DP World
London Gateway
The definitive guide
Welcome to DP World London Gateway

This is your definitive guide to the UK’s most integrated logistics hub; a sustainable, strategically located, trade enabling centre of excellence on the River Thames.

The deep sea port and logistics park is supported by its own international rail terminal and is situated just 10 miles from the M25 and 28 miles from London, making it an accessible hub for import and export. The site also offers convenient, modern warehousing space, with a logistics park equivalent in size to 400 football pitches - the biggest of its kind in Europe. Facilities offer absolute flexibility, from building size and layout to length of lease.

The port is equipped with top-of-the-range equipment, including some of the largest quay cranes in the world, as well as automation in many areas, such as the truck handling process and stacking yard.

DP World London Gateway offers logistics & shipping companies, retailers and manufacturers a unique opportunity to work more efficiently and sustainably, closer to key consumer markets, in turn reducing road miles and offering a full service on one site.

Why not take a virtual tour?
See the port and Logistics Park in action with our interactive, 360 degree tour.

To find out more contact
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DP World London Gateway Port
DP World London Gateway Port

• DP World London Gateway currently has three berths, all with water at a depth of 17m chart datum

• There is the opportunity to develop three more deep-water berths, in line with market demand

• Current capacity with three berths is 2.4million TEU (twenty foot equivalent units)

• The port is among the fastest growing in the world. TEU throughput grew by 35% in 2017

• With its sister terminal, DP World Southampton, DP World London Gateway is able to offer a two-port solution. This means both ports can offer operational back up to each other, a unique offering in the UK.

The port grew by 35% in 2017, making it one of the world’s fastest growing
Ship-side & quay cranes

- The quay cranes are among the largest in the world. With the boom up, they’re the same height as the London Eye.
- They weigh 2000 tons and sit on two quay walls which are set almost 50m deep into the ground.
- The quay cranes were constructed by ZPMC in China and shipped to DP World London Gateway whole - a voyage that takes at least two months.
- They are capable of lifting four 20ft containers (quad lift) or two 40ft containers (tandem lift) off or on a ship in one go.
- There are 12 quay cranes, sitting on 1250m of quayside for three berths.
- The quay crane driver sits 52m above the ground. Pinners, who couple and uncouple twist locks from containers as they’re loaded/unloaded, operate on a platform around 20m off the ground.
- The distance from the quay line to cranes furthest outreach is 70m/25 container widths.
- They can operate in winds of up to 25m/s.
- The air draft of the cranes enables them to work containers stacked 11 high on deck.
- They can lift up to 80 tonnes in tandem/quad mode.
- Quay cranes 9 – 12 have remote control capability and can be driven from the terminal’s control building.
- For improved health and safety, DP World London Gateway’s operations team has introduced mooring vehicles to assist with tethering vessels to the quayside on arrival.

Quay cranes can operate in winds of up to 25m/s
Shuttle carriers

- Shuttle carriers are machines which pick up and move containers between the back reach of the quay crane and the automated container stacking area
- There are currently 40 of them, all manually operated
- But they have the potential to be automated
- Currently the port uses 11 hybrid shuttle carriers (the 12th has been converted to be fully electric), which reduces fuel consumption by 40%

Fully electric shuttle carriers
- The port is trialling the first ever fully electric shuttle carrier and FastCharge system with supplier Kalmar (a Finnish company)
- This enables the battery of the shuttle to be fully charged, every hour, in just 360 seconds.
- They are locally emission free
- They require less maintenance
- And are more energy efficient in comparison to diesel-electrics.

The port is trialling the first ever fully electric shuttle carrier and FastCharge system.
Automation

The logistics and supply chain industry is introducing ever-increasing levels of automation, in everything from trucks (platooning) and in warehouses and factories, to ports.

Automation at DP World London Gateway comes via its gate system, truck handling, stack management, shuttle carrier management systems (and potential to one day fully automate shuttle carriers) and through optical character recognition on quay cranes.

Automation:

- Is better for the environment
- Requires less light
- Is more efficient
- Is process-led
- Is safer because it removes people from dangerous areas
- Is highly reliable
- Locally carbon emission free
- Is not replacing jobs. Rather, it is leading to a skill-set shift. Automation is creating more and new jobs in I.T, planning, engineering and control. Using automation to do some of the more dangerous work previously done by humans frees up staff to work in other areas.
Automated stacking yard

- DP World London Gateway uses 60 automated stacking cranes (ASC); 30 for landside operations, 30 for shipside. These operate across 30 modules, each with six vehicle bays
- The stack has 1,800 reefer plugs for plugging in temperature controlled containers
- The quay cranes were constructed by ZPMC in China and shipped to DP World London Gateway whole - a voyage that takes at least two months
- Because people are removed from dangerous areas, landside operations and truck handling can continue in weather that normally causes ports to close. Since opening in 2013, DP World London Gateway has been closed for fewer than 10 hours because of wind
- One ASC can lift 41 tonnes under the spreader
- The crane can straddle up to one over five high cube (9’6”) containers
- Trucks are turned around within the port in an average time of approximately 35 minutes
- The automated stacking cranes which manage the container yard/stack, deliver containers to both the quayside interchange zone (for shuttle carriers) and to the landside interchange zone (where containers are delivered to/collected from cassettes [and then taken to the rail terminal or inspection facilities] or to waiting trucks)
- Internal tractors and translifters ‘shunt’ or move containers loaded onto cassettes between the border inspection buildings and the rail terminal
- The cassette handling system means containers can be dropped off and collected, allowing terminal tractors to be utilised in the most efficient ways.

The average truck turnaround time is 35 minutes

An ASC can lift 41 tonnes under the spreader

05
The automated truck handling process

• All container transactions have to be booked through the Vehicle Booking System at least one hour in advance and all drivers have to undergo training and be registered

• At the main gate, drivers receive a ticket telling them which module they need to go to for each transaction. If the terminal is not quite ready to service them, they are asked to hold in the Call Forward Zone and wait for the registration number of their vehicle to appear

• Once they arrive at the module, they reverse in to any of the six bays. They must ensure the trailer is within the yellow lines. The driver then gets out of the truck. If they are delivering an export container to the terminal, they are required to undo the twistlocks (un-couple the container from the trailer) before proceeding. They then go up to the pedestal/computer. They are prompted, first, to confirm whether they are in the bay to the left or the right of the pedestal and confirm that twist locks are ready. The driver is then asked to return to their vehicle until it is their turn to be serviced

• Once the ASC is ready to complete the transaction, an orange light on top of the pedestal and a beeping sound alert the driver to get out of their cab and return to the pedestal

• The spreader of the crane lines up with the top of the container using 3D scanners, sensors and lasers. One of these is positioned at the back of the bays (it looks a little bit like a standing lamp and lamp shade). This guides the container onto/off of the trailer

• The driver is requested to press a black presence button to tell the crane that he is a safe distance away. An invisible light curtain across the front of the cab will also cause the crane to cut out if it is broken

• If there is a problem, the cranes can go into over-ride mode and be driven remotely from the control room by an operator.

The port, on average, is currently handling around 1300 truck visits per day
The rail terminal

- DP World London Gateway’s international rail terminal is one of the longest in the UK at 775m.
- It has six sidings, meaning six lengths of wagons can be loaded and unloaded at any one time.
- Three rail mounted gantry (RMG) cranes work to load and unload containers from wagons onto cassettes.
- Around 45 services per week arrive and depart to and from major freight hubs in the UK, Europe and Asia.
- The first ever UK to China export train departed from London Gateway on the 3000-mile long journey to Yiwu, China, in April.
- One container freight train has the ability to take more than 70 trucks off of the road.
- Around 25% of DP World London Gateway’s current throughput is moved by rail.
Border control & inspections

• DP World London Gateway has Authorised Economic Operator Status (AEO). AEO status is an internationally recognised quality mark, indicating that the port’s role in the supply chain is secure, and that all customs controls and procedures are efficient and compliant.

• It isn’t mandatory, but gives quicker access to certain simplified customs procedures and in some cases the right to ‘fast-track’ shipments through some customs and safety and security procedures.

• 0.2% of traders in the UK have AEO status, 10x fewer than Germany.

• Post-Brexit, there will be a whole host of new obligations which traders will have to comply with, on both sides of the Channel. By having AEO status, DP World London Gateway is ready to assist businesses with potential impacts of any new, stringent customs regime.

DP World London Gateway has a 200,000 sq ft state-of-the-art complex designed in conjunction with UK authorities. UK Customs and Border Control fully integrated with DP World London Gateway internal processes/systems.

Border Control Post
• Managed by Port Health & DEFRA
• 22 inspection bays:
  • Nine for inspection of products of animal origin
  • Seven bays dedicated to inspection of products for human consumption;
  • Two for inspection of products not for human consumption
  • Includes HMRC-issued banana weighing license.

Customs Examination Area
• Eight inspection bays
• Managed by UK Border Force.

DP World London Gateway works with port users to ensure containers of cargo requiring inspection are presented to the authorities in minimal time, so that that cargo can be released for collection.
Container ships

- The world’s largest container ships are 400m long, 60m wide and can carry more than 21,500 TEU containers

- The largest container ship to ever call at DP World London Gateway is the 20,568 TEU measuring 399m x 58.6m *Monaco Maersk* in January 2018

- They require deeper water, bigger cranes and more space to store the containers that are discharged from them – that’s one reason DP World London Gateway has been built

- 22,000 TEU container ships are on order and will be in operation by mid-2019.

Comparisons facts:

- If you were to take the world’s largest container ship out of the water it would be 100m taller than The Shard and 20m taller than the Empire State Building

- If you were to stack 22,000 containers on top of each other, the stack would be six times higher than Mount Everest.
Containers

• There are 17 million containers in circulation around the world at any one time.

• The container was invented in 1956 by an American entrepreneur called Malcolm McLean. Almost from the first voyage, use of this method of transport for goods grew steadily and in just five decades, containerships would carry about 60% of the value of goods shipped via sea.

A 20-foot container can hold

• 200 full size mattresses
• 48,000 bananas
• 50-60 refrigerators
• 400 flat screen tv’s

More than 75% of the world’s manufactured goods are moved in shipping containers.
Shipping services

- DP World London Gateway is now connected to more than 110 unique ports in 60 countries, the most of any UK deep-sea port.

- As of August 2018, DP World London Gateway had 21 weekly services calling

- The port handles cargo going to and from China, Vietnam, Thailand, Singapore, Australia, Sri Lanka, Brazil, Argentina, USA, Mediterranean, the Middle East, India, South Africa, West Africa, Russia and many more

- DP World London Gateway Port handles the majority of southern hemisphere containerised traffic into the UK.
Logistics Park

DP World London Gateway Logistics Park is covered by a local development order, meaning planning consent for 9.25 million sq ft of warehousing can be obtained in less than 28 days.

The Logistics Park is equivalent in size to 400 football pitches - the biggest of its kind in Europe.

It offers absolute flexibility, from building size and spec, to lease length.

- Units of up to 1.2 million sq ft can be developed, with flexibility right at the heart of the offering. Flexibility in terms of building size, configuration, specification and lease length.

- There are units built speculatively, available for immediate occupation, and land ready for bespoke design & build solutions.

- Buildings between 100,000 and 220,000 sq ft can be delivered in nine months.

- The Logistics Park will eventually be home a workforce of around 10,000 people. 3.1m workers live within a 45 minute drive and 80% of the local resident population (aged 16-74) is economically active with an 85% increase in the local resident working age population expected by 2025.

Logistics Centre, a 155,000 sq ft, cross docked (or double-sided) facility is currently available for immediate occupation on flexible lease length terms.
In October, UPS’s London Hub became operational. It was formally opened by Chris Grayling, the Secretary of State for Transport, in May 2018.

- The London Hub is a state-of-the-art parcel sorting hub, using high levels of automation. The building can be expanded but the first phase is able to process 28,000 packages an hour.
- The facility is 345,000 sq ft in size and is UPS’s largest ever infrastructure investment outside of the USA.
- The London Hub is currently handling parcels/packages inbound from Europe, before distributing them to smaller centres in the south east. From there, parcels are delivered direct to businesses and homes. This is called a ‘hub and spoke’ model.
- More than 500 people will operate out of the facility, working with four miles of conveyor belts.
- On opening the facility, UPS stated that the new facility strengthens its cross-border capabilities, enhancing trade with mainland Europe.
Lidl at DP World London Gateway

- Lidl, one of the fastest growing grocery retailers in the UK, operates out of Phase One of the DP World London Gateway Logistics Centre
- It took occupancy in the Spring of 2017
- It is distributing products to its South East network of UK stores
- Phase One of the Logistics Centre comprises 180,000 sq ft of warehousing. A three storey office block is also home to John Good Shipping, Westbound Shipping Services and Estuary Waste Management.
Dixons Carphone at DP World London Gateway

- Dixons Carphone, a multinational electrical and telecommunications retailer and services company, is distributing goods to stores and homes from Plot 3010 at DP World London Gateway.
- This 316,000 sq ft facility was built as a joint venture with one of the world’s largest industrial real estate developers, Prologis.
- Dixons Carphone operates one of its KnowHow customer services centres out of the facility.
- It initially moved into the building to fulfil a requirement for Black Friday and Christmas, two significant seasonal peaks for retailers which puts pressure on their supply chains.
- Dixons Carphone began occupying the facility in October 2017.
SH Pratt Group – Halo

• SH Pratt Group, one of Europe’s leading fruit importers, has taken a lease on a bespoke temperature-controlled facility at DP World London Gateway Logistics Park

• ‘Halo’ will be sited at the 108,555 sq ft facility, integrated with DP World London Gateway’s Port, ensuring a more sustainable supply chain, cutting waste, cost and time to market, increasing freshness

• Construction started in early 2018 and the facility will be operational by late 2018

• In June 2018, DP World London Gateway handed the building over to Halo, complete and ready for tenant enhancements. Construction of the facility was completed in less than 24 weeks, under budget and within just eight months of the planning application first being submitted.

• Halo is a new venture for SH Pratt Group, which currently import between 25-30 million bananas per week into the UK. This new venture will handle soft and citrus fruits such as lemon and grapes, which arrive into the UK through DP World London Gateway Port

• It will consist of a number of chambers; frozen and refrigerated.
CMA CGM multi-temperature facility

- CMA CGM, a world leader in maritime transport, is to take a long-term lease and invest in a build-to-suit, multi-temperature warehouse facility at DP World London Gateway Logistics Park.

- The CMA CGM Group will occupy, through its international freight forwarding and logistics solutions subsidiary, a one hectare cold store facility within a 2.4 hectare logistics plot.

- This state-of-the-art facility, fitted with IT traceability and management systems, represents a major milestone for the CMA CGM Group’s strategy to develop a global range of products in maritime transportation but also in inland solutions and logistics.

- The facility will feature chilled and frozen chambers to handle a large variety of temperature-controlled products, but it will also offer customers a wide range of added-value services such as product quality controls, packing, sorting, labelling, palletisation or bagging. It will also offer customs clearance, shunting (transfer from the quay to the warehouse) and delivery transportation (last-mile delivery).

- Work will start later in 2018, and the facility will become operational in early summer of 2019.

- The CMA CGM Group, the world’s second largest carrier of reefer containers, is currently bringing cargo through DP World London Gateway Port on seven services. This includes large numbers of refrigerated containers arriving from the Caribbean, Australia, New Zealand, India and South America.
DP World London Gateway has opened a 13.5 acre truck parking facility on land known as “The Tongue Land”. This provides truck parking for vehicles using the port.

- A 5.5 acre common-user facility is operated by Hireco. The site features 169 bays for trucks and trailers. With ANPR activated gates, the park is open 24 hours a day, 7 days a week. Trucks can roll in, have their number plates scanned and roll out after their stop.

- There are designated bays for contract customers, cash and card pay stations for casual customers and an app-based payment system may come later.

- By November, the facility will be fully equipped with separate male and female toilets and showers, a café/restaurant and vending machines. Drivers can grab something to eat whether they’re staying all night or just popping in for a quick rest.

The rest of the truck park is split into four yards:

- ATL Haulage Contractors occupies one yard of 2.64 acres and provides parking for up to 80 trucks. The yard is also the haulier’s operational headquarters.

- Wincanton occupies a 2.64 acre yard

- Seven Lincs occupies a yard of 1.3 acres

- A further 1.3 acres is currently available for lease

Maritime Transport operates its own truck parking facility on the Logistics Park. Hireco is also developing a centre on land to the north of the Logistics Park.
Off-dock container storage yards

DP World London Gateway has two empty container yards, both located adjacent to the port’s main gate.

**Solent Stevedores:** operate a five acre yard which opened in April 2018. Solent Stevedores provides a broad range of bulk and general cargo handling and storage services at ports in Southampton, Jersey, Immingham and London. From the site it offers a range of container services.

**Pentalver:** operates a nine acre yard. The first phase opened in 2015 and the second phase opened in 2018. It offers a large range of services to container shipping service providers.
A fully integrated logistics development
Connectivity and a market-centric location

DP World London Gateway combines a state-of-the-art deep sea container port with an international rail terminal and land for the development of up to 9.25 million sq ft of warehousing, distribution and/or manufacturing space. This provides:

- Shippers with the ability to significantly reduce the number of miles they truck goods and empty containers between ports and inland distribution centres. In turn, this enables shippers and cargo owners with the chance to reduce the carbon footprint of their operations.

- The integration - or ‘micro supply chain’ characteristics - of the site means there is route choice and resilience when it comes to moving goods in and out, to all parts of the UK and into Europe.

The port and Logistics Park sits in a strategic location:

- 28 miles from Central London (Covent Garden)
- 10 miles from the M25
- 100 miles from the UK’s ‘golden triangle of distribution’ in the Midlands, to the M6 via the M1
- Less than two miles from the A13 with short links to the A127, A128 and A130 - all major A roads
- Eight miles from the Port of Tilbury
- With rail connectivity to all corners of the UK and into mainland Europe via the Channel Tunnel.
Investment in infrastructure

• DP World London Gateway is expected to add £3.2 billion to the economy each year

• It has not received any public funding, making it one of the UK’s largest privately funded infrastructure projects in the last 30 years

• To date, DP World has invested c.£1.5 billion in developing DP World London Gateway.

Expenditure on off-site roads projects

In addition to on-site infrastructure investment, DP World has invested in off-site infrastructure to considerably improve access to site:

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<th>Project Description</th>
<th>Cost</th>
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<td>M25 Junction 30 Interim Scheme</td>
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<tr>
<td>A13 / A1014 grade separated junction initial and final scheme</td>
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<td>Port access road &amp; Sorrells roundabout</td>
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<td>CECL &amp; Intergen pipeline</td>
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<tr>
<td>Total</td>
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People

• DP World London Gateway’s people are its most important asset: since 2011, the port has created more than 500 new jobs – from engineers and crane drivers, to vessel planners and IT analysts

• Once fully built out, DP World London Gateway Port will employ around 2000 people. Tenants and operators on the Logistics Park will employ around 10,000 people. It is estimated that the port and Logistics Park will create, in total, around 36,000 direct and indirect jobs

• DP World London Gateway employs a team of supply chain experts ready and able to collaborate with shippers and cargo owners to streamline their supply chains

• The technology employed at the port has led to DP World being able to create a diverse workforce, shifting the typical port stereotype. For instance, the port recruited and trained the UK’s first ever female quay crane driver and now employs more women as a percentage of total workforce than any other deep-sea port in the UK

• Around 20% of DP World London Gateway’s workforce is female and in 2017, the gender pay gap at the port was 0.63%

• DP World London Gateway currently has 12 apprentices, 10 engineering apprentices, one in fabricating and welding and one in business administration.

• 85% of our current employees live within a 35-minute drive of DP World London Gateway

• 20% of our employees live in the nearest town to DP World London Gateway.
Sustainability

DP World is committed to minimising its impact on the environment, invest in and ensure the safety of its people and build a vibrant, secure and resilient society through strategic investment.

DP World London Gateway has:

• Worked with 2500 local school pupils
• Shown more than 3000 local residents around the port and park in three years for community insight days
• Sponsored both Corringham Christmas Lights and the Thurrock Education Awards
• Created work for more than 100 Thurrock business’
• Sponsored 137 employees to volunteer in 2017
• Supported 86 organisations in 2017
• Ensured that its community investments and volunteering work benefited 2017 people
• Committed to eliminating all single-use plastic (under its control) from site by the end of 2019.
Environmental work at DP World London Gateway

- Through the course of construction, DP World London Gateway has moved more than 350,000 animals off site into newly created habitats and to existing habits in other areas of the country.

- To compensate for the loss of intertidal mudflat caused by construction of the port, DP World created more than 70 hectares of new mudflats at Stanford Wharf Nature Reserve in Essex and Salt Fleet Flats in North Kent. The habitats are perfect for water-wading birds.

- The RSPB now runs Stanford Wharf Nature Reserve for wildlife and the public. It is a perfect spot to watch ships come and go from the port.

- DP World London Gateway created 56 ponds for Great Crested Newts during construction – enough pond water to fill 16 Olympic swimming pools.

- DP World London Gateway Port is constantly striving to lower its carbon emissions; it has been awarded the Planet Mark Certification for its commitment to lower emissions per container by 2.5% annually.

- Beneath The Manorway, DP World has constructed tunnels for Great Crested Newts so they can migrate to new habitats.

- DP World used scrap materials, such as timber, to create hibernaculas for reptiles on land around the perimeter of the port and Logistics Park.

- The site is encircled by miles of ecological fencing to prevent animals from getting back onto the site.
Archaeological finds during construction

While dredging a 100km channel, removing 28million cubic metres of silt (enough to fill Wembley stadium with silt eight times!), from the River Thames to ensure it was deep enough for the world’s largest vessels, more than 650 objects of archaeological significance were found.

**These included:**

- A German Junkers 88 spy plane, shot down in 1942 while on a reconnaissance mission over Chelmsford
- Dozens of unexploded bombs
- A Roman salt works
- The HMS London, a ship wrecked by gunpowder in the 17th Century.
Charitable work

• More than £200,000 has been raised at annual charity quizzes over the past five years. Raising money for: Thurrock Food Bank, Little Havens Hospice and Meningitis Now

• A three-year partnership with The Prince’s Trust, part funding Get-into-Logistics Programmes which help develop key skills, confidence and motivation, enabling young people to move into work, education or training. Around 14 young people aged 18 – 30 who are interested in a career in the logistics sector will be selected from the Basildon, Southend and Thurrock area

• East Thurrock Football Club and Treetops specialist school for disabled pupils. DP World London Gateway are part funding a PE teaching assistant to increase their sports provision for pupils. Treetops can now schedule sport activities for pupils and small groups as part of the curriculum as well as extracurricular sporting activity. Young people who were previously not able to take part in any supervised sporting activity now have the opportunity to do so. DP World hopes that this will have a massive impact on their quality of life and sense of wellbeing

• Seafarers: Queen Victoria Seamens Rest: DP World is funding the upgrade of the seafarers room at London Gateway and funding a minibus to transport seafarers between London Gateway and Tilbury seafarers centre when vessels are in port for long enough

• Essex Skills Board Logistics Action Group Virtual reality programme. DP World is funding a virtual reality port specific experience to be developed and delivered to every secondary school and job centre in Essex as part of career and job fair events. With the aim of raising awareness of careers within the logistics industry. This is part of a package of five VR experiences the group are developing.
Brexit

- DP World is an enabler of trade, able to facilitate the swift and seamless movement of goods between the UK and any of its global trading partners.

- No matter where goods are arriving from or going to, DP World London Gateway can collaborate with shippers and cargo owners on bespoke solutions to ensure trade in a post-Brexit world is as frictionless as possible.

- It has the integrated, multimodal supply chain assets and technology to find solutions to any major challenges posed by Brexit.

- While approximately 90% of cargo coming through the port now is non-European, DP World London Gateway already has facilities, such as a state-of-the-art border inspection facility, an internationally connected rail terminal and more, which could be leveraged to ensure trade continues to flow with minimal disruption.