

Report

Chatham Docks Economic and financial assessment based on new engineering input

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Independent Port Consultants (IPC)

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Executive Summary

This report provides an analysis of the economic importance and financial viability of Chatham Docks as a commercial port. The report draws on the findings of the report by APB Marine Limited dated March 2021 stating that the lock system at the Dock can be re-established with an estimated cost of £ 3,500,000.00. Based on this conclusion and other insights, the report provides an assessment of the financial viability of the port and comments on the economic importance of the operation.

The report draws on a number of sources, including but not limited to:

- K2 Consultancy report (non-dated) Chatham Lock Caisson Refurbishment;
- Association of Chatham Docks Commercial Operators and ArcelorMittal (Feb 2020) "Chatham Docks: After four centuries, how bright is the future for one of Britain's most historic ports?";
- APB Marine Limited (March 2021) "Review of requirements Caissons and infrastructure lock systems Chatham Docks";
- Crossley Group Chartered Accountants (2021) "Viability Report Economic conditions surrounding commercial tenancy at Chatham Docks".

Four key conclusions emerge from the analysis in this report, namely:

- The estimate quoted by the latest engineering input regarding the required costs of rendering the lock system viable from an operational perspective (namely £3.5 million pounds) strengthens the financial viability case for the port to remain operational.
- Adequate and sustained maintenance of the lock system would allow the lock system lifetime to be indefinite.
- In view of the cost estimate, financial viability, and impact on jobs and revenue if the operation is made to close, ending the operation to render the land available for alternative uses does not make economic sense.
- From a policy and strategic perspective, terminating the port operation is an extremely serious decision because it cannot be turned back. As per the evidence underpinning the views in this report, doing so would undermine the Medway port Cluster as a whole and the objectives of strengthening the port and logistics assets of the national economy.



1 Introduction

Chatham Docks includes 70-acre commercial port and manufacturing hub with more than 10 businesses occupying the land and buildings¹. Peel Group is a family-owned company with investments in land and property, transport and logistics, and other infrastructure². The owners of the Chatham Docks are Peel Land & Property (Peel L&P), a subsidiary of Peel Group³. The owners have expressed the view that the port is not viable as a commercial site and therefore wish to use the site for other purposes.

This report considers the arguments brought forward in previously issued reports on the matter in light of new engineering information presented by the report issued by APB Marine in March 2021. This report confirms and further strengthens the view that the operation is financially viable. In addition, the economic and strategic implications of terminating the port operation makes no sense for the local community and for the wider region since this move is both irreversible and not required from an economic or financial perspective. This argument is supported by a number of evidence-based considerations detailed in the report.

The report uses the recent findings of the APB report of the lock system of the port to make the first point. Other points are argued on the basis of publicly available information and a knowledge base of ports in the UK developed over many years of working as independent port consultants in the UK and abroad.

The analysis in the report is centred around four key points:

- The estimate quoted by the latest engineering input regarding the required costs of rendering the lock system viable (namely £3.5 million pounds) strengthens the financial viability case for the port to remain operational.
- Adequate and sustained maintenance of the lock system would allow the lock system lifetime to be indefinite.
- In view of the cost estimate, financial viability, and impact on jobs and revenue if the operation is made to close, ending the operation to render the land available for alternative uses does not make economic sense.
- From a policy and strategic perspective, terminating the port operation is an extremely serious decision. Doing
 so would undermine the Medway port Cluster as a whole and the objectives of strengthening the port and
 logistics assets of the national economy.

Each of the above points is treated in this report in the respective order. A summary of the APB report and overall key findings of this report are described below. Further details are relayed in the subsequent sections of the report.

¹ Crossley Group report, 2021.

² https://www.peel.co.uk/

³ https://peellandp.co.uk/about-us/



2 Financial viability assessment

2.1 Findings of the APB Report

APB Marine Limited, a specialist Marine Consultancy, was requested to carry out a report to establish the approach and coverage of capital expenditure and operational expenditure and any other relevant points be considered with respect of rendering the lock system at Chatham Docks operational in the short, medium, and longer term.

The key findings of the APB report can be summarised as follows:

- The owners, namely Peel L&P, have not maintained the locks adequately. Over time, this leads to higher
 expenditure costs to re-establish the lock systems to an adequate operational level since wear and tear related
 effects are magnified;
- A phased approach is possible to bringing the locks back to a satisfactory condition. Such a phased approach may
 include immediate repairs that would bring the Locks to adequate operational level, and longer term works that
 would both strengthen the functioning of the Locks as well as render the system more efficient overall;

The caissons are likely to be of a condition to be suitable for further use with only minor repairs needed. Other smaller maintenance works may be needed;

- Initial funds should focus on the sills to ensure they are sound and any work required to ensure that the caisson is in operable conditions;
- The financial input needed to re-establish the lock system to an acceptable level pending continued financing of a maintenance system is of approximately £ 3.5 million.

2.2 Findings of the financial viability report

Peel L&P have made a number of claims about the financial viability of the port operation. This includes that the future operation of Chatham Docks port is becoming financially unviable and unsustainable due to the investment required in the infrastructure for the long-term⁴.

In response to this, the financial viability report produced in 2021 by Crossley Group Chartered Accountants notes the following:

- The return on capital employed is above the expected average;
- The service charge for the site at best reach a break-even basis for the general maintenance of the site;
- A break-even position could in fact be considered an indicator of viability;
- The overall return and level of rental income should be sufficient to rectify the historical lack of maintenance and repairs of the Docks;
- There is potential for further opportunities to increase returns;

⁴ https://peellandp.co.uk/news-and-views/news/chatham-waters-and-chatham-docks-update-december-2019/



• The site of Chatham Docks is economically viable as a commercial port;

The above findings are based on a number of assumptions regarding costs. These include:

- Maintenance costs estimated of £350,000 in view of the need to make up for overdue maintenance. It is assumed that if regular maintenance was undertaken this would range from £100,000 to £200,000 per year.
- The capital spending estimate of up to £5,000,000.

2.3 Financial viability of the operation

The financial viability report produced by Crossley Accountants suggests a return on capital employed (ROCE) of between 6% and 19% for the landowner, above the average for the industry. This is based on a number of assumptions, including additional capital expenditure to be a maximum of £5,000,000.00 in order to achieve serviceable condition on the lock gates.

If funds available were not a constraint, the APB report suggests that the cost of commissioning a new lock system in its entirety would be approximately £12,188,000.00 including the South and North Lock. The APB report however also confirms that the locks can be made serviceable with a cost of £3,500,000.00.

This implies that the ROCE ratio, all other assumptions staying the same, would be even higher than the ratio suggested by the Crossley report. This further strengthens the argument that Chatham Docks is financially viable by increasing the ROCE ratios further.



3 Maintenance needs of the lock system

3.1 Maintenance requirements and costs

One of the key findings of the APB report is the absolute necessity of complying with the maintenance schedule of the locks system and the port more generally. The basic starting point for this would include:

- Mid-term inspection every 5 years (allocated budget for inspection)
- Full- term inspection every 10 years (allocated budget for inspection)

The above would need to include the maintenance of the locks including mechanical electrical and hydraulic systems any time between the five- and ten-years refit and refurbishment cycles.

In addition to regulatory and policy compliance, there are two further key reasons for ensuring the schedules are in place and respected. The first is that the lack of adequate maintenance leads to increased costs over the long run. The second is the importance of the locks to ensure that pollution if spilled into the dock area does not impact the conservation of rare species and habitats and the role played by the locks in forming a barrier to resist tidal flooding.

As noted by the APB report, the potential recovery costs to businesses would likely far exceed the full lock replacement cost of flooding of the port surrounding area occurs⁵.

As of today, an appropriate schedule for this would include:

- Full inspection to be carried out in 2021. Budget £30,000.00.
- A budget of approximately £3.5 million to re-establish the Lock system to an acceptable level.

At the time the new lease is granted, works may include:

- Caisson repairs between £100,000.00 to £2,400,000.00 per caisson.
- Granite sills repairs at £100,000.00 per sill.
- Cofferdam construction to carry out the repairs to the sills at £150,000.00 per Lock system.

The above could be financed with an annual budget of between £50,000.00 and £100,000.00.

Maintaining the locks would become uneconomical if the costs associated with doing so exceed the cost of building a new caisson. The finding from the APB report suggests that the maintenance costs would be lower than the above, therefore confirming that maintaining the locks from a purely financial perspective is not uneconomical.

3.2 Sunk costs

The life cycle of the locks depends on the extent to which the un-planned, planned, and refurbishment maintenance schedule is respected⁶. If well maintained, internally and externally, *the caisson can have a life-cycle of many years, verging on indefinite life span.*

⁵ APB Report, page 11.

⁶ APB Marine, page 5.



In 2011, two lock gates were refurnished at a cost of £6,000,000.00. Granite sills were not included in the refurbishment. In 2021, ArcelorMittal, the largest tenant, spent £3 million to remain at Chatham Docks. These investments were made on the basis that the port operation was and would continue to be financially viable, and that the lease would be renewed after the expiry in 2025. This was also based on the assurance provided by the then existing planning designations for the Docks issued by Medway Council.

These investments would be rendered null if the port operation was to cease, therefore implying wastage of resources as well as annulled plans for growth and development of the facility as a working port.

3.1 Sinking fund and other options

3.1.1 Sinking and other forward funding mechanisms

It is understood that the Lock system at Chatham Docks once benefitted from a sinking fund used to finance maintenance activities. A sinking fund is a fund formed by periodically setting aside money for the replacement of a wasting asset. RICS⁷ professional standards and guidance provide information and best practices regarding sinking funds and other mechanisms to ensure maintenance budgets are applied⁸.

As noted by RICS, where a landlord collects money for anticipated future expenditure over time, the problem for tenants has been that they are at risk of becoming unsecured creditors if the landlord becomes insolvent or the landlord fails to undertake the works in a timely and comprehensive manner, or at all. This applies to Chatham Docks. RICS therefore suggests that the solution is the creation of a sinking fund held on trust for the tenants from time to time, into which contributions are paid by the tenants (and the landlord in respect of any voids) and in which funds accumulate until such time as they are required.

Different sinking fund arrangement have different tax consequences and this needs to be explored. That said, the owner or a managing agent can take charge of the fund. Key highlights regarding best practices relevant to the Chatham Docks situation and options to move forward include:

- A clear policy is to be put in place referring to the purpose for which the monies are being built up.
- Transparency of information regarding the fund must be upheld
- In the case of more substantial funds, it may be advisable to have a formal trust deed setting out the arrangements, trustees, etc.
- At the same time that other occupiers are making their contributions, the owner should contribute to the fund for any void properties as though he or she was the occupier.
- Sinking funds remain part of the service charge, and all payments made out of the fund should be clearly communicated to occupiers, and included as part of the annual reconciliation of the service charge.
- The nature of sinking funds means that they are best suited to being collected over the life of the item for which they are intended. Where major works are anticipated in the relatively short term, and it is decided to spread the cost during the period leading up to the point at which the expenditure was incurred, this then becomes a reserve rather than a sinking fund.

⁷ https://www.rics.org/uk/

⁸ https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/real-estate/service-charges-in-commercial-property-1st-edition.pdf



Other forms of forward funding include reserve funds and agreed contributions for future works. Agreed contributions for future works refers to forward funding of major projects but where the lease does not allow for a sinking or reserve fund to be set up. This is a voluntary arrangement and must therefore be agreed in writing between the owners and individual occupiers and full details provided within the notes to the service charge expenditure report⁹.

3.1.1 Change of ownership

Change of ownership is also a clear option. The objective would be to instil confidence in the tenants of the port about their business and allow the development of strategic plans to growth the business and therefore asset utilisation further. An example of the impact that lack of assurances regarding lease renewal is investments related to renewable energy, which form part of the core objectives of local and national government. Tenants at Chatham Docks have in the past approached suppliers to investigate the viability of installing solar panels at the port. Unfortunately, suppliers require solid assurances regarding length of the lease and other conditions before agreeing to providing the service.

Investments such as those required to foster the greening of the port and operations are not possible without longer term assurances regarding tenancy and maintenance.

⁹ https://www.rics.org/globalassets/rics-website/media/upholding-professional-standards/sector-standards/real-estate/service-charges-in-commercial-property-1st-edition.pdf, page 45.



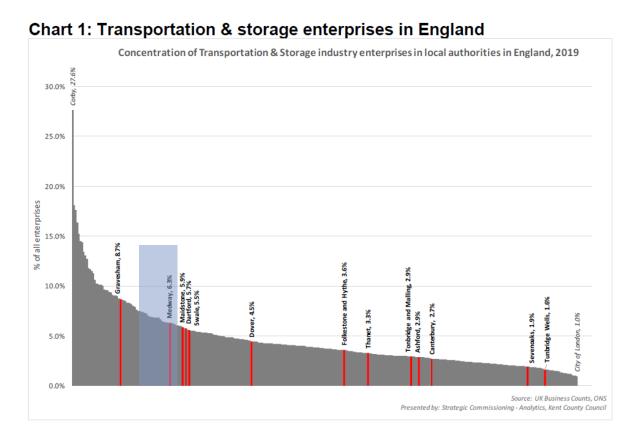
4 Economic significance of the port

4.1 Economics impact

Moving beyond the financial viability of the operation, Government at all levels needs to consider the matter in terms of wider factors such as economic multipliers, capacity building, and the environment, amongst others. Terminating the operation does not make economic sense for the local area for a number of reasons. The key ones are highlighted below.

4.1.1 Reliance of the local economy on the sector

The Medway economy is particularly reliant on the sector comprising the port and associated activities. As shown from the table below, Medway falls second place in terms of concentration of transportation and storage industry enterprises in local authorities in England¹⁰.



4.1.2 Economic multipliers of the sector are higher than residential property

Input-Output analytical tables (Office of National Statistics, 2020)¹¹ provide solid indications of the fact that the economic multipliers of the sector, particularly warehousing and support services for transportation, have much more significant effects on the local economy compared to accommodation related business. The tables

 $^{^{10}\} https://www.kent.gov.uk/_data/assets/pdf_file/0016/105028/Transportation-and-storage-industries-in-Kent.pdf$

 $^{^{11} \} https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/ukinputoutputanalyticaltablesindustrybyindustry$



furthermore ignore manufacturing, which is a key business activity at the existing port. If manufacturing were to be considered, the higher impact would be further confirmed. The numbers are displayed below¹².

2016 Input-Output Analytical Tables - Multipliers and effects (product)

	Products	Output Multiplier	Rank	Employment Cost Multiplier	Rank
30	Retail trade services, except of motor vehicles and motorcycles	1.578	39	1.437	47
34	Warehousing and support services for transportation	1.842	10	1.743	25
36	Accommodation and food services	1.780	14	1.538	41
51	Rental and leasing services	1.507	49	1.491	43

	Products	GVA Multiplier	Rank	FTE Multiplier	Rank
30	Retail trade services, except of motor vehicles and motorcycles	1.467	48	1.336	54
34	Warehousing and support services for transportation	1.840	19	1.700	31
36	Accommodation and food services	1.664	28	1.329	56
51	Rental and leasing services	1.389	54	1.841	29

4.1.1 Quality jobs and skills

Ports are well known to provide quality jobs and the skill capacity development involved is deep. Career opportunities are as broad and tend to be skilled and specialised, not mentioning international in nature. There are opportunities for maritime professionals in port operations, engineering, warehousing, transport, planning, safety, security, and a host of other business areas. In recent years, new national occupational standards, apprenticeships and qualifications have been developed in the UK to support the wide range of sophisticated, modern services offered by UK ports. Many of these schemes recognise and incorporate marine qualifications and experience¹³. *Chatham Docks has in the past supported and can further expand opportunities to create such jobs that benefit the local economy and have multiplier effects across the economy.* This is particularly the case when investments are made and utilisation rates increase to ensure that the facilities are used to their maximum potential.

4.1.2 Environmental opportunities

Ports have an important role to play in the decarbonisation of the economy. The port is very near to London and this is essential to reduce time and cost of trade between Medway and the Capital city¹⁴. It also reduces the amount of freight traveling in and out the capital by road.

¹² Peel Ports operates under code H52.2.2 - Service activities incidental to water transportation (https://ec.europa.eu/competition/mergers/cases/index/by_nace_h_.html#h50_2)

¹³ https://www.portskillsandsafety.co.uk/files/2021-01/PSS%20Annual%20Review%20of%202020%20V1%20%281%29.pdf

¹⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/701352/england-port-connectivity-the-current-picture.pdf

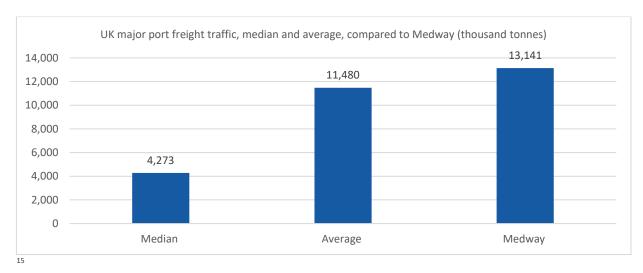


5 Policy and strategic considerations

5.1 One of two pillars of the Medway port cluster

The volumes of cargo handled at Chatham Docks have the potential to grow under the right conditions and planning. The operation forms part of the overall Medway port cluster, which in turn, forms part of the group of major ports network in the UK. Medway Ports handle just over a fifth of 'forestry products' handled by major UK ports, the most handled by any port in the UK. Furthermore, Chatham Docks in particular allows for the importation of aggregates that support the construction industry nearby.

The Medway cluster is a significant operation, reaching volumes that are higher both in terms of median and average traffic of UK ports as of 2019.



Source: Port and domestic waterborne freight statistics: data tables (PORT)

Chatham Docks is a fundamental pillar of this cluster and removing it will impact the benefits that come about with diversifying the maritime freight routes to and from the area. Moving the port operations currently taking place in Chatham to Sheerness, is inefficient for a number of reasons.

Firstly, the port is instrumental in servicing project cargo customers, particularly from the construction industry in the South East and London shipping bulk items. This is facilitated by good roads and deep water. The location makes ideal for importing cargo to nearby manufacturing sites and bulkier project cargo shipments thanks to its inland location, minimising road miles for large items and maximising efficiency and reducing delays caused by road transport. This would likely change if the port was relocated.

Secondly, having two ports rather than one in the cluster diminishes the potential for increased waiting times and disruptions at the port of Sheerness. This, in turn, decreases the chances of losses in competitiveness and increased costs for importers and exporters in the region.

Thirdly, Customers of the port can take advantage of the Ports and logistics network across the UK, allowing cargo to reach origin and destination points by means of maximising the use of water transport modes, which are both cheaper and less susceptible to delays. Relocating this operation is unlikely to be effective from the

¹⁵ https://www.gov.uk/government/statistical-data-sets/port-and-domestic-waterborne-freight-statistics-port#port-and-domestic-waterborne-freight-table-index



point of view of time and cost of trade for traders, leaving a net loss in terms of connectivity and port capacity overall.

5.2 Part of the Covid-19 recovery planning

The UK port sector is expected to see significant change over the next few years, influenced by domestic and international competition/trade wars, climate change, competition in the global logistics chains, and Brexit. These challenges represent both risks and opportunities for individual ports.

In addition to this, the Covid-19 pandemic has caused major issues in the sector. Ports are engines of growth and will play an important role in the recovery process. An important condition for such a recovery is to ensure the short-term financial viability of the maritime industry and the most affected businesses in the port.

Supporting the port in its efforts to grow is an example of how this can be done. The current crisis shows the key and critical role of port infrastructure and well-functioning port operations in ensuring the supply of essential goods and material.

Destroying port capacity in the area, particularly at this time, is likely to undermine the recovery efforts rather than supporting them.

5.3 Logistics strategy for the region

Unlike many other economies around the world that have a few numbers of very large ports handling most of trade flows into and outwards of the national economy, Ports in the UK are either small and medium size in relative terms. The set-up makes the UK particularly effective in terms of flexibility and speed of freight transportation. Preserving existing port infrastructure in the UK is vital for the overall safeguarding and advancement of the UK ports and logistics network and the advantages that such a set-up entail.



6 Conclusions

The decision regarding closing the operation at Chatham Docks is extremely significant because it would become too expensive to reinstate any such operation in the same location in the future. *The decision therefore cannot be undone.*

The information collected and considered in this report confirms that the port operation at Chatham Docks is financially viable both from the point of view of the businesses running the operations as well as the Landlord.

The findings of the report by APB Marine Limited dated March 2021 stating that the lock system at the Docks can be re-established with an estimated cost of £ 3,500,000.00 further confirms this. This evaluation means that the return on capital invested (ROCE) ratio would be even higher than suggested by earlier reports, which assumed higher costs, and also already confirmed more than adequate returns for the Landlord.

Adequate and sustained maintenance of the lock system would allow the lock system lifetime to be indefinite. The finding from the APB report suggests that the maintenance costs would be lower than the cost of building a new caisson. In view of the financial viability of the operation, the above means that maintaining the locks from a purely financial perspective is not uneconomical.

Ending the operation to render the land available for alternative uses does not make economic sense for a number of reasons. Firstly, the Medway economy is particularly reliant on the sector comprising the port and associated activities. Secondly. the economic multipliers of the sector, particularly warehousing and support services for transportation, have much more significant effects on the local economy compared to accommodation related business. Thirdly, quality jobs will be lost and the opportunity for the port to generate further quality jobs will also be lost. Finally, the port supports the type of transport modal shifts that the country needs to move towards national carbon emission targets.

From a policy and strategic perspective, terminating the port undermines the Medway port Cluster as a whole and the objectives of strengthening the port and logistics assets of the national economy. The port is instrumental in servicing project cargo customers. Secondly, having two ports rather than one in the cluster diminishes the potential for increased waiting times and disruptions at the port of Sheerness. Customers of the port can take advantage of the Ports and logistics network across the UK by maximising the use of water transportation for freight and therefore increasing trade facilitation measures such as cost and time of trade Overall, destroying port capacity in the area, particularly at this time, is likely to undermine the recovery efforts rather than supporting them.

Preserving existing port infrastructure assets in the UK is vital for the overall safeguarding and advancement of the UK ports and logistics network and the advantages that such a set-up entail.

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