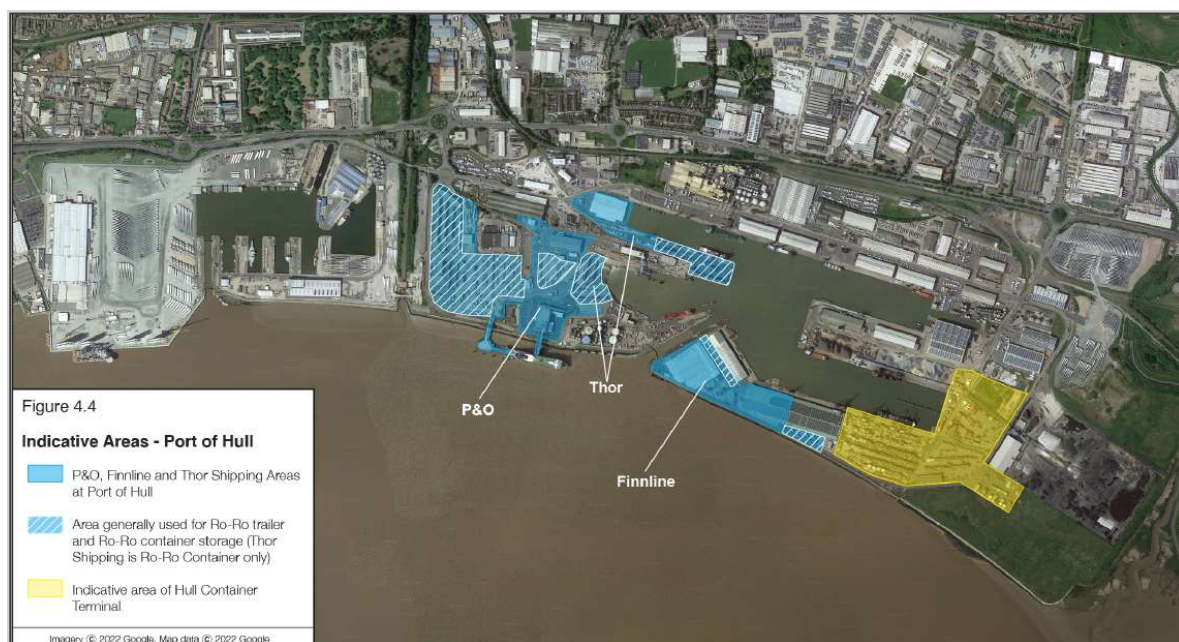


Figure 4-4 Port of Hull

Table 4-3 Port of Hull terminal characteristics

	P&O Terminal	Finn Terminal	Hull Container Terminal	Thor Shipping
Type	Ro-Ro	Ro-Ro	Lo-Lo	Ro-Ro
Estimated Ro-Ro / Container storage area	8.6 ha	0.7 ha	13 ha	3.3 ha
No of Ro-Ro berths	1	1	1	1
Maximum Size of Ro-Ro vessel able to be accommodated	214m LOA 29m beam 6.5m draught	199 m LOA 25.5 m beam 10.4 m draught	199 m LOA 25.5 m beam 10.4 m draught	199 m LOA 25.5 m beam 10.4 m draught

South Humber Ro-Ro Berthing Windows

4.20. The availability of a free berth served by appropriate and adequate landside infrastructure is of crucial importance for Ro-Ro operators. It is difficult to combine multiple services at a single berth. In Figure 4.5 the arrival and departure times of the Ro-Ro services in Killingholme and Immingham are mapped over a week according to published schedules by the operators and times-at-berth, along with sailing schedule information provided to the examination and AIS data. Effectively, two berths are needed at Killingholme for the CLdN services, four berths for the DFDS services in Immingham and two more berths for the Stena services just to ensure all current services can maintain their intended sailing schedules.

4.21. At present, one of the Stena services calls at Immingham whilst the other Stena service calls at Killingholme. The division of Stena operations between two different and separate locations some distance apart is, operationally and commercially, far from ideal. In simple terms, the separation increases management time, makes operational co-ordination more complex and reduces

the operator’s ability to optimise the services and will inevitably increase its cost base.

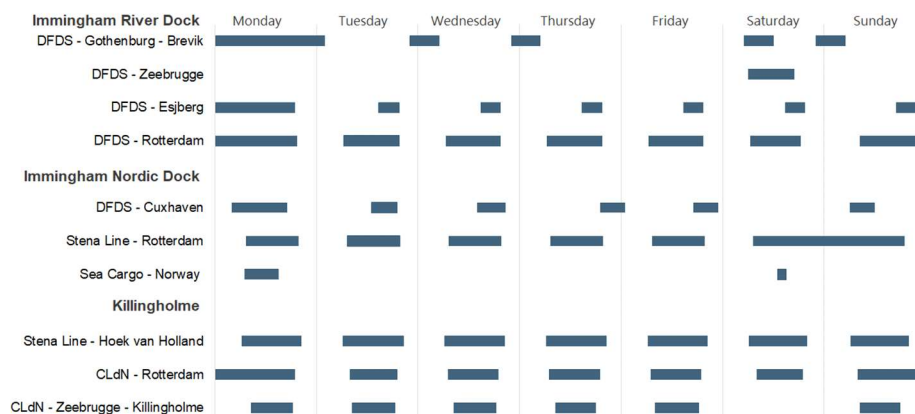


Figure 4-5 Overview of berthing schedule of Ro-Ro services in Killingholme and Immingham as published by the operators (2022) (the CLdN services to Goteborg, Leizoes, Esbjerg and Santander as advertised on CLdN’s website, are first connecting with a service to Zeebrugge subsequently connecting from Zeebrugge to these markets)

5. Capacity Considerations

5.1. This section gives an update to those parts of the original Market Study which considered capacity matters.

Overview

5.2. The overall capacity of a Ro-Ro terminal is determined by a number of different factors, including matters such as storage yard capacity, berth capacity, suitability and availability, the availability and capacity of necessary infrastructure and the operational mechanisms available and employed. Evidence presented to the IERRT examination to date by the Applicant and Interested Parties has demonstrated the diverse various factors involved and the subsequent difficulty in predicting precise capacity parameters and, viewed holistically, can be a somewhat arbitrary exercise.

Berth Capacity Overview

5.3. Nevertheless, based on the information provided in the original Market Study [APP-079] as updated by this update report, the position in terms of the berth capacity available at the various Ro-Ro facilities on the Humber is summarised in the following paragraphs.

5.4. The availability of appropriate berthing windows at appropriate berths (i.e. a berth accessible for the vessels the operator intends to deploy) is paramount for a high-quality scheduled Ro-Ro service. Shippers have preferences for certain time slots with operators enjoying a competitive advantage if they can

control daytime slots in preference to evening or night berthing windows. It is, therefore, a meaningless exercise to attempt to express berthing capacity simplistically as a matter of berthing hours divided by total number of hours. To do so would be to ignore reality and the competitive nature of Ro-Ro activities.

- 5.5. **Immingham Outer Harbour DFDS:** As noted above, the Immingham Outer Harbour has three in-river Ro-Ro berths which are used by DFDS. The two main berths are located either side of a single finger pier and the third berth uses a fender arrangement which allows for a vessel to be berthed alongside a vessel already moored on the most southerly of the two main berths.
- 5.6. From schedule information provided by DFDS two of these berths are in regular daily use, with occasions during a weekly period when all three berths are utilised.
- 5.7. As such, it is clear that the Ro-Ro berths in the outer harbour are extensively used with limited ability for significant further use.
- 5.8. **Immingham In Dock DFDS:** The Immingham In-Dock DFDS facility has three Ro-Ro berths. These are located at berths 11 and 12, with the third berth located between those two berths. These berths – due to their location in an enclosed dock only accessible via a lock – are limited in terms of the vessels able to be accommodated both now and in the future. From schedule information provided by DFDS, two of these berths are in regular use, albeit only one is used on an effectively daily basis.
- 5.9. **Immingham In Dock Stena:** The Immingham In-Dock Stena facility has a single Ro-Ro berth which, as with the DFDS berths, is similarly constrained in terms of the vessels able to be accommodated. This berth is occupied on a daily basis by vessels operating on the Immingham / Rotterdam service.
- 5.10. **Killingholme:** The Killingholme facility has six in river berths, although one is currently noted by CLdN as being unused. The remaining five berths range from 208 to 262m in length. Two berths are used to accommodate the current CLdN services and a further berth is used to accommodate the current Stena service. Although the berths are in river and unconstrained by a lock, the largest Ro-Ro vessels can currently only use one berth (Berth 3) (albeit that contrary to earlier submissions, CLdN - in Appendix 2 of **REP7-040** – suggest that the relevant berth is berth 1 and not berth 3).
- 5.11. In addition, only recently within Appendix 2 of **REP7-040** (provided at Deadline 7), CLdN now identify that there are restrictions on the size of vessel that can be manoeuvred onto the adjacent berths 2 and 5 at Killingholme when either berth is already in use. This restriction does not appear to have been referred to in CLdN's earlier Killingholme consolidated note **[REP4-021]**.

- 5.12. **Port of Hull:** The main Ro-Ro facility at the Port of Hull is a facility from which a daily service runs to and from Rotterdam – operated by P&O. This facility benefits from one in-river berth which is, in effect, fully utilised by the P&O service. Other, less frequent services which handle some degree of Ro-Ro cargo operate from within the locked, and therefore constrained, Queen Elizabeth Dock.
- 5.13. **Conclusion:** From the brief analysis outlined above, although there are currently some limited spare Ro-Ro berths available across the Humber, they do not, even when considered collectively, provide sufficient capacity to meet forecast demand, let alone the commercial requirements of existing operators like Stena Line. In any event, those spare berths are not currently able to accommodate the full range of Ro-Ro vessels currently operating or considered likely to operate in the future. The spare berths are currently limited in the size of vessels they can service. Furthermore, as discussed further in subsequent sections of this report, it cannot be assumed that all of the berths currently used for Ro-Ro activity will remain in such use in the future.

Storage Yard Capacity Overview

- 5.14. As made clear above and in the original Market Study, the storage yard capacity is only one element in the overall consideration of the essential constituent parts of an efficient operational Ro-Ro facility and cannot be taken on its own to be the overall capacity of the terminal in question. The capacity of a storage yard is influenced by various matters, as summarised below.
- 5.15. **Dwell times:** When attempting to undertake an analysis / assessment of storage yard capacity, use of a dwell time must be employed with considerable caution as dwell time cannot ever be a fixed parameter. Dwell times are themselves influenced by a number of factors, for example, the type of traffic and the commodities transported. A more detailed list of influencing factors is provided with the dwell time statement of Common Ground [REP6-020].
- 5.16. Dwell times will also, therefore, vary throughout the year – for example, peak season usually occurs during the run up to the Christmas period to reflect a high volume period. Indeed, dwell times can also vary throughout a given week and will inevitably fluctuate over time to reflect fluctuations in operational and market conditions over the years. They will also vary to take account of one off events and issues.
- 5.17. The use of low operational dwell times, achieved over short periods of time but not taking account of yearly fluctuations, longer-term influences or shorter fluctuations and one-off events, will necessarily result in what will be a high overall storage yard capacity estimate. Basing decisions on such an analysis fails to reflect those variables and will not provide the operator with an efficient, effective or resilient estimate of storage yard capacity sufficient to meet varying and diverse trends and conditions. It is, therefore, imprudent and wrong for any

Ro-Ro operator, when considering yard storage capacity needs, to base its potential requirements on such an estimate.

- 5.18. In addition, given the time required to deliver additional capacity, the ports industry, sensibly, and as recognised by the National Policy Statement for Ports (NPSfP) does not wait until full operational capacity is reached – with consequent efficiency and resilience issues - before taking steps to provide additional capacity. The industry has to anticipate and look ahead – as does any prudent infrastructure provider in similar industry sectors such as rail, aviation and utilities.
- 5.19. **Stack Height and Stack Efficiency:** Stack height and stack efficiency will not necessarily be a key element in all Ro-Ro operations. Such factors depend on a variety of factors such as the type of equipment used to handle the containers, the design of the container stacks and the height of the container stacks. A stack efficiency of 80% is considered to be at the top end for Ro-Ro terminals handling containers with reach stackers – which appears to be the equipment used at all Ro-Ro terminals across the Humber.
- 5.20. **Peak Factor:** A peak factor – the use of which appears to be common ground - takes account of the fact that the amount of Ro-Ro cargo handled by a facility does not stay constant throughout the year. The peak factor seeks to ensure that the storage yard capacity identified covers the busiest period of the year.
- 5.21. **Trailer and Ground Slots:** The number of trailer slots and container ground slots obviously influence the storage yard capacity. The capacity calculated per container ground slot is higher than that for a trailer parking slot as containers can be stacked on top of each other. The number of container ground slots and the variables associated with the capacity they can provide, therefore, need to be given careful consideration.
- 5.22. **Conclusion:** From the brief analysis outlined above, it will be clear that the variety of factors involved mean that it is possible to come up with significantly different estimates of storage yard capacity depending upon what inputs are assumed. However, even using the most generous assumptions to generate the highest assumed capacities, the amount of storage yard capacity across the Humber is not realistically considered sufficient to meet forecast demand, let alone the commercial requirements of existing operators like Stena Line. Moreover, as discussed further in subsequent sections of this report, it cannot be assumed that all of the storage yard areas currently used for Ro-Ro activity will remain in such use in the future.

Overall Capacity Considerations

- 5.23. During the Examination, reference has been made to the importance of using real world data and real world information. The Applicant has, therefore, sought

to analyse likely overall existing Ro-Ro Terminal capacity for unaccompanied units – as opposed to simply a storage yard capacity estimate - using information provided to the examination and having regard to the considerations and analysis included in the preceding sections of this update.

- 5.24. That analysis is summarised in Table 5.1, but the key inputs for that analysis can be summarised as follows.
- 5.25. *Killingholme* – For robustness, the existing capacity for Killingholme assumed in the analysis is 675,764 unaccompanied units. This is described by CLdN in paragraph 17 of Appendix 2 of **[REP6-036]** as ‘*the most accurate estimate of existing capacity at Killingholme*’. It should be emphasised that this claimed capacity by CLdN has been taken at face value for the purposes of this analysis. That is even though un-answered questions remain– see, for example, the Applicant’s submissions in **[REP5-032]** – as to whether this claimed capacity reflects the reality of what is occurring at the Killingholme facility. In fact the Applicant anticipates that this capacity is likely to be lower. The Applicant has queried CLdN’s capacity information within **[REP5-032]**, primarily because the number of container slots claimed by CLdN appears to be significantly greater than the level that reflects the actual traffic mix occurring at the facility.
- 5.26. Notwithstanding these concerns, for the purposes of this analysis CLdN’s claimed capacity has been used and it has been rounded up to 680,000 unaccompanied units for simplicity.
- 5.27. *Stena In Dock Facility Immingham* - This facility is a single berth temporary facility that, in 2022, handled in the order of 94,000 unaccompanied units. Due to the facility being served by one in dock berth which is restricted in terms of the size of Ro-Ro vessels it can accommodate and which is effectively fully utilised by the existing Rotterdam Europort service, and the limited landside storage area available, neither Stena Line – nor ABP – consider that this facility could handle a significantly greater amount of unaccompanied units. For the purpose of the analysis the 94,000 units has been rounded up to 100,000 units for simplicity.
- 5.28. It is understood that, in terms of future capacity, there is no guarantee that, once Stena Line vacate this facility, that the area – whilst being put to port use - will remain in Ro-Ro use.
- 5.29. *DFDS Immingham* - From data submitted to both the DfT and separately to the examination, it is estimated that in 2022 DFDS handled some 460,033 unaccompanied Ro-Ro units at its Immingham facilities. Through its submissions to the examination, DFDS have identified that they are operating at 90 to 95% of their capacity. On this basis an estimate of the likely full capacity of the DFDS facilities has been made – rounded to the nearest 10,000 units, again for simplicity.

5.30. *Hull* – The Port of Hull handles a limited number of unaccompanied units. The main Ro-Ro specific facility is a predominantly accompanied freight and passenger facility that is operated by P&O. From figures reported to the DfT and reflecting information presented to the examination, in 2022 the Port of Hull handled a total of around 52,000 unaccompanied units (both Ro-Ro and Lo-Lo). Due to the make-up of the main facility at Hull, as already explained, it is highly unlikely that a significantly greater amount of unaccompanied units will be handled. For the purpose of the analysis the 52,000 unaccompanied units has been rounded to the nearest 10,000 units.

Table 5.1 Estimated Maximum Ro-Ro Capacity on the Humber by terminal (Examination information)

Terminal	Current throughput (unaccompanied units)	Indicated Capacity	Indicated level of utilisation	Indication of current capacity (units)
Immingham - DFDS	460,033 (2022)	-	90 to 95% utilised	510,000
Immingham - Stena	94,000 (2022)	-	Around 95% utilised	100,000
Killingholme	442,280 (2022)	675,764 (2023)		680,000
Hull	52,000 (2022)	-		60,000
Total	1,048,313 (2022)			1,350,000 (or 1,250,000 without the Stena In Dock Capacity at Immingham)

5.31. This updated analysis indicates that the existing maximum Ro-Ro capacity on the Humber is likely to be no more than 1,350,000 unaccompanied units (although for the various reasons already indicated this figure is actually likely to be too high).

5.32. There is no certainty that the level of capacity estimated as currently being available will remain available in the future. The issues associated with the current Stena in dock facility are explained above. Furthermore, there may well be issues with other in dock capacity remaining in Ro-Ro use in the future, having regard to the trends – for example, in vessel sizes - which the sector is experiencing.

5.33. The original Market Study identified a likely maximum storage yard capacity of 1,270,000 units (identifying a range between 560,000 to 1,270,000 units) for unaccompanied Ro-Ro units across the Humber as a whole (see, for example, Appendix 7 of **APP-079**). The range was produced by inputting different dwell times into the analysis undertaken, with the 1,270,000 unit figure based upon the lowest dwell time figure considered.

- 5.34. The updated maximum capacity estimate of 1,350,000 units (taking account of 2022 throughput figures) will have clearly been influenced by the existing operational dwell times at the different terminals similar to the dwell time that resulted in the 1,270,000 unit figure. The updated maximum capacity estimate is not, therefore, significantly different from the upper end storage yard capacity figure given in the original Market Study.
- 5.35. In addition, the 1,350,000 units maximum capacity figure simply assumes what is claimed by CLdN to be the capacity at Killingholme despite the doubts as to the realism of that figure. If the estimated level of activity at Killingholme were calculated using the information submitted to the DfT and submissions made to the examination about those figures instead of the claimed capacity then the overall capacity estimate would be below the previous upper end of the storage yard capacity range estimated in the original Market Study.

6. Humber Shortsea Projections Update

- 6.1. This section updates the forecasts for Ro-Ro traffic on the Humber. The section starts with summarising the new baseline projections for the macro-economic outlook for the UK. Subsequently, it compares the various national and regional forecasts from different sources presented to the examination. This illustrates the fact that most forecasts are consistent in terms of growth rates. Lastly, updated projections are provided for the shortsea traffic on the Humber.

Macro- Economic Forecast Revisions

- 6.2. The macro-economic context has changed since the Market Study was prepared and even during the course of the IERRT examination. This section, therefore, uses the latest macro-economic projections available. In addition, as suggested by an Interested Party to the examination (CLdN) the basic GDP scenario from the July 2022 Forecast of Oxford Economics has been changed to the June 2023 OBR Forecast. This results in a higher long term GDP rate adopted in the forecasts.
- 6.3. Since the Market Study was written, macro-economic forecasts from both Oxford Economic and the OBR have been adjusted downwards due to changing conditions. In particular, the outlook for the period up until 2024 has been revised. However, the medium to long term growth rate has been left relatively unaffected. This means that whilst trade growth may be sluggish currently, the old growth trajectory is expected to be picked up again in the medium to long term. It should be noted that last year's Oxford Economics forecast was more conservative than the OBR forecasts published in 2023, which means that the updated forecasts are revised upwards as a result of shifting to the use of the Government's OBR GDP forecasts.

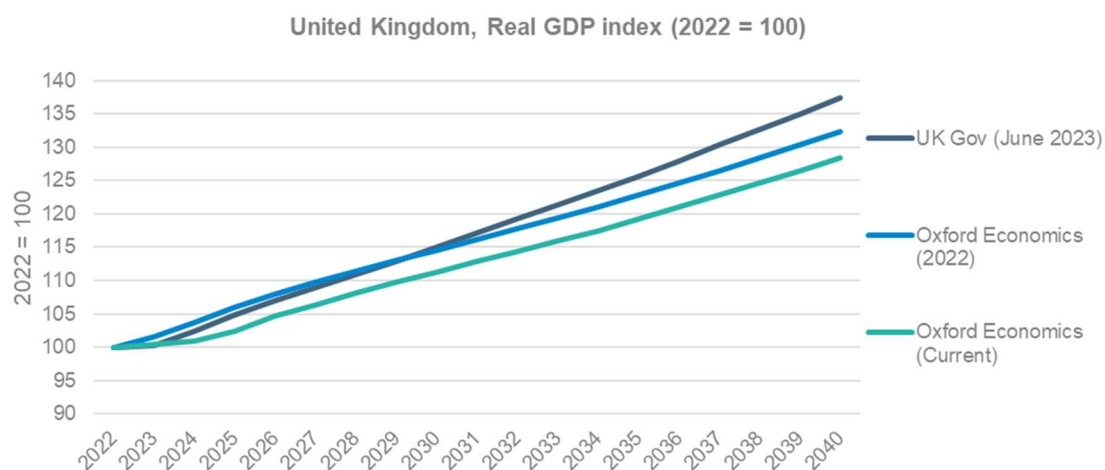


Figure 6-1 Comparison of GDP forecasts of Oxford Economics and OBR by publication date (Source: Oxford Economics, OBR)

- 6.4. Although GDP provides a very useful tool when assessing and forecasting trade (and, therefore, port demand) GDP estimates are notoriously subject to revision. This will always introduce a degree of uncertainty into any (short term) reliance on GDP as a primary driver.
- 6.5. An example of this was the recent (early September 2023) announcement by the Office of National Statistics that it had significantly understated the growth of the UK economy in 2021. The new figures confirm that the size of the UK economy is 1.2 per cent larger than had previously been thought to be the case.
- 6.6. In the current context it should be noted that the scale of volatility in such major projection drivers means that there will always be a relatively wide range of possible outcomes. Such divergences more than offset differences of opinion on short term forecasting. It is always the case that recessions and high growth periods fluctuate around the projections of average demand. There is, however, a clear upward demand trend and forecasts will always be around this range.

Comparison of national forecasts

- 6.7. Overall, there seems to be little (or no) disagreement on the outlook within the various projections presented to the examination.
- 6.8. The actual growth rates of the various forecasts over different time horizons have been summarised in Table 6.1 below. It is considered that the Market Study forecasts, as updated, are accurate and in no way to be considered too bullish.

Table 6-1 Shortsea traffic projections comparison

	Short Term (2023-2030)	Medium term (2030-2035)	Long term (2035-2050)
MDS Transmodal Humber	>2%*		
UK Government 2019	2.7%	2.9%	2.5%
Rebel Market Study – UK RoRo	2.3%	1.9%	1.4%
Rebel Market Study - Humber	2.8%	1.9%	1.3%
Rebel Revised Forecast - Humber	3.0%	2.0%	1.4%
Volterra – No UK or Humber forecast available / in line with Rebel **			
Volterra - OBR adjustment	1.8%		
Volterra - CAGR adjustment	1.5%		

Humber shortsea projections

Humber Forecast

- 6.9. In Figures 6.2 and 6.3 the revised Humber projections are summarised adjusting for the revised macro-economic forecast, the revised 2022 traffic data and the data on Killingholme provided to the examination. The deep blue line represents the revised projections of units in the Humber. The revision of the projections results in:
- A higher starting point for traffic in the Humber and hence throughout the forecast.
 - A marginally higher growth rate but roughly in line with the previous Market Study forecast.
- 6.10. For comparison reasons the 2019 Government Port Freight forecasts and the MDS Transmodal forecast (produced for the National Infrastructure Commission) are included in the charts. It can be clearly seen that the forecast projections remain below those of the Government and of MDS Transmodal.

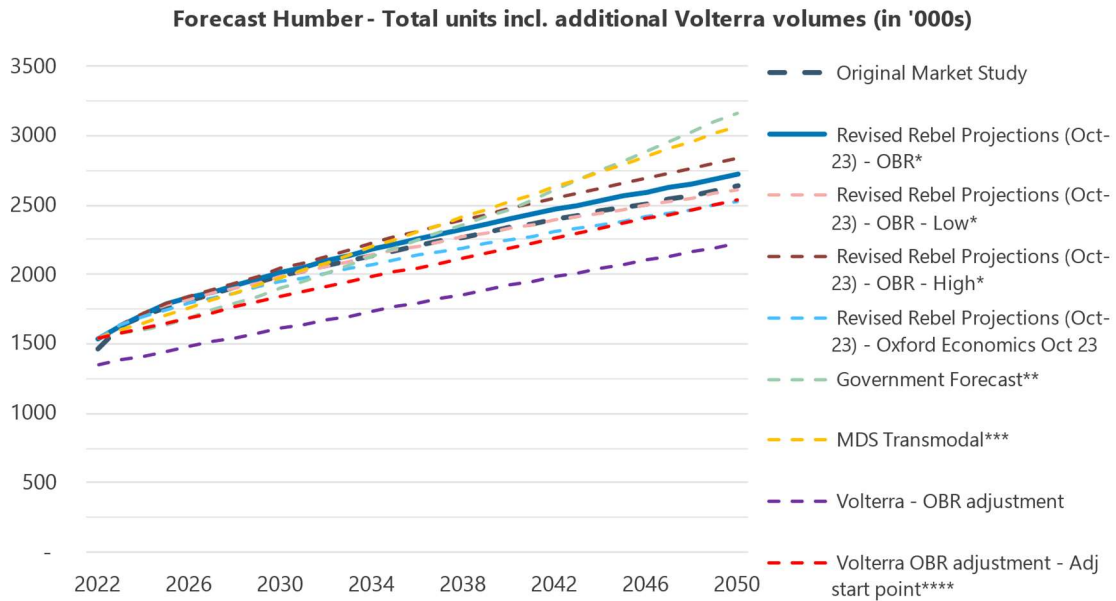
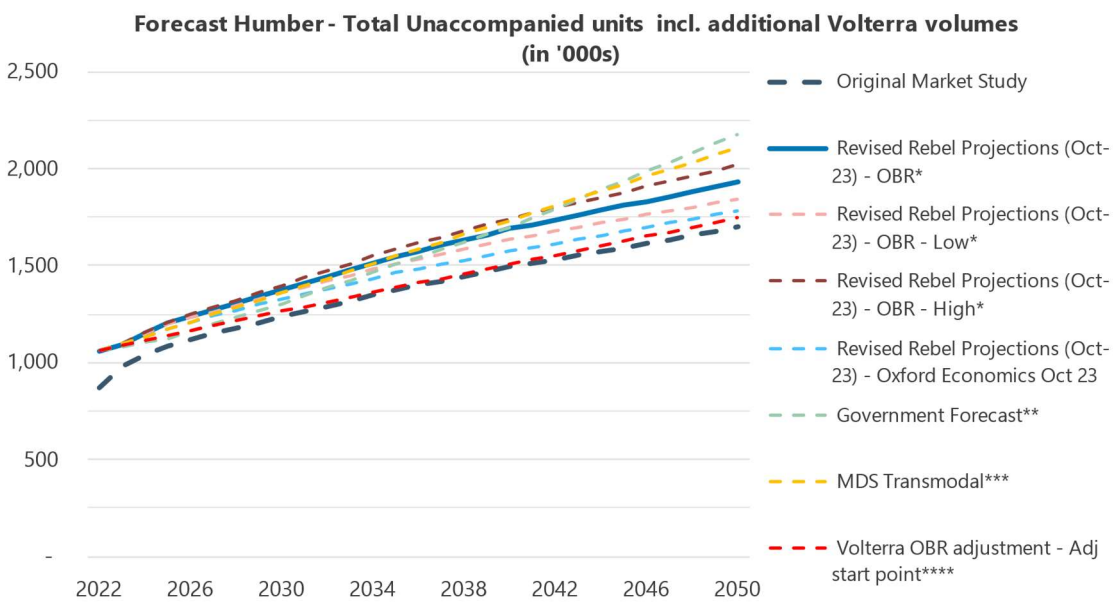


Figure 6.2 Forecast total shortsea units (Ro-Ro & Lo-Lo) Humber



* Revised GDP: Based on OBR June 2023 GDP forecast¹

** Government forecast: Based on the overall UK Ro-Ro growth rate applied on the 2022 starting point².

*** MDS Transmodal: based on the growth rate of Humber traffic applied on the 2022 starting point³

**** Volterra – Adjusted Start Point: Volterra growth rate applied to the new starting point.

Figure 6.3 Forecast unaccompanied Ro-Ro and MAFI units Humber

¹ <https://obr.uk/efo/economic-and-fiscal-outlook-march-2023/>, accessed 8 September 2023

² Department for Transport, 2019, UK Port Freight Traffic

³ MDS Transmodal on behalf of the National Infrastructure Commission, 2019. Future of Freight Demand

Humber market share of East of UK in shortsea markets

6.11. Figures 6.4 and 6.5 detail the market share of the Humber region in the context of the overall East of the UK shortsea market. For unaccompanied trailers this market share has been high and relatively stable at between 60% and 70% of the total UK East Coast volumes, and this is expected to continue in the period to 2050. For accompanied trailers the volatility in market share has been somewhat greater but is still relatively stable. This market share is expected to be stable with a marginal decline to around 40% of the East of the UK shortsea market in the long term.

Market share Humber Region Import- East of UK

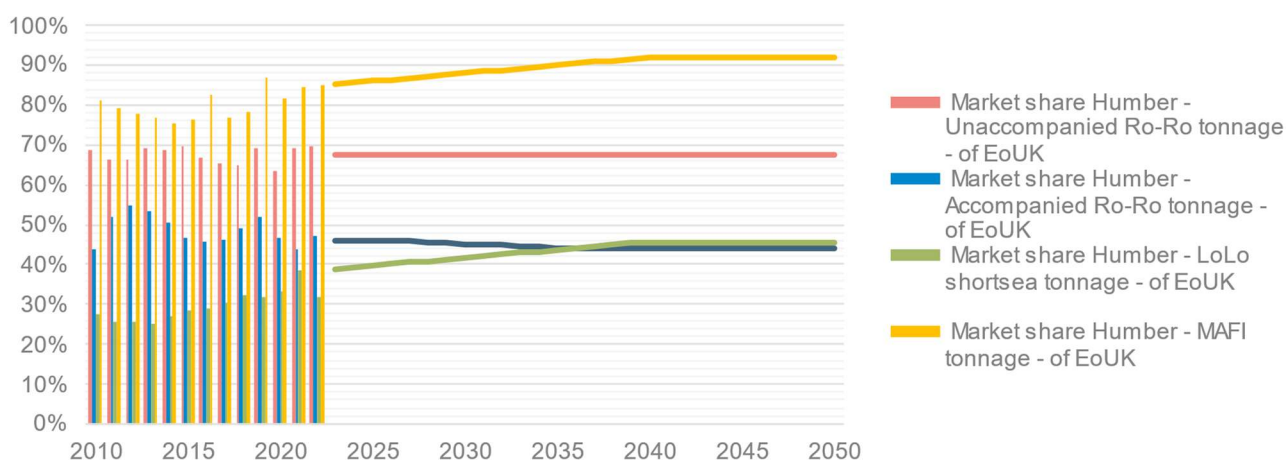


Figure 6-4 Humber region market share import (in % market share) – update of original Market Study Figure 8.11

Market share Humber Region Export East of UK

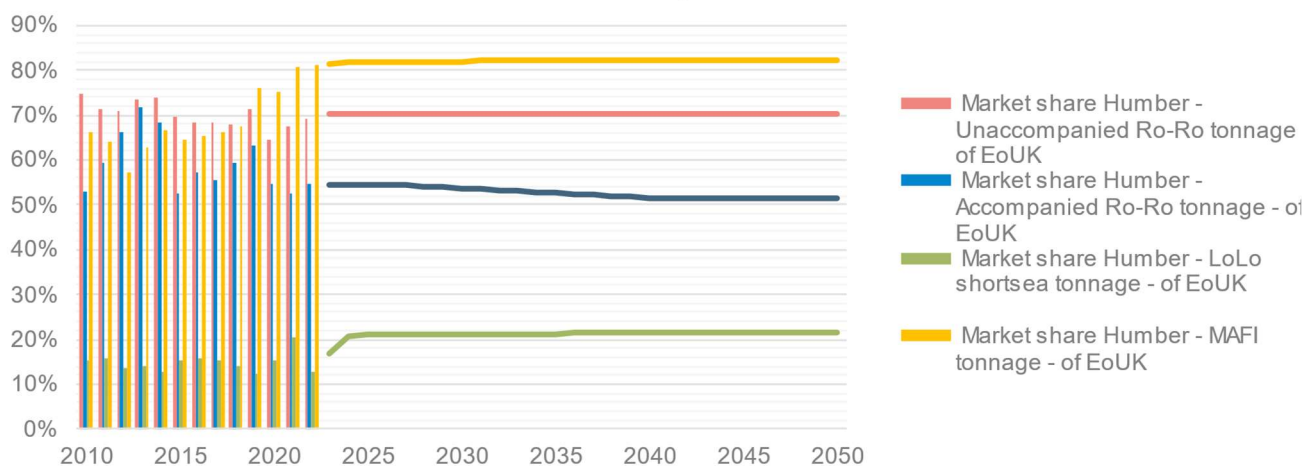


Figure 6-5 Humber region market share export (in % market share) – update of original Market Study Figure 8.12

Humber region shortsea forecast in units

6.12. The shortsea forecast for the Humber in terms of units is presented in figures 6.6 and 6.7. The following key conclusions are drawn based on these projections:

- a. **Unaccompanied Ro-Ro traffic** - is expected to see continued and strong growth as a consequence of the set of drivers previously detailed. The facilities on the Humber are ideal for serving the captive hinterland of the central and north of the UK. A clear growth is therefore expected for the unaccompanied Ro-Ro and MAFI segment in the Humber region in respect of the number of units with a CAGR of 3.6% in 2023-2028 and a CAGR of 2.5% in 2028-2032 (in comparison to 2.1% in 2012-2022). The CAGR between 2032 and 2050 is expected to be 1.6%. Growth in the short term in tonnage is lower having a CAGR of 2.7% in the period 2023-2028, 1.9% in 2028-2032 and 1.3% in 2032-2050. In the period between 2020 and 2032 the CAGR is expected to be 4.0% (in units), which is in line with the historic CAGR between 2018 and 2022 of 4.2%.
- b. **Accompanied Ro-Ro traffic** - in the region will remain the smallest of the shortsea traffic flows. Growth (CAGR (in units) for this trade is predicted to be 1.8% in the period 2023-2028, 1.6% in 2028-2032 and 1.2% for 2032-2050. This in comparison to an overall CAGR between 2012 and 2022 of -0.5%, which is largely as a consequence of Covid related travel restrictions and HGV driver shortages.
- c. **Shortsea Lo-Lo traffic** - Albeit in smaller volumes, the Humber facilities will also see increased shortsea Lo-Lo traffic. The Humber is well placed for this sector in relation to key centres of production and consumption. Growth in the Lo-Lo segment (in units) is expected to reach a CAGR of 2.9% in the period 2023-2028 and 1.7% in 2028-2032. In the period from 2032 to 2050 the CAGR is 1.1%.

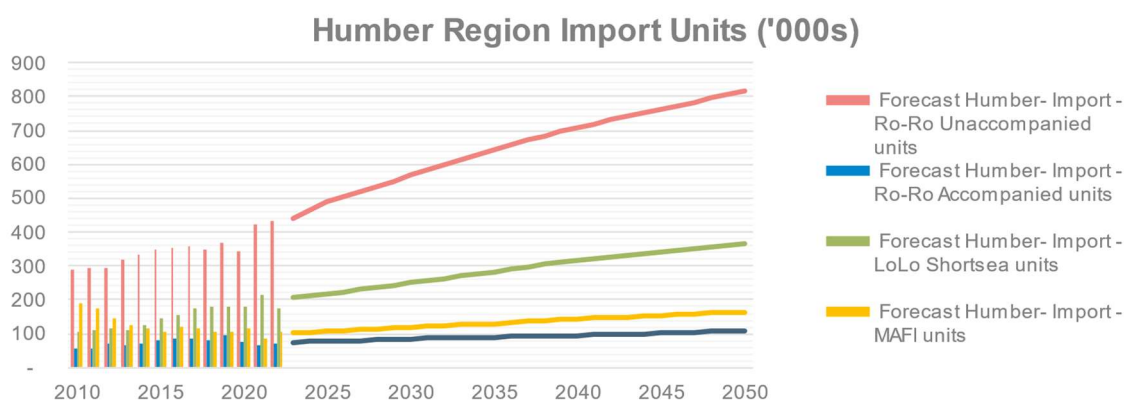


Figure 6-6 Humber Region Import Units - update of original Market Study Figure 8.13

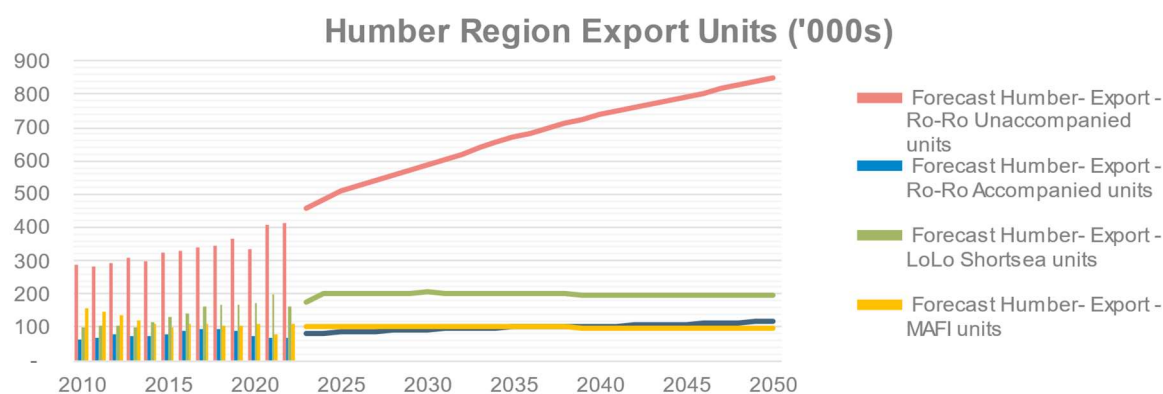


Figure 6-7 Humber Region Import Units - update of original Market Study Figure 8.14

6.13. In terms of unaccompanied Ro-Ro units the analysis indicates that (under the base scenario) in 2050 the demand across the Humber Estuary will be approximately 1.92 million units in comparison to the current circa 1.05 / 1.06 million units level of activity.

Conclusion - Humber demand-supply balance

6.14. Figures 6.8 to 6.10 show an estimate of the demand-supply balance for the Humber region. For the supply side element the existing capacity scenario that reflects information presented to the examination and detailed in section 5 of this update has been used as this seeks to take into account all of the varied elements that influence overall Ro-Ro capacity in comparison to what would be a misleadingly narrow scenario if one were to look only at storage yard capacity. For the demand side element the figures provide updated base, low and high macro-economic forecast scenarios.

6.15. These figures demonstrate that additional Ro-Ro capacity will clearly be required to meet forecast demand. As already underlined, the Ro-Ro sector cannot simply stand back and wait until capacity is reached before then planning to provide additional capacity. Such an approach is certainly not advocated by Government policy – see, for example, paragraphs 3.4.9 and 3.4.13 of the NPSfP.

6.16. In this context, it should also be noted that the analysis only considers the position up to 2050. There are no suggestions that the movement of goods in the form of Ro-Ro cargo will cease or decline in 2050. On the contrary, it is considered likely that there will be further growth in this sector beyond 2050 and due to the locational advantages offered by the Humber Estuary it is considered likely that growth in the Ro-Ro sector on the Humber will continue beyond 2050.

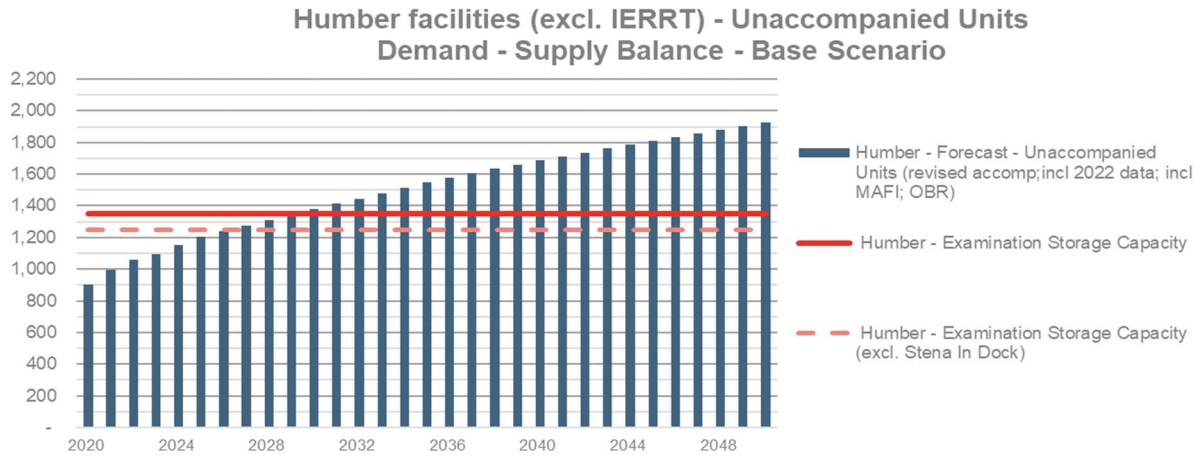


Figure 6.8 – Demand – supply balance unaccompanied Ro-Ro Traffic Humber Region (in '000 units) – Base scenario

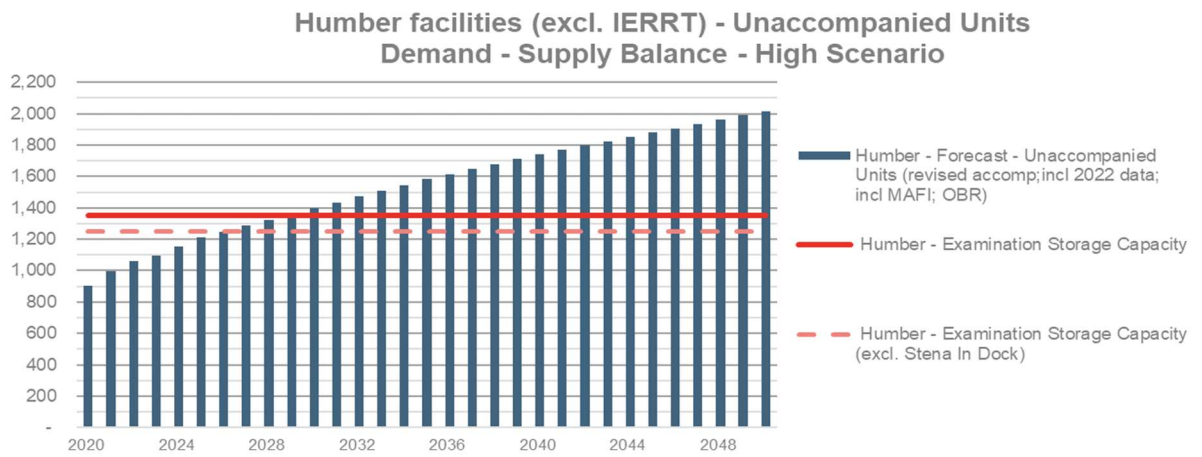


Figure 6.9 – Demand – supply balance unaccompanied Ro-Ro Traffic Humber Region (in '000 units) – High scenario

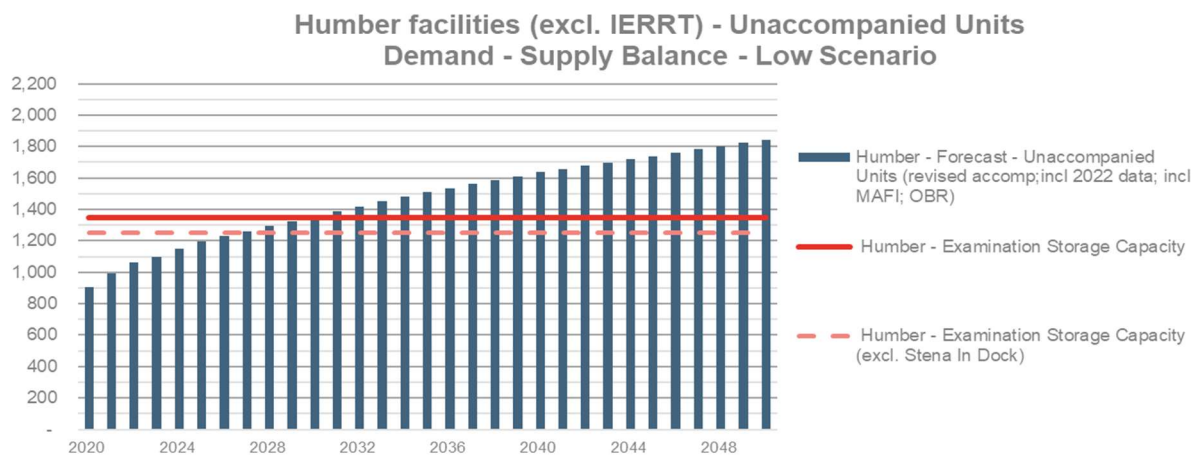


Figure 6.10 – Demand – supply balance unaccompanied Ro-Ro Traffic Humber Region (in '000 units) – Low scenario

Abbreviations and Acronyms

Acronym	Definitions
ABP	Associated British Ports
CAGR	Compound Annual Growth Rate
DCO	Development Consent Order
DfT	Department for Transport
ExA	Examining Authority
GDP	Gross Domestic Product
HGV	Heavy Goods Vehicles
IERRT	Immingham Eastern Ro-Ro Terminal
LOA	Length Overall
Lo-Lo	Lift-on / Lift-off
NPSfP	National Policy Statement for Ports
OBR	Office of Budget Responsibility
Ro-Ro	Roll-on / Roll-off
RoPax	Ro-Ro / Passenger