

Chatham Docks

Economic Impact Assessment

Medway Council

9 May 2022

Redacted Version:

In accordance with Data Access Agreement signed by Medway Council and AECOM (MRP No.5532/2022), elements of this report that breach any commitments made to respondents to protect the confidentiality of the data provided, or enable personal information to be inferred, have been redacted from this report.

Data is redacted in compliance with The 2007 Act which requires that personal data held on behalf of the Statistics Authority must not be disclosed unless directly authorised by the National Statistician.

Quality information

<u>Prepared by</u>	<u>Checked by</u>	<u>Verified by</u>	<u>Approved by</u>
Bart Monhonval Principal Consultant - Economic Development	Bart Monhonval	Jon Howells	Jon Howells

Revision History

<u>Revision</u>	<u>Revision date</u>	<u>Details</u>	<u>Authorized</u>	<u>Name</u>	<u>Position</u>
Draft	14/04/2022		JH	Jon Howells	Associate Director
Final	09/05/2022		JH	Jon Howells	Associate Director

Distribution List

<u># Hard Copies</u>	<u>PDF Required</u>	<u>Association / Company Name</u>

Prepared for:

Medway Council
Gun Wharf,
Dock Rd,
Chatham
ME4 4TR

Prepared by:

AECOM Limited
Aldgate Tower
2 Lemn Street
London E1 8FA
United Kingdom
aecom.com

© 2022 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited (“AECOM”) for sole use of our client (the “Client”) in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Executive Summary	7
2.	Introduction.....	8
3.	Methodology	9
	Baseline analysis	9
	Economic value of businesses.....	9
	Scenarios	10
4.	Baseline Analysis	11
	Overview	11
	Port Dependent Users.....	13
	Non-Port Dependent Users.....	16
5.	Economic Impact Assessment	17
	Baseline.....	17
	Scenario 1 (Business as Usual).....	20
	Scenario 2 (loss of port dependent users).....	21
	Scenario 3 (loss of non-port dependent users).....	22
6.	Additional Considerations.....	26

Figures

Figure 4-1. Distribution of Chatham Docks Businesses by Employment Size Band	11
Figure 4-2. Employment at Chatham Docks by Industry	12
Figure 4-3. Chatham Docks Businesses Map.....	13
Figure 4-4. Ship Calls at Chatham Docks, 2018 – 2021.....	14
Figure 4-5. Cargo Throughput at Chatham Docks, 2018 – 2021.....	14
Figure 5-1. Total Economic Contribution of Chatham Docks to the UK.....	18
Figure 5-2. Total Economic Contribution of Chatham Docks in the local area (Medway).....	19

Tables

Table 1-1. Economic Impact Summary	7
Table 4-1. Non-Port Dependent Users	16
Table 5-1. Baseline – Direct Economic Impact	17
Table 5-2. Economic Impact Comparators	20
Table 5-3. Economic Impact Range	20
Table 5-4. Scenario 1 Economic Impact	21
Table 5-5. Scenario 2 Economic Impact	21
Table 5-6. Scenario 3 Economic Impact	23
Table 5-7. High Level Review of Commercial Shipping Facilities – Practical Considerations	24
Table 5-8. High Level Review of Commercial Shipping Facilities – Commercial and Planning Perspectives	25

1. Executive Summary

- 1.1 Chatham Docks provides 460 jobs (415 full-time, 45 part-time) on-site across 22 businesses, based on 2021 Inter-Departmental Business Register (IDBR) data, generating a direct economic impact for the national and local economy of £40m in GVA per annum. In addition, economic activities at Chatham Docks have indirect (supply chain) and induced (workers' expenditures) impacts which contribute to support a further 338 jobs at the national (UK) level (generating £20.5 in GVA per annum) and 164 jobs at the local (Medway) level (generating £9.9m in GVA per annum).
- 1.2 Existing jobs at Chatham Docks are spread across a range of industrial activities, with 145 workers (31%) employed in the manufacture of basic metals, 70 workers (16%) in land transport via pipelines and 50 workers (11%) in warehousing and support activities for transportation.
- 1.3 To assess the impact of the closure of Chatham Docks in 2025, a range of scenarios has been considered:
- Scenario 1: Chatham Docks in industrial use (a Do Nothing scenario): Chatham Docks does not close and keeps supporting industrial employment and other activities.
 - Scenario 2: Chatham Docks closes in 2025 as expected and 14 businesses whose operations are not reliant on having access to the river/dock infrastructure are relocated within available spare capacity within Medway.
 - Scenario 3: Chatham Docks closes in 2025 as expected and 8 businesses whose operations are reliant on having access to the river/dock infrastructure are relocated within available spare capacity within Medway.
- 1.4 The impact of each scenario on the baseline economic value of Chatham Docks, both at the national and local level, is summarised in Table 1-1. This table shows that businesses dependent on the river/dock infrastructure deliver the majority of employment (458 jobs out of 798)¹ and GVA (£36.8m out of £60.5m per annum) at the national level. The loss of those businesses, should they be unable to relocate following the closure of Chatham Docks would therefore have a proportional impact on the national economy. Non-port dependent businesses deliver the rest of the economic value generated at Chatham Docks, which remains an important share of employment (just above 40%) and GVA (just under 40%).
- 1.5 The impact on the local economy would be slightly less important due to the loss of jobs and GVA outside of Medway (indirect and induced impact).

Table 1-1. Economic Impact Summary

	National		Local	
	Employment	GVA (£m)	Employment	GVA (£m)
Baseline Economic Value	798	60.5	624	49.9
Scenario 1 impact	0	0	0	0
Scenario 2 impact	-458	-36.8	-348	-30.1
Scenario 3 impact	-340	-23.7	-276	-19.8

Source: AECOM

¹ It should be noted that these figures indicate the number of direct, indirect and induced jobs. Direct jobs (jobs located at Chatham Docks) represent 460 jobs (Chatham Docks support indirectly a further 338 jobs), of which 244 direct jobs are reliant on the River Medway.

2. Introduction

- 2.1 AECOM was commissioned by Medway Council to assess the economic importance of business activities at Chatham Docks for the Medway economy and the potential impact that would result from the potential closure of the Docks.
- 2.2 The study has been commissioned in response to Medway’s emerging Local Plan which could allocate the Chatham Docks site for potential mixed-use redevelopment, and the need to understand the impacts of the proposals on the local economy and the proposals’ ability to contribute to the regeneration of the local area. Peel Ports, the landowner, has stated that it is its intention to close the docks. Temporary maintenance work has recently been carried out to ensure that the port remains functional until 2025, but further investments would be required beyond 2025 to keep the lock gates in working condition. In the absence of commercial viability to maintain the port infrastructure and provide the necessary maintenance to the lock gates, Chatham Docks is expected to close in 2025, when most current leases are set to expire.
- 2.3 This report provides a detailed baseline assessment of Chatham Docks and the economic impact of its current operations, before considering a range of development scenarios and their potential implications for both the local and national economy.

3. Methodology

3.1 This section of the report details the methodological approach taken to calculate the economic impact of Chatham Docks under the range of scenarios.

Baseline analysis

3.2 The baseline data underpinning the economic impact assessment of Chatham Docks is taken from the Office for National Statistics (ONS) Inter-Departmental Business Register (IDBR), a comprehensive list of UK businesses used by government for statistical purposes. IDBR data is underpinned by Value Added Tax (VAT) and Pay as You Earn (PAYE) records from Her Majesty's Revenue and Customs (HMRC), with additional information from Companies House and ONS business surveys. The IDBR covers around 2.7 million businesses in all sectors of the economy, with 2021 records utilised for the purpose of this study. However, the data is marked 'Official Sensitive' and protected from disclosure in legislation, and therefore cannot be published directly here.

3.3 IDBR data represents a point in time, with the potential for new businesses to locate at Chatham Docks, for businesses to close or for other changes such as mergers and acquisitions to occur since its publication in 2021 that could affect its accuracy today. As such, a comparison of the IDBR data with a range of wider sources of data and intelligence has been made to sense-check the accuracy of this data. Additional sources of data reviewed include:

- AddressBase records in GIS, an Ordnance Survey addressing product which matches Royal Mail postal address to unique property reference numbers (UPRN)
- Data from CoStar, a commercial property information database
- Data provided by Peel Group in relation to its tenants, employment, floorspace/site area, business activity and lease agreements
- Information provided by Locate In Kent,
- A site visit undertaken by the project team, offering opportunities to verify berths/plots and occupants.

3.4 The baseline analysis has identified individual businesses located at the time of recording (IDBR 2021) in Chatham Docks, employment figures by business, business activities (based on industry Standard Industrial Classification (SIC) codes) and turnover.

3.5 Turnover figures were gathered from Company House records. For businesses that did not report this information, an average turnover by sector statistics was applied, pro-rated to the size of employment.

3.6 In compliance with General Data Protection Regulation (GDPR), this report only provides aggregated numbers (i.e. employment, floorspace, turnover by industries rather than for each individual business).

Economic value of businesses

3.7 The economic value and impact of closure of Chatham Docks is quantified based on the Docks' impacts across three sources:

- Direct impact – Chatham Docks' own activities i.e. the employment and economic activity supported directly by companies operating within the Docks.
- Indirect impact – The employment and economic activity supported through the supply chain of the companies located within the Docks, as a result of their procurement of goods and services from other UK companies. This includes capital expenditure with other UK companies.

- Induced impact – The wider economic benefits that arise when workers within the Docks, and its supply chain, spend their earnings, for example in retail and leisure establishments, and the employment and economic activity that this supports.
- 3.8 The sum of these sources of economic impacts constitutes Chatham Docks’ total economic impact. This is broken down into two metrics:
- Employment
 - Direct employment – measured on a headcount basis based on 2021 IDBR data.
 - Indirect and induced employment – estimated based on Type I and Type II employment multiplier² by industry³.
 - Gross Value Added (GVA) – the value of an industry’s outputs less the value of intermediate inputs used in the production process, used as a proxy for GDP.
 - Direct GVA – measured based on regional GVA/head by industry applied to the direct employment headcount.
 - Indirect and Induced GVA – estimated based on overall regional GVA/head applied to total indirect and induced employment.
- 3.9 The economic impact of Chatham Docks is presented for two separate geographies: Medway (local impact) and the UK as a whole (national impact). There is no difference between national and local impact in terms of direct employment and GVA, all direct jobs (on-site jobs) being both local and national (460 jobs and £60.5m in GVA per annum). Indirect and induced employment and GVA are greater at the national level than at the local level due to “leakage” as not all indirect and induced jobs are generated within the local economy. The demand-side self-containment within the Medway economy is estimated at 48.5%⁴, meaning that for every 10 indirect and induced jobs generated by direct activities at Chatham Docks, less than 5 are within the Medway area. The calculations presented in Section 4 therefore show the total economic impact across the UK (national impact), as well as the portion of this impact which would fall in Medway (local impact).

Scenarios

- 3.10 The economic impact is presented under a range of development scenarios, based on the resulting impact in terms of employment and GVA. The scenarios are:
- Scenario 1: Chatham Docks in industrial use (Do Nothing): Chatham Docks does not close and keeps supporting industrial employment and other activities.
 - Scenario 2: Chatham Docks closes in 2025 as expected and the existing 14 businesses whose operations are not reliant on having access to the river/dock infrastructure are relocated within available spare capacity in Medway.
 - Scenario 3: Chatham Docks closes in 2025 as expected and the existing 8 businesses whose operations are reliant on having access to the river/dock infrastructure are relocated within available spare capacity in Medway.

² Type I multipliers account for the direct and indirect impacts based on how goods and services are supplied within a region, generating employment in the supply chain. Type II multipliers not only account for these direct and indirect impacts, but they also account for induced impacts based on the purchases made by employees within the economy (generating further employment)

³ ONS only produces Type I Employment multipliers by industry for the UK. As such, Type II multipliers are estimated for the UK utilising Scottish Government Input Out Tables, uplifted on a proportional basis.

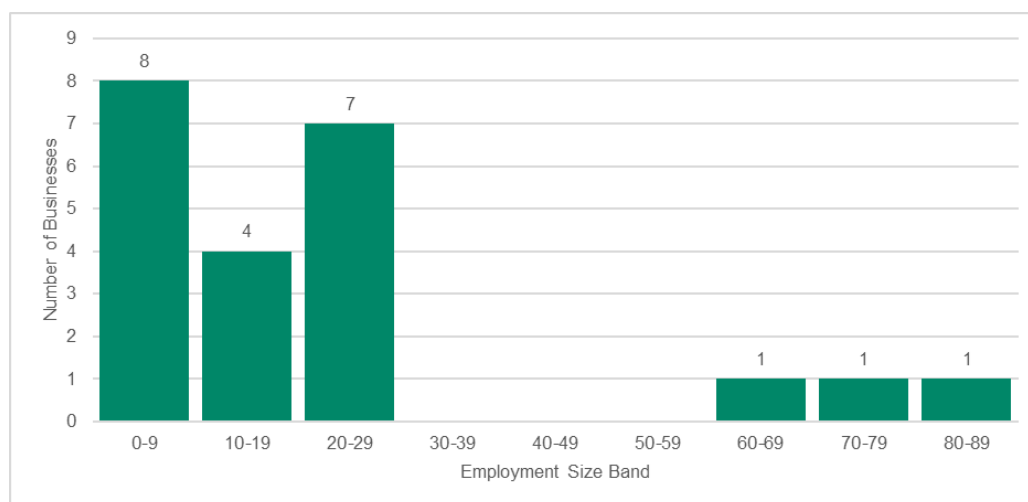
⁴ Percentage of jobs taken by local residents; Census 2011

4. Baseline Analysis

Overview

- 4.1 The 2021 IDBR data indicates that there are 22 businesses based within the Chatham Docks study area, with their turnover estimated to be £147,900,988⁵ per annum. Turnover represents the value generated by the sales of goods and services, and therefore does not necessarily reflect the added value of businesses (as turnover does not take into consideration the costs of production for those businesses). Turnover data is reported by businesses through their annual report and could, in some instances, include turnover generated by a company’s activities on a different site and inversely (i.e. companies operating from different locations will usually report their entire turnover at their main registered address).
- 4.2 These businesses employ circa 460 staff, of which 415 are full-time and 45 are part-time. The largest business located at Chatham Docks employs over 80 staff while the smallest employs less than 5 staff members as shown in Figure 4-1.

Figure 4-1. Distribution of Chatham Docks Businesses by Employment Size Band

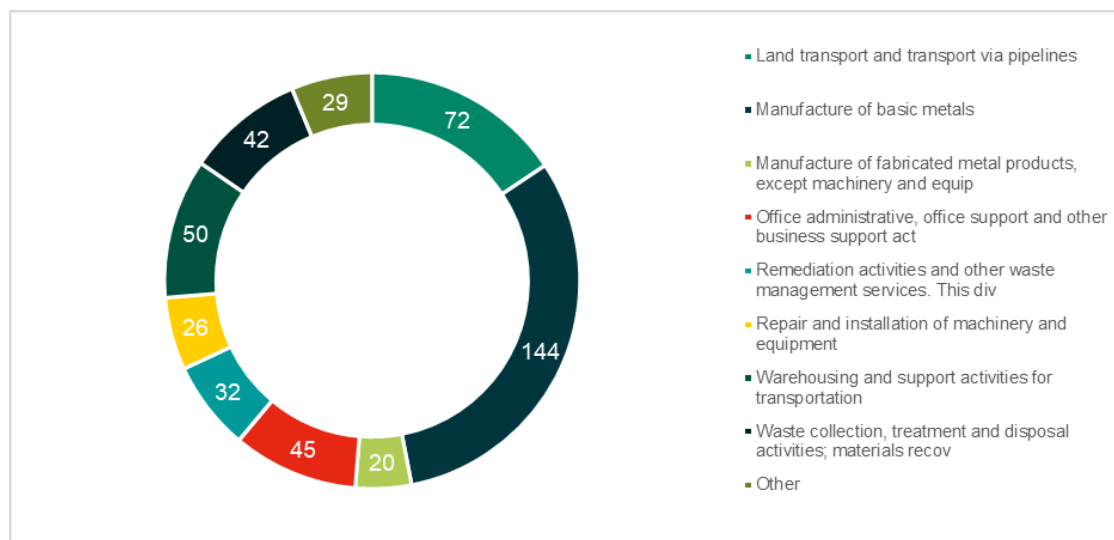


Source: IDBR, Chatham Docks, 2021

- 4.3 Figure 4-2 shows the sectoral breakdown reveals that 144 workers (31.3%) are employed in the manufacture of basic metals, with 72 workers (15.7%) in land transport via pipelines and 50 workers (10.9%) in warehousing and support activities for transportation.

⁵ Based on Companies House records and average turnover by sector statistics for companies that did not report.

Figure 4-2. Employment at Chatham Docks by Industry



Source: IDBR, Chatham Docks, 2021

- 4.4 The breakdown by use class at Chatham Docks indicates that 53.4% of floorspace is use by class B2 (General Industrial) with 41.2% by B8 (Warehousing and Open-Air Storage).
- 4.5 By way of comparison, data has been provided by Peel Group in relation to its tenants at Chatham Docks.
- 4.6 The data provided includes a detailed tenancy schedule and a breakdown of employment by businesses (based on audited accounts). This data indicates that Chatham Docks businesses employ 353 staff across 22 businesses. The data provided by Peel Group suggests that employment is therefore 23.2% lower than the 2021 IDBR data (460 workers) and, being more up to date, may reflect the partial or total relocation of some businesses that has occurred since the IDBR data was gathered in 2021. Additionally, IDBR data estimates employment based on PAYE and HMRC data and therefore may include employment for businesses registered at Chatham Docks but being carried out off-site, which could lead to higher estimates of employment based in the area than actually exists. However, for the purpose of the economic impact assessment IDBR data, which is the most impartial data, is utilised.
- 4.7 AECOM has estimated that Chatham Docks provide in the region of 67,400 sqm of industrial floorspace. This estimate is based on data sourced from CoStar, information gathered through a site visit by the project team, and desk-based research. This figure also includes temporary structures.
- 4.8 Data sourced from CoStar also estimates that the average rental value of the floorspace within Chatham Docks is £8.54 per sqft per annum, which is lower than the Medway average for comparable industrial sites (£9.75 per sqft per annum). The estimated average market value of property in Chatham Docks of £124 per sqft is also lower than the Medway industrial average of £143 per sqft. The estimated average rental yield of 5% is comparable to the Medway average of 5.1%. While this data is a guide, it is likely to be an overestimate of the actual rental values and market values within Chatham Docks.
- 4.9 In terms of location of businesses, AECOM has mapped, in Figure 4-3, all businesses currently located at Chatham Docks using the available information from different sources: IDBR data, Google Map and Google Map Street View, CoStar, VOA, information provided by Peel Group and gathered through the site visit. It is to be noted that this map is indicative only and may be approximative in regard to exact site boundaries (as it is not always clear where one business' site starts and ends) and may be subject to changes as businesses relocate. During the site visit, we noted that Pier Rigging and Testing had already vacated the site and Uplands Engineering was in the process of moving out.

Figure 4-3. Chatham Docks Businesses Map

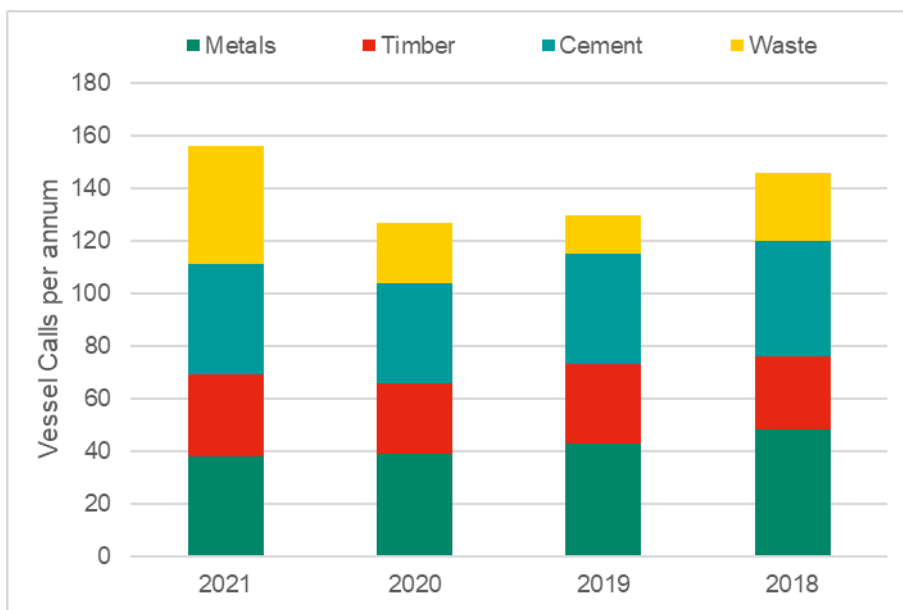


Source: AECOM

Port Dependent Users

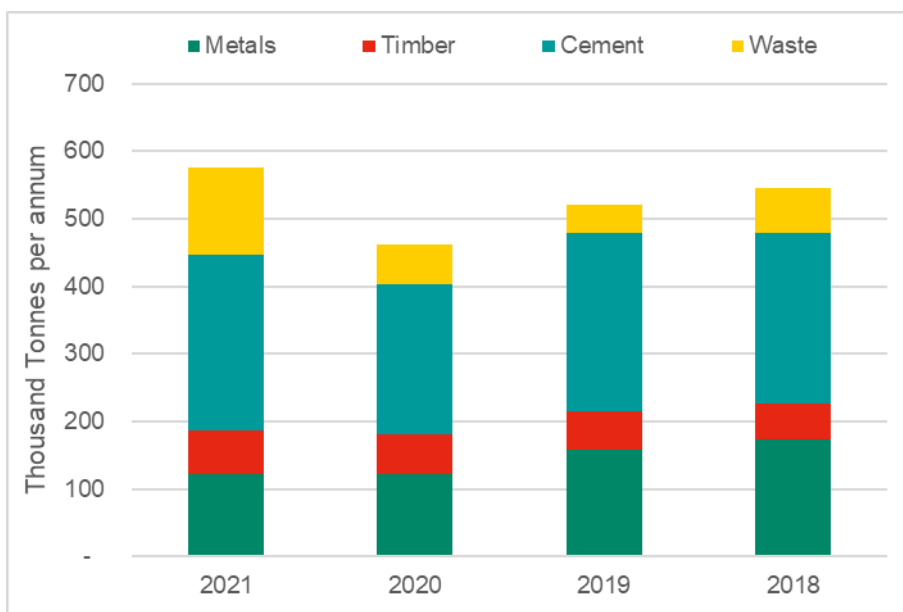
- 4.10 The breakdown of businesses and review of operations suggests that there are 8 businesses located at Chatham Docks whose operations are reliant on having access to the quayside to load, unload, or work on ships. This is due to these businesses being reliant on the supply of materials, utilising the river to transport goods; or due to being a ship repair or marine supply company.
- 4.11 These businesses are concentrated in the construction sector, waste and recycling sector, or ship repair.
- 4.12 Businesses that are reliant on port infrastructure provide 244 jobs out of the 460 jobs at Chatham Docks (c.53%). It should however be noted that, based on data provided by Peel Group, this number is estimated at 220 jobs out of 353 (c.62%).
- 4.13 The docks have received consistent shipping volumes over the last four years, measured both by the number of ship calls (Figure 4-4), and the annual tonnage of cargo loaded or unloaded at the quayside (Figure 4-5).

Figure 4-4. Ship Calls at Chatham Docks, 2018 – 2021⁶



Source: AECOM analysis of data provided by Peel Ports

Figure 4-5. Cargo Throughput at Chatham Docks, 2018 – 2021



Source: AECOM analysis of data provided by Peel Ports

4.14 On average there are 140 ship calls per annum for cargo (excluding any ships brought to the docks for repair), and a cargo throughput of 530,000 tonnes.

4.15 The operations of the businesses reliant on having access to the quayside are summarised as follows:

- Aggregate Industries UK (berth 2)** – receive bulk shipments of cement by ship, which is piped ashore to a storage silo prior to being loaded into trucks for local distribution. This business is a supplier to the construction sector in Kent. Receiving cement by ship likely lowers their cost of cement distribution and greatly reduces the carbon footprint of cement used in Kent. Without the ability to receive ships alternative transport arrangements would almost certainly result in an increase in truck miles on Kent’s roads, and elsewhere in the UK. Receiving cement by rail may be a possibility but would be highly dependent on where the cement is sourced from and likely more costly than deliveries by ship.

⁶ Does not include ships visiting the docks for repair, only those loading or unloading cargo

- **ArcelorMittal Kent Wire (berth 3)** – receive shipments of wire rod for use as reinforcing material in concrete structures. Wire is unloaded at the quayside on the south side of the dock and transferred to their warehouse where fabrications and other wire products are made. Some of the output is despatched by ship, and some of these items are too large to be transported by road or rail.
- **European Active Projects (berth 5)** – supply engineering services to the marine industry and related cargo handling industries such as quarrying. They operate seven locations in the UK and Chatham is their headquarters. At Chatham they offer ship repair facilities, therefore a site where ships and other floating structures can be accessed is integral to their business. At Chatham they are co-located with cargo receiving business such as Aggregate Industries UK Ltd, Arcelormittal Kent Wire Limited and others however this does not necessarily imply synergy or benefit. Decisions on ship repair are taken by vessel owners not consignees such as the cargo receiving business at Chatham. Ship owners will typically prefer a facility that is competitive in terms of cost and quality and does not require a large deviation from where their ships are trading. In this context, ship repair at Chatham is likely serving a much wider region, e.g. London and the South East rather than Medway or Chatham docks in particular. For operators of a ship repair facility their capability in terms of the size of vessel they can work on and absence of navigation constraints (such as tidal limitations, or height limits imposed by bridges) likely have a bigger influence on competitiveness than any co-location considerations.
- **HY-TEN (near berth 8)** – receive shipments of wire rod for use as reinforcing material in concrete structures. Wire is unloaded at the quayside on the north side of the dock and transferred to their yard and warehouse where fabrications and other wire products are made.
- **P&D Material Recovery (north side of dock)** – bring waste to Chatham Docks by road and export the processed waste by ship. Waste such as refuse derived fuels (RDF), its by product incinerator bottom ash (IBA) and recycled materials such as scrap metal, cullet (broken glass) and so on are low value, high volume and/or high weight commodities extensively transported by sea and traded within the continent of Europe by short sea shipping. Producers of waste derived products operate in a highly competitive market where the cost of their output, delivered to the customer’s premises, is the key decision making parameter for customers once quality considerations have been satisfied. For this reason ability to transport by ship, with the low unit cost it offers, is likely a significant influence on the competitiveness of a business such as P & D Material Recovery Ltd. Without the ability to use ships, the bulky nature of the materials they handle would result in a significant number of truck miles in Kent and elsewhere in the UK.
- **Pier Rigging and Testing** – provide services relevant to ship owners including supplying lifting equipment and rigging for leisure craft. Some of their services may be applied to vessels brought into Chatham Docks but other services do not necessarily require a vessel to be brought here.
- **Streetfuel (near berth 6)** – are another waste and recycling company operating in a similar manner to P&D Material Recovery Ltd.
- **Total Ship Services (berth 6 and 7)** – are the shipping arm of ArcelorMittal. Their activities at Chatham Docks include importing timber and metals which are unloaded on the north side of the dock.

4.16 In terms of their functional requirements, these businesses may be grouped as follows:

- Group 1: Conventional short sea cargo operations – includes Aggregate Industries UK Ltd., Arcelormittal Kent Wire Limited, HY-TEN LTD, P&D Material Recovery Ltd and Streetfuel Ltd.
- Group 2: Ship repair - European Active Projects Ltd and to a lesser extent Pier Rigging and Testing Limited.

4.17 There is limited synergy between the two groups so they do not necessarily require to be co-located, although co-location may have some benefits for Group 2.

Non-Port Dependent Users

4.18 The remaining 14 businesses operate across a wide range of industrial activities, including warehousing and storage, general industrial, car repair, RDF waste production. The list of these businesses is presented in Table 4-1

Table 4-1. Non-Port Dependent Users

Business Name	Industry
Chatham Freight Station Limited	[REDACTED]
D2 Electrical Ltd	[REDACTED]
D2 Fire and Security	[REDACTED]
D2 Maintenance Limited	[REDACTED]
D4 Group Limited	[REDACTED]
EVCL Downtown Limited	[REDACTED]
Mobile Compactor Services Limited	[REDACTED]
MTS Projects Ltd	[REDACTED]
Nezaj Services Limited	[REDACTED]
Paramount Site Limited	[REDACTED]
Port of Sheerness Ltd	[REDACTED]
Uniconnection Shipping	[REDACTED]
Uplands Engineering Ltd	[REDACTED]
WCB Utilities Ltd	[REDACTED]

Source: IDBR (2021)

4.19 These businesses are less reliant on being based in a port-based environment and, as a result and as suggested by data and confirmed by Peel Group, a number of these businesses have already relocated out of Chatham Docks. The types of activities undertaken by these businesses include predominantly services in the construction industry (i.e. electrical, property maintenance, engineering) and warehousing and (road) transport services.

5. Economic Impact Assessment

5.1 This section details the economic impact of Chatham Docks and considers how this impact would change under the various scenarios relating to its potential closure that could come to pass.

Baseline

5.2 As stated within Section 2, the economic impact of Chatham Docks can be broken down into direct, indirect and induced impacts, the sum of which constitutes the Docks' total economic impact.

Direct Impact

5.3 The direct employment associated with businesses located in Chatham Docks is taken from the ONS IDBR as the primary source of information in relation to business activity at the Docks.

5.4 This data suggests that the businesses based within the Chatham Docks study area employ 460 staff (415 full-time jobs, 45 part-time jobs). It should be noted that the IDBR data only provides a snapshot of existing employment at a certain point in time (2021) and therefore that current employment level may have evolved since.

5.5 Applying industry specific GVA per worker benchmarks, utilising the latest data from ONS Regional Accounts and the Business Register and Employment Survey (BRES), to the employment generated by Chatham Docks⁷ suggests that the overall direct GVA impact of Chatham Docks totals £39,953,996 per annum.

Table 5-1. Baseline – Direct Economic Impact

Industry	Employment	GVA/Head	Total GVA
Manufacture of basic metals	144	£64,211	£9,246,316
Land transport and transport via pipelines	72	£39,683	£2,857,143
Warehousing and support activities for transportation	50	£31,200	£1,560,000
Office administrative, office support and other business support act	45	£10,545	£474,545
Waste collection, treatment and disposal activities	42	£270,448 ⁸	£11,358,806
Remediation activities and other waste management services	32	£270,448 ⁹	£8,654,328
Repair and installation of machinery and equipment	26	£55,838	£1,451,777
Manufacture of fabricated metal products, except machinery and equip	20	£64,211	£1,284,211
Specialised construction activities	18	£124,211	£2,235,789
Wholesale trade, except of motor vehicles and motorcycles	6	£48,000	£288,000
Construction of buildings	3	£106,462	£319,385
Manufacture of machinery and equipment n.e.c.	2	£111,848	£223,697
Financial service activities, except insurance and pension funding	0	£53,647	£-
TOTAL	460	N/A	£39,953,996

Source: AECOM, BRES

⁷ ONS Regional gross value added (balanced) by industry 2019/ ONS BRES 2019

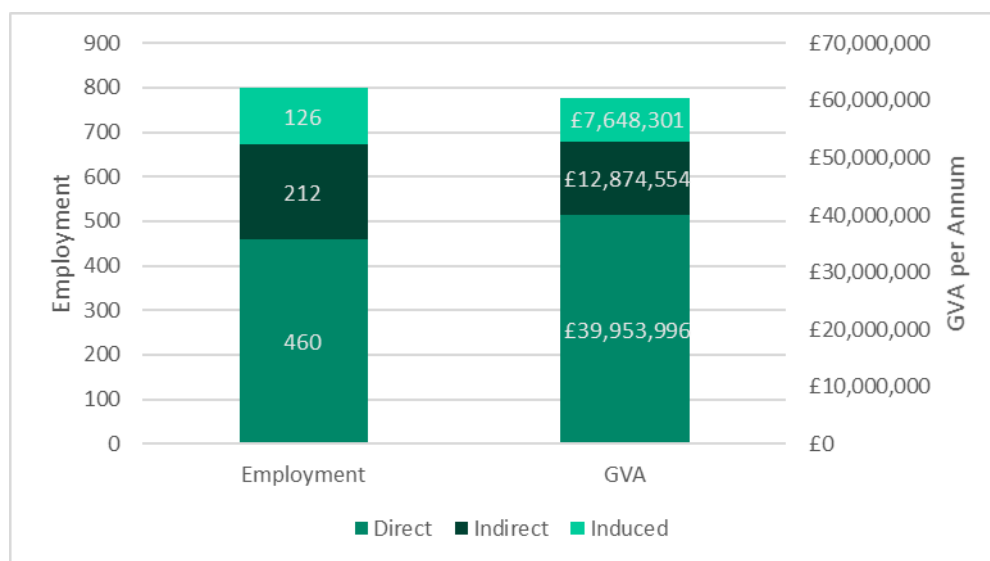
⁸ It should be noted that this represents the average GVA/head at the regional level and would include the GVA generated by waste management businesses as well as energy and utility companies. This average is driven up by the GVA associated by energy companies and therefore likely over-estimate the average GVA per head for these activities at Chatham Docks.

⁹ As previous footnote.

Indirect and Induced Impacts

- 5.6 In addition to the direct employment generated, the current activities supported at Chatham Docks will generate employment through the indirect and induced effects of these businesses' activities.
- 5.7 The economic impact associated with the indirect and induced impacts is captured through economic multipliers. Type I multipliers only consider the economic impact in the supply chain (indirect), whereas Type II multipliers also include the spending of the staff involved in the process (induced).
- 5.8 The economic multipliers that are used are modelled from the ONS Input–Output Supply and Use Tables¹⁰, with Type I and Type II employment multipliers applied to specific activities supported at Chatham Docks¹¹.
- 5.9 The application of these multipliers suggests that economic activity in the supply chains of companies at Chatham Docks supported 212 (indirect) jobs and the wage-financed consumption of Chatham Docks' workers and those in its supply chain supported a further 126 (induced) jobs at the UK level.
- 5.10 With no data to breakdown indirect and induced employment by specific industries, an overall GVA per worker benchmarks for Medway (£60,681/head) is applied to estimate the indirect and induced GVA impact. The indirect GVA impact comes in at £12,874,554 and the induced GVA impact totals £7,648,301.
- 5.11 The economic contribution of Chatham Docks to the national economy is summarised in Figure 5-1.

Figure 5-1. Total Economic Contribution of Chatham Docks to the UK



Source: AECOM

Local Impacts

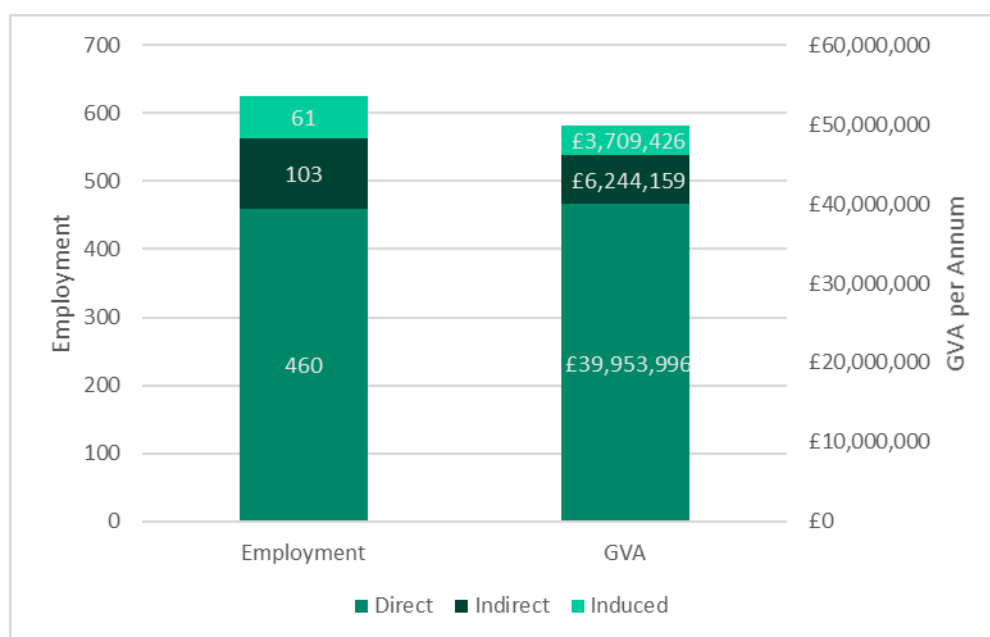
- 5.12 To assess the impact of Chatham Docks at the local level, it is important to consider that regional propensities to import tend to be higher than national propensities, meaning local borders are more porous than national frontiers, with the national multipliers adopted above requiring adjustment to reflect this.

¹⁰ <https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/inputoutputsupplyandusetables>

¹¹ ONS only produces Type I Employment multipliers by industry for the UK. As such, Type II multipliers are estimated for the UK utilising Scottish Government Input Out Tables, uplifted on a proportional basis.

- 5.13 Consequently, each multiplier (for each industry and both Type I and Type II) is adjusted by a proportional basis to reflect the level of leakage, assumed to be 48.5% based on the demand-side self-containment within the Medway economy¹².
- 5.14 The application of these sub-regional multipliers suggests that economic activity in the supply chains of companies at Chatham Docks supported 103 (indirect) jobs and the wage-financed consumption of Chatham Docks’ workers and those in its supply chain supported a further 61 (induced) jobs at the local level.
- 5.15 Again, this is converted to GVA by overall GVA per worker benchmarks for Medway, with the indirect GVA impact estimated at £6,244,159 and the induced GVA impact totalling £3,709,426.
- 5.16 The economic contribution of Chatham Docks to the national economy is summarised in Figure 5-2.

Figure 5-2. Total Economic Contribution of Chatham Docks in the local area (Medway)



Source: AECOM

Validation of Impact Assessment

- 5.17 The methodology for undertaking this assessment was focused around a theoretical approach to assessing the economic impact of Chatham Docks. This comprised utilising official data from the IDBR, alongside Type II multipliers to derive indirect and induced employment and average GVA/head by industrial activity to derive the economic impact of the business activities at Chatham Docks. It was recognised that detailed interviews with business owners/occupiers would allow a validation and/or potential refinement of the assessment and could be a follow-on exercise from this study.
- 5.18 To validate the approach undertaken, a comparison of the results of this assessment with similar studies covering a range of ports in the UK was prepared and presented in Table 5-2. This benchmark analysis shows how the results of this study compare with more detailed analysis both in terms of employment (indirect and induced) and economic impact (GVA generated).
- 5.19 This shows that the employment and GVA impact of Chatham Docks is comparable with that of other similar port and water-side economic entities.

¹² Percentage of local jobs taken by local residents; Census 2011

Table 5-2. Economic Impact Comparators

	Employment				GVA (£m)			GVA/Job (£)		
	Direct	Indirect	Induced	Multiplier	Direct	Indirect	Induced	Direct	Indirect	Induced
Chatham Docks	460	212	126	1.7	40.0	12.9	7.6	£86,857	£60,681	£60,681
Portsmouth International Port ¹³	1,420	670	330	1.7	135	36	18	£95,070	£53,731	£54,545
Scrabster harbour ¹⁴	226	129	48	1.8	14.1	7.4	3.3	£62,389	£57,364	£68,750
Port of Sheerness ¹⁵	660	N/A	N/A	N/A	82.7	N/A	N/A	£125,303		
Devonport Naval Base and Dockyard ¹⁶	7,236	1,989		1.3	275	84		£38,004	£42,232	

Source: AECOM

- 5.20 Applying the higher and lower employment multiplier and GVA/Job from different benchmark studies to employment and GVA generated by economic activity at Chatham Docks provides a range of impacts, with our assessment being in the middle of this range.
- 5.21 As seen in Table 5-3, the upper estimate (at the UK level) of the impact of Chatham Docks is 820 jobs and £66.4m GVA per annum. The lower estimate (at the UK level) of the impact of Chatham Docks is 586 jobs and £22.8m in GVA per annum. This study, as presented in the analysis above, calculates the impact to be 798 jobs and £60.5m in GVA per annum.
- 5.22 Whilst employment figures held by Peel are lower than suggested by the 2021 IDBR data, the overall GVA impact is roughly comparable to our estimate, at £54.5m. This is circa 10% less than the GVA estimate based on the 2021 IDBR data.

Table 5-3. Economic Impact Range

	Employment				GVA (£m)			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
Upper Range	460	263	98	820	£43,732,394	£15,932,702	£6,716,814	£66,381,911
Chatham Docks	460	212	126	798	£39,953,996	£12,874,554	£7,648,301	£60,476,852
Information from Peel	353	185	103	641	£37,015,212	£11,222,768	£6,263,272	£54,501,253
Lower Range	460		126	586	£17,481,840		£5,339,932	£22,821,772

Source: AECOM

Scenario 1 (Business as Usual)

- 5.23 Under Scenario 1, as a reference case, Chatham Docks would not close and would keep supporting the range of businesses that are currently located within the Docks area.

Economic Impact Assessment

- 5.24 Under this scenario, the current economic impact associated with Chatham Docks would be maintained, as shown in Table 5-4, with all 460 roles currently supported at the Docks safeguarded, in addition to 212 indirect and 126 induced jobs at the national level, as shown in line “Scenario 1 – National”. At the local level, the 103 indirect and 61 induced jobs would also be preserved. The impact (nil) is shown in the “Impact” lines of the table.
- 5.25 The GVA impact would be maintained at £60.5m at the national level (of which £49.9m is at the local level).

¹³

<https://democracy.portsmouth.gov.uk/documents/s23996/Appendix%201%20The%20Economic%20Impact%20of%20Portsmouth%20International%20Port%20report%20by%20Oxford%20Economics.pdf>

¹⁴ <http://www.scrabster.co.uk/wp-content/uploads/2015/03/SHT-EIA-2016-Final-Report-rev-2.pdf>

¹⁵ Port of Sheerness Masterplan

¹⁶ <https://www.plymouth.gov.uk/sites/default/files/PortOfPlymouth.pdf>

Table 5-4. Scenario 1 Economic Impact

		Employment				GVA (£m)			
		Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
Baseline	National	460	212	126	798	40.0	12.9	7.6	60.5
	Local	460	103	61	624	40.0	6.2	3.7	49.9
Scenario 1	National	460	212	126	798	40.0	12.9	7.6	60.5
	Local	460	103	61	624	40.0	6.2	3.7	49.9
Impact	National	0	0	0	0	0	0	0	0
	Local	0	0	0	0	0	0	0	0

Source: AECOM

Evidence Supporting Feasibility of Relocation

5.26 Under this scenario, Chatham Docks remains open and therefore no relocation is required.

Scenario 2 (loss of port dependent users)

5.27 Scenario 2 considers the potential for the 14 businesses whose operations are not reliant on having access to the river/dock infrastructure relocating their operation elsewhere within spare capacity available within Medway. As a result, it is assumed that the 8 other businesses that are reliant on having access to the river/dock infrastructure would close following the closure of Chatham Docks in 2025.

5.28 Under this scenario, 244 direct jobs (out of 460) would be lost. The loss of direct jobs would lead to further losses in indirect and induced jobs and associated GVA.

Economic Impact Assessment

5.29 This would result in the direct employment for businesses that were previously located at Chatham Docks falling from 460 to 216. Similarly, indirect and induced employment would drop from 338 workers to 124 at the national level and from 164 to 60 at the local level.

5.30 Scenario 2 would also result in the overall annual GVA impact dropping from £60.5m per annum to £23.7m at the national level, a reduction of £36.8m; and from £49.9m per annum to £19.8m per annum at the local level, a reduction of £30.1m for the Medway economy.

Table 5-5. Scenario 2 Economic Impact

		Employment				GVA (£m)			
		Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
Baseline	National	460	212	126	798	40.0	12.9	7.6	60.5
	Local	460	103	61	624	40.0	6.2	3.7	49.9
Scenario 2	National	216	76	48	340	16.2	4.6	2.9	23.7
	Local	216	37	23	276	16.2	2.2	1.4	19.8
Impact	National	-244	-136	-78	-458	-23.8	-8.3	-4.7	-36.8
	Local	-244	-66	-38	-348	-23.8	-4.0	-2.3	-30.1

Source: AECOM

Evidence Supporting Feasibility of Relocation

- 5.31 To provide a perspective on whether there would likely be available spare capacity for displaced businesses to relocate to within Medway data from CoStar on availability has been analysed. This indicates that there are currently 38 industrial properties within industrial estates, that could be available for the businesses displaced under scenario 2 to relocate to. This is irrespective of whether the space is affordable for the businesses in question or takes account of other locational or specification requirements as listed further below. These properties provide a combined 150,000sqm of floorspace. There is currently a significant amount of floorspace available¹⁷ in Medway (c.72%), which is more than the baseline floorspace estimated at Chatham Docks (67,400sqm) and more importantly the total floorspace occupied by non-port dependent businesses.
- 5.32 Almost all available space is concentrated in three postcodes: ME1 (in Rochester and near Rochester Airport – circa 5km from Chatham Docks¹⁸), ME2 (Medway City Estate – circa 2km from Chatham Docks) and ME3 (Kingsnorth Power Station / Isle of Grain – circa 4km from Chatham Docks).
- 5.33 ME1 and ME2 locations (c.10% of all available space in Medway) would provide quicker vehicular access to the rail and motorway network than the existing Chatham Docks site.
- 5.34 There are several properties within the ME3 postcode (c. 89% of all available space in Medway) which are large enough to accommodate any of the existing businesses in Chatham Docks. Sites in this location are also more likely to be suitable for waste disposal business uses. However, this postcode is further away from Chatham, as well as rail and motorway infrastructure, than the existing Chatham Docks site.
- 5.35 AECOM has estimated that non-port dependent businesses currently occupy up to 7,500sqm of industrial floorspace in Chatham Docks. If those businesses had to relocate today, sufficient space would be available in Medway to accommodate them, including in ME1 and ME2 alone.
- 5.36 The type of industrial space currently available includes warehousing (50% of all available space) and distribution (45% of all available space). Services, manufacturing and light industrial space provide the remaining available space (5%).
- 5.37 With most non-port dependent business activities being within warehousing use, if all businesses had to relocate today, sufficient space would be available within Medway to accommodate them.
- 5.38 It should be noted that this reflects the current market context and that it is not possible to predict availability of industrial space in the future. Furthermore, this analysis only takes into consideration space availability and location – it is likely that businesses, when deciding to relocate, will have a wide range of criteria to consider (such as operational yard, facilities, rental cost, accessibility for workers, etc.) which will influence their choice.
- 5.39 It should also be noted that designation of employment land is considered as part of the Draft Local Plan, which would create more opportunities for the relocation of businesses within Medway and therefore increase likelihood of retaining those businesses locally.

Scenario 3 (loss of non-port dependent users)

- 5.40 Scenario 3 considers the potential for the 8 businesses whose operations are reliant on having access to the river/dock infrastructure relocating their operation elsewhere within spare capacity available within Medway. As a result, it is assumed that the 14 businesses that are non-reliant on having access to the river/dock infrastructure would close following the closure of Chatham Docks in 2025.

¹⁷ Total amount of space that is currently being marketed as available for lease or sale, regardless of whether the space is vacant, occupied, available for sublease, or available at a future date

¹⁸ As the crow flies

Economic Impact Assessment

5.41 This would result in the direct employment generated within Chatham Docks falling from 460 to 244. Similarly, indirect and induced employment would drop from 338 workers to 214 at the national level and from 164 to 104 at the local level.

5.42 Scenario 3 would also result in the overall annual GVA impact dropping from £60.5m per annum to £36.8m at the national level, a reduction of £23.7m; and from £49.9m per annum to £30.1m per annum at the local level, a reduction of £19.8m for the Medway economy.

Table 5-6. Scenario 3 Economic Impact

		Employment				GVA (£m)			
		Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
Baseline	National	460	212	126	798	40.0	12.9	7.6	60.5
	Local	460	103	61	624	40.0	6.2	3.7	49.9
Scenario 3	National	244	136	78	458	23.8	8.3	4.7	36.8
	Local	244	66	38	348	23.8	4.0	2.3	30.1
Impact	National	-216	-76	-48	-340	-16.2	-4.6	-2.9	-23.7
	Local	-216	-37	-23	-276	-16.2	-2.2	-1.4	-19.8

Source: AECOM

Evidence Supporting Feasibility of Relocation

5.43 In Chapter 4 (Port Dependent Users section), port dependent users were categorised into two groups which derived some limited benefit from co-location but it was not critical to their business operations, so they could be re-located to separate sites.

- Group 1: Conventional short sea cargo operations – includes Aggregate Industries UK Ltd., Arcelormittal Kent Wire Limited, HY-TEN LTD, P&D Material Recovery Ltd and Streetfuel Ltd.
- Group 2: Ship repair - European Active Projects Ltd and to a lesser extent Pier Rigging and Testing Limited

5.44 Given the nature of businesses in Group 1 and the commodities they handle any replacement facility will need to offer:

- Alongside berthing i.e. a quay, not a jetty
- Reasonable quay side apron for cargo marshalling during loading/unloading
- Extensive yard area for fabrication and storage of low-value but high-volume goods
- Ample space for warehousing on the yard area
- Potentially some limited office accommodation
- Good links to arterial roads that can accept a steady flow of truck traffic

The following are not critical, although may be beneficial:

- Deeper water than available at Chatham Docks
- Rail link

5.45 Given the nature of businesses in Group 2 and the commodities they handle any replacement facility will need to offer:

- Alongside berthing as currently provided, however alternatives could potentially be more valuable such as a floating dry dock or an enclosed dock
- A yard area

- Potentially a warehouse
- Limited office accommodation
- Good links to arterial roads

The following are not critical, although may be beneficial:

- Deeper water than available at Chatham Docks

5.46 Note these requirements are based on AECOM’s understanding of the operations of these businesses.

5.47 Locations that are currently multi-cargo facilities, or single cargo facilities that handle one of the commodities currently handled at Chatham Docks, were considered as alternatives:

- Sheerness – multi-cargo facility
- Thamesport - multi-cargo facility
- Medway City Estate – single cargo facility for timber
- Ridham Dock - multi-cargo facility

5.48 The navigation restrictions of these facilities (maximum draft, tidal restrictions, and air draft limits) have not been fully investigated at this stage, but all are used for short sea shipping so can at least accommodate the type of ship that currently uses Chatham Docks for some of the time.

5.49 The number of berths or combined berth length has also not been considered in detail at this stage as it may be that different businesses re-locate to different facilities, so there may be no need for a single facility with the same capacity as Chatham Docks if multiple facilities are used.

5.50 A high level review of their suitability for both groups 1 and 2 has been prepared based on the following practical considerations:

- Alongside Berth
- Reasonable quay side apron
- Land for yard area, warehousing and offices
- Road links
- Rail links

5.51 A further high level review considered their suitability from commercial and planning perspectives:

- Existing Occupancy
- Synergy with Existing Users
- Other considerations

5.52 Findings are shown in Table 5-7 and Table 5-8 below. The findings suggest there are alternative locations that could accommodate groups 1 and 2 if displaced from Chatham Docks. In addition to the locations reviewed, other locations may be suitable for group 2 if co-location with group 1 is not a requirement.

Table 5-7. High Level Review of Commercial Shipping Facilities – Practical Considerations

Commercial Shipping Facilities	Alongside Berth	Reasonable quay side apron	Land for yard area, warehousing and offices	Road links	Rail links
Sheerness	Yes	Yes	Yes	Good	Inactive
Thamesport	Yes	Yes	Yes	Good but constraints on Isle of Grain	Yes, active

Medway City Estate	Yes	Yes	No	Good based on relative proximity to the Strategic Road Network	No
Ridham Dock	Yes	Yes	No	Good	Inactive

Source: AECOM

Table 5-8. High Level Review of Commercial Shipping Facilities – Commercial and Planning Perspectives

Commercial Shipping Facilities	Existing Occupancy	Synergy with Existing Users	Other considerations
Sheerness	Unknown	Yes, some of the site is used for construction materials at present (steel, timber)	
Thamesport	Under-utilised	Yes, steel terminal recently developed and construction yard adjacent, history of supporting major construction projects (Channel Tunnel, Thames Tideway and Crossrail)	Probably has the greatest land area available for development, subject to other proposals for the site and adjacent land
Medway City Estate	Fully occupied (Scottline)	Yes, but fully occupied	Berth capacity limited
Ridham Dock	Appears occupied	Somewhat	Vessel size constraints and berth capacity both limited

Source: AECOM

5.53 For businesses importing materials such as cement, wire and timber or exporting waste or material recovered for recycling an argument could be made to use rail. While this is possible, compared to transport by ship using rail would likely result in:

- Higher costs per tonne or unit transported
- Greatly reduced flexibility in terms of sourcing: whilst good rail connectivity exists within the UK and most of Europe, sourcing from more distant regions e.g. from Scandinavia or outside Europe would be problematic
- Likely higher emissions per tonne transported (although this would be dependent on the type of rail traction used throughout the journey i.e. electric or diesel)
- Constraints in volume due to capacity limitations on the rail network.

6. Additional Considerations

- 6.1 Chatham Docks provides 460 jobs across 22 businesses, based on the 2021 IDBR data, generating a direct economic impact for the national and local economy of £40m in GVA per annum. In addition, economic activities at Chatham Docks have indirect (supply chain) and induced (workers' expenditures) impact which contribute to support a further 338 jobs at the national level (generating £20.5 in GVA per annum) and 164 jobs at the local level (generating £9.9m in GVA per annum).
- 6.2 As suggested by the data shared by Peel, compared to the 2021 IDBR data, businesses have started to relocate out of Chatham Docks and it is assumed that most businesses will have relocated well before the closure of the Docks.
- 6.3 The average remaining lease length for the 8 businesses whose operations are reliant on having access to the river/dock infrastructure to operate is 3.5 years. Conversely, the average remaining lease length for businesses that have more general requirements is 1.2 years.
- 6.4 Should only half of the businesses being able to relocate within Medway, the local economic impact would be a loss of 399 jobs (direct, indirect and induced) and c.£19.9m in annual GVA.
- 6.5 It is also important to note that this report focuses on the impact of the closure of Chatham Docks from a business point of view and purely from a relocation angle. The report does not touch upon the opportunities that could come out of the closure of Chatham Docks, for both the businesses currently located in the Docks and the regeneration of the area. Those opportunities include:
- The relocation of businesses in more suitable locations. Non-port dependent users could relocate to more accessible industrial estates, within higher quality premises; whilst port dependent businesses could relocate in alternative ports.
 - An opportunity for businesses to restructure/expand their activities following relocation.
 - An opportunity to deliver regeneration at Chatham Docks, generating positive economic impacts (i.e. residential dwellings, employment space for high-skilled jobs, enhanced public realm and walkability etc) which are not captured in this report.
 - The creation of a new waterfront destination in Chatham and accessible neighbourhood, providing a connection between St Mary's Island to Gillingham.

