



## A GUIDE TO MAXIMISING EFFICIENCIES IN THE SEA FREIGHT CONTAINER SUPPLY CHAIN



**The key to an efficient supply chain is timely and accurate information. Most of the inefficiencies in the sea freight supply chain are the result of inadequate, late, inaccurate, ambiguous, or no information being provided by parties to other parties in the chain.**

## Introduction

The sea freight container supply chain involves many parties and relies on accurate and timely information being transmitted amongst the parties. Inefficiencies affect all parties in the chain and can result in delays and increased costs for importers and exporters.

The objectives of this Guide are to:

- Describe the potential causes of, or reasons for, inefficiencies or delays in the sea freight container supply chain; and
- Identify measures which can be taken by supply chain parties to maximise efficiencies.

## Who comprises the Sea Freight Supply Chain?

Parties	What they do
<b>Importers</b>	Before taking delivery of cargo, importers must: <ul style="list-style-type: none"> <li>• Obtain a 'Delivery Order' from the shipping line or freight forwarder in return for a Bill of Lading and payment of freight and service charges; and</li> <li>• Complete all import declaration statutory (Customs, AQIS, etc.) requirements.</li> </ul>
<b>Exporters</b>	Before delivering containerised cargo to the wharves, exporters must: <ul style="list-style-type: none"> <li>• Arrange the physical transport of cargo through a freight forwarder or direct through a shipping line; and</li> <li>• Complete all export declaration statutory (Customs, AQIS) requirements.</li> </ul>
<b>Freight Forwarders</b>	Arrange international transport of freight on behalf of importers and exporters. Most also offer the service of a customs broker/export agent to complete the statutory requirements on behalf of clients.
<b>Customs Brokers</b>	Are licensed by Customs to complete import declaration requirements on behalf of importers.
<b>Export Agents</b>	Complete some or all of the export processes on behalf of exporters. They are not licensed.
<b>Stevedores</b>	Load and unload containers from ships and arrange for containers to be received from, and delivered to, transport companies.
<b>Shipping Lines</b>	Provide relevant authorities/ports/terminals with details of cargo on board the vessel, on receiving vessel arrival and manifest information.
<b>Container Parks</b>	Store empty containers on behalf of shipping lines, and provide off-hire delivery points and receipt depots for off-hired containers.
<b>Road Transport Operators</b>	Transport containers to and from the wharves on behalf of importers, exporters and freight forwarders.
<b>Rail Operators</b>	Transport containers to and from the Brisbane Multimodal Terminal (BMT) on behalf of importers, exporters, and freight forwarders.
<b>Container Freight Station (CFS) Operators</b>	CFS operators offer a number of services on a 24/7 basis, to cater for the extended hours of stevedore operations and the often limited hours of operation of importers, exporters, and freight forwarders. These services include container packing and unpacking, consolidation and deconsolidation of FCL (full container load) cargo and LCL (less than container load) cargo, holding and storing cargo, and the provision of 'staging' arrangements and/or 'interim' depots.



<b>Australian Customs Service (ACS)</b>	<p>Customs protects Australia's borders from the entry of illegal or harmful goods. It intercepts prohibited or restricted items including illicit drugs, weapons, pornography, and quarantine items. Customs also collects import duty and indirect taxes on imported goods. All sea cargo is risk assessed by Customs and around 5% of containers are inspected through the use of container x-ray technology.</p> <p>Containers selected for examination are 'held' by Customs and transported from the stevedores' terminal to the x-ray facility. Once the inspection is finished, containers are transported back to the stevedores' terminal before being released. As a result of the x-ray, some containers are opened and physically inspected by Customs staff.</p>
<b>Australian Quarantine and Inspection Service (AQIS)</b>	<p>AQIS is charged with protecting Australia's agricultural industries and natural environment from exotic pests and diseases. In order to do this, AQIS undertakes quarantine intervention and inspection of containers:</p> <ul style="list-style-type: none"> <li>• AQIS inspects all import containers containing material of quarantine concern; and</li> <li>• AQIS inspects the external surfaces of all import containers that exit container terminals and wharf areas.</li> </ul>

### Glossary of terms

Term	Definition or Meaning
<b>B/L</b>	<p>The Bill of Lading (B/L) is the transport document commonly used for sea freight shipments. It is a legal document under which cargo is accepted for carriage on board a vessel. It is issued by the shipping line/owner. A B/L is both evidence of the contract of affreightment, and a document of title. The consignee may take delivery of the goods at the destination, or transfer them to another person by endorsing the B/L. When using a B/L, cargo cannot be delivered without presentation of an original copy of the B/L. A B/L must be suitably endorsed and stamped by the parties involved in the shipment (requirements will vary depending on the consignee nominated on the B/L). If using an agent to present the B/L, the agent needs to have written authority from the consignee to collect the cargo eg. a Delivery Order (D/O). Where the sale of goods is under a Letter of Credit (L/C), the B/L must comply with the L/C in all respects, including spelling.</p> <p>Virtually all the information contained on the Interim Receipt/Forwarding instruction will appear on the B/L. The shipping line issues a 'Master' B/L which covers the full container. 'House' B/Ls, which are issued by freight forwarders, cover individual shipments which may have been loaded into a container with other exporters' shipments, and consolidated by the freight forwarder.</p>
<b>Bulk Run</b>	<p>A bulk shipment of containers (empty or full) for one consignee, or a number of shipments for different consignees which are bundled together to constitute a 'bulk run'.</p>
<b>CoR</b>	<p>Chain of Responsibility, is a term coined for the principle underlying the Road Transport Reform agenda of the federal Government, aimed at improving compliance by industry to regulations relating to mass limits, dimension and load restraint, vehicle standards, speeding of heavy vehicles, and driving hours.</p>
<b>CWD</b>	<p>Container Weight Declaration, is a declaration that states or purports to state the weight of a freight container and its contents. It is expected that this new provision will be operative in 2008.</p>
<b>CRN</b>	<p>Consolidation Reference Number, is a Customs term.</p>
<b>D/O</b>	<p>Delivery Order, is a cargo release document, which is provided by shipping companies given in exchange for an original B/L, Seaway Bill, or email-released B/L. It is issued by shipping companies to enable consignees to collect containers/cargo ex-wharf.</p>
<b>EDN</b>	<p>Export Declaration Number. Permits are required for all exports over the value of \$2,000 per consignment. Goods may not be exported unless they have been entered for export using an Export Declaration (some exemptions apply), and Customs has given approval for export by means of a "cleared" EDN.</p>
<b>ERA</b>	<p>Export Reveal Advice, is a mandatory document for receiving full container loads into an export terminal/wharf.</p>
<b>EIDO</b>	<p>Electronic Import Delivery Order, is an electronic form of the Delivery Order (D/O).</p>
<b>GAS</b>	<p>Giant African Snail.</p>



<b>Letter of Credit</b>	A commercial instrument for organising payments. They offer security and minimise risk and are available through banks.
<b>PRA</b>	Electronic Pre-Receipt Advice, is a stevedores' document to enter the international terminals.
<b>SWB</b>	The Sea Waybill (SWB) is a receipt for the goods, showing details of agreed shipping arrangements eg, route, vessel, description of goods. The SWB is, unlike a B/L, not a 'document of title', not negotiable, and the title to the goods cannot be transferred during transit. In effect it is evidence that the carrier has taken over the goods for the purpose of transport. The SWB simplifies documentation by eliminating the need for the physical transfer of paper documents eg. a B/L.
<b>TEU</b>	Twenty foot equivalent unit i.e. 20ft container.
<b>VBS</b>	Vehicle Booking System, is a web-based booking system which allows carriers to organise the pick up and delivery of shipping containers to/from the wharf. Carriers must be registered with the relevant terminal to use the system and once approved are able to book time slots within specified time zones.

### DISCLAIMER

**The information contained in this Guide is of a general nature and does not consider the reader's specific circumstances. Port of Brisbane Corporation Limited does not give any warranty as to the accuracy or completeness of the information contained in this Guide. Readers should not rely on the information contained in this Guide and should instead make their own enquiries and seek their own professional advice as to their specific circumstances.**

**The information contained in this Guide is current at December 2007.**

### IMPORTS

What Importers, Freight Forwarders and Customs Brokers need to do	What might happen if you don't
<p>Ensure Bills of Lading are:</p> <ul style="list-style-type: none"> <li>• Accurate and contain all the information required.</li> <li>• Endorsed correctly (company stamp and signature) before being given to a forwarder or broker.</li> </ul>	<ul style="list-style-type: none"> <li>• May result in a Delivery Order not being provided.</li> <li>• At the least, will cause delays in Delivery Orders (D/Os) getting to wharf carriers, which will in turn delay both the booking of slots, and containers being picked up at the wharf.</li> <li>• May affect the speed with which cargo is cleared by Customs.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure the container is not contaminated by soil and extraneous plant or animal material. Arrange for the inside and outside of the container to be cleaned before shipment.</li> <li>• Ensure containers which contain timber, including exposed timber components, have been treated ie. fumigated.</li> <li>• Provide AQIS with a packing declaration.</li> <li>• Ensure a cleanliness declaration is provided to AQIS.</li> </ul>	<ul style="list-style-type: none"> <li>• Containers which are assessed as being contaminated after being inspected at the stevedore's gate will be sent to be washed at an AQIS-approved premise. This will add costs and delay the release of the container.</li> <li>• Containers with untreated exposed timber components can be released from quarantine without inspection of those components, provided the container has been fumigated with methyl bromide or sulphuryl fluoride and packed or shipped within 21 days. Acceptable offshore fumigation will eliminate the need for quarantine inspection of the timber components on arrival. If not treated offshore, containers which contain untreated wood will have to be treated (fumigated) at an AQIS-approved premise before being released. This will add costs and cause delays.</li> <li>• If a packing declaration is not provided, the container will have to be opened and inspected at a Quarantine-approved premise.</li> <li>• Containers from countries where the Giant African Snail is endemic will be inspected thoroughly outside, and empty containers will be inspected inside as well.</li> </ul> <p>This information was accurate at December 2007. For further guidance on how to clear import containers quickly, or confirm AQIS import requirements, contact AQIS or visit <a href="http://www.aqis.gov.au">www.aqis.gov.au</a>.</p>



<p>Get the correct documents and information (container number and wharf carrier) to your customs broker/freight forwarder at least 5 days prior to the vessel berthing at the first Australian port.</p> <p>Benefits:</p> <ul style="list-style-type: none"> <li>• Enables a truck slot to be booked before the vessel arrives.</li> <li>• Enables the stevedore to plan deliveries, make better use of scarce terminal space, reduce truck turn times, and provide greater opportunities for bulk deliveries.</li> </ul>	<ul style="list-style-type: none"> <li>• Greater risk of delivery delays, storage charges, and the imposition of penalties for cancelled slots, and missed slots.</li> <li>• An overall inefficient sea freight supply chain, which affects all parties.</li> <li>• Allows time for Customs and Quarantine clearances.</li> </ul>
<ul style="list-style-type: none"> <li>• Pay duties and charges early.</li> </ul>	<ul style="list-style-type: none"> <li>• Time slots may not be available when desired.</li> <li>• Stevedore storage charges may be incurred.</li> </ul>
<p>Obtain Delivery Orders (D/Os), whether in paper or electronic form (Electronic Import Delivery Order - EIDO), from the shipping lines. Ensure paper Delivery Orders (D/Os) are:</p> <ul style="list-style-type: none"> <li>• Provided to wharf carriers at least 3 days before the scheduled pick up day.</li> <li>• If required by Customs, signed and when required, 'D stamped' (documentary release/clearance).</li> <li>• Accompanied by a Quarantine Direction (not provided separately).</li> </ul>	<ul style="list-style-type: none"> <li>• The wharf carrier needs the container number and gross weight of the container before a VBS slot can be booked.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure weight information is accurate and unambiguous on whether the weight is a gross or a net weight.</li> </ul>	<p>Expanded "Chain of Responsibility" legislation - expected to commence in 2008 - will introduce a new term and new provisions for a "Container Weight Declaration" (CWD), which must be completed whenever a container moves by road. The weight recorded on the CWD must include:</p> <ul style="list-style-type: none"> <li>• The weight of the goods being transported in the container;</li> <li>• The weight of any packaging in the container; and</li> <li>• The weight of the container itself.</li> </ul> <p>Each of the above weights need not be shown separately, but it must be clear that the gross weight recorded is the sum of the three amounts.</p> <p>For further guidance on the new CWD, see the "Guide to Container Weight Declarations", which can be accessed from the Port of Brisbane Corporation website <a href="http://www.portbris.com.au">www.portbris.com.au</a>.</p>
<ul style="list-style-type: none"> <li>• At least three days before the ship arrives, advise the wharf carrier of the container number, the vessel, and the voyage, and when the cargo is to be picked up.</li> <li>• Provide the paperwork (D/O or EIDO - electronic import Delivery Order) before the first day of availability (usually, but not always, the day after the ship arrives).</li> <li>• Advise the wharf carrier (and the freight forwarder) on the day the ship arrives or before, when the container is to be delivered. This advice should be provided at least 3 days before pick up.</li> <li>• If an EIDO is being used, ensure it has a separate number for each container.</li> </ul>	



<ul style="list-style-type: none"> <li>• Preferably, arrange for your wharf carrier to pick up containers from the stevedores at night or on the weekend, in conjunction with an intermediate or ‘staging’ facility, and deliver the next working day (see “Benefits and costs of using ‘Interim’ or ‘Staging’ depots’ below”).</li> <li>• Arrange for your wharf carrier to organise an after hours ‘bulk run’ to pick up your container(s) and store at an intermediate or ‘staging’ facility (see discussion below).</li> </ul>	<ul style="list-style-type: none"> <li>• A ‘bulk run’ can be a bulk shipment of containers for one consignee or a number of shipments for different consignees which are bundled together to make up a ‘bulk run’ – for a particular transport company.</li> </ul>
<ul style="list-style-type: none"> <li>• To meet DP World’s VBS requirements, importers and/or freight forwarders must provide details of expected container arrivals (container number and vessel) to the transport operator at least three days before the day of collection. This will reduce delays at the terminal, and provide more opportunities for after hours ‘bulk runs’ of containers.</li> </ul>	<ul style="list-style-type: none"> <li>• Without the container number, the transport operator will be unable to book a VBS slot at DP World.</li> <li>• Deliveries are likely to be delayed, especially when the terminal is busy.</li> <li>• There is an increased likelihood of storage charges and demurrage charges.</li> </ul>
<ul style="list-style-type: none"> <li>• Return (dehire) empty containers within the allocated free time as shown on the contract with the shipping line.</li> </ul>	<ul style="list-style-type: none"> <li>• You will be charged detention costs.</li> <li>• Potential shortage of containers for exporters, especially reefers.</li> <li>• For food or cotton quality containers, the shortage may result in the size of the export booking being reduced, or the booking being cancelled altogether.</li> <li>• May require the shipping company to lease boxes from container leasing companies, the costs of which will be borne by the exporter.</li> <li>• Late de hires cause containers to have to be turned around quickly, which can lead to congestion within the container park during busy periods.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure a hard copy of the EIDO is provided to the wharf carrier for returning the empty container to the container park.</li> </ul>	<ul style="list-style-type: none"> <li>• The return of the container will inevitably be delayed.</li> </ul>
<b>What Shipping Lines need to do</b>	<b>What might happen if you don’t</b>
<ul style="list-style-type: none"> <li>• Report cargo to Customs at least 48 hours before the ship arrives.</li> <li>• Report impending arrival of ship to Customs not more than 10 days and not less than 96 hours prior to the estimated time of arrival of the vessel at its first Australian port.</li> </ul>	<p>Penalties apply for:</p> <ul style="list-style-type: none"> <li>• Failure to report cargo</li> <li>• Failure to report impending arrival</li> <li>• Failure to report the arrival of a ship</li> <li>• False or misleading statement in a cargo or outturn report</li> <li>• Failure to make an outturn report</li> <li>• Failure to report other cargo reporters</li> <li>• Failure to report persons engaged to unload cargo</li> <li>• Failure to lodge a Progressive Discharge Report for containerised cargo.</li> </ul> <p>See Australian Customs Notice 2006/17.</p> <p>Late reporting of cargo to Customs – regardless of the reason - especially reporting cargo after the ship has arrived, could lead to delays in border processing and the cargo being released. Reasons for late reporting could include late arrival of documents from overseas, or incorrect or inadequate information on the Bill of Lading.</p> <p>Delays in border processing could lead to stevedore storage charges, as well as difficulties in booking slots.</p>



What Wharf Carriers need to do	What might happen if you don't
<ul style="list-style-type: none"> <li>Book a slot including the container number at least 3 days before the required day of pickup.</li> </ul> <p><u>Note that DP World mandates early advice (see below).</u></p>	<ul style="list-style-type: none"> <li>Could incur detention charges.</li> <li>Decreases the chances of getting a slot at a convenient time.</li> </ul>
<ul style="list-style-type: none"> <li>Book VBS slots (with container number) before the container is cleared. Containers identified for x-ray should be booked for the last day of availability. Do not wait until the box has been x-rayed before booking a slot. (Should an x-ray container not be available in time for its slot, the slot fee will be waived, and it will be rebooked by the terminal, upon application by the carrier. Free storage will also be extended in accordance with the provisions of the x-ray contract between Customs and the stevedores).</li> </ul> <p>GAS containers will be booked by the terminal, upon application by the carrier, once the container has been cleared by AQIS.</p> <p><u>Note that DP World mandates advance notice, see below.</u></p>	<ul style="list-style-type: none"> <li>The risk of storage charges increases significantly, especially when it is busy.</li> <li>Will make it hard to book a slot on the last free day of availability, even an after hours slot.</li> <li>A booking cancellation fee and/or storage charges will likely be levied on the wharf carrier.</li> </ul>
<p>DP World has specific requirements for import deliveries:</p> <ul style="list-style-type: none"> <li>For 'bulk runs', provide DP World with the container number and vessel 24 hours prior to the vessel's arrival;</li> <li>For non 'bulk' runs for imports, book the VBS timeslot 3 days in advance of the day of pick up, and provide a container number when the slot is booked.</li> </ul>	<ul style="list-style-type: none"> <li>No container number, no VBS slot. The transport operator will be unable to book a VBS slot.</li> <li>Deliveries are likely to be delayed, especially when the terminal is busy.</li> <li>There is increased likelihood of storage charges and demurrage charges.</li> </ul>
<ul style="list-style-type: none"> <li>Having booked a slot, ensure you have a copy of the D/O and the container has been customs cleared, before you arrive at the gate.</li> <li>For EIDOs, ensure the EIDO has been provided to the stevedore, and that the driver has the PIN code when he arrives at the terminal. Alternatively, link the PIN code to the booking within the VBS when the slot is booked.</li> </ul>	<ul style="list-style-type: none"> <li>No D/O or PIN (for an EIDO), no container, and you could be turned away, resulting in a wasted trip, and no guarantee that you will be able get another slot when you need it.</li> <li>If the PIN code is included with the VBS booking, the driver cannot lose or forget the PIN code, but the driver still has to quote the PIN code when he or she arrives at the terminal.</li> </ul>
<ul style="list-style-type: none"> <li>Ensure that you have been given a hard copy of the EIDO before returning the container to the container park.</li> </ul>	<ul style="list-style-type: none"> <li>The return of the container will inevitably be delayed.</li> </ul>

## EXPORTS

What the Exporters and/or Freight Forwarders need to do	What might happen if you don't
<ul style="list-style-type: none"> <li>Ask for a release of the container from the shipping company, and confirm the release number.</li> </ul>	<ul style="list-style-type: none"> <li>The wharf carrier may not be able to pick up the container when he arrives at the container park.</li> </ul> <p>If a special container is required (eg. food grade box), lack of early warning may result in the container not being available (special boxes are usually not kept in stock).</p>
<ul style="list-style-type: none"> <li>Pack and deliver containers to the wharf for export within the free time allowed by the shipping line (the free time starts from the time an empty container is collected from a container park to when it is received for shipment at the wharf).</li> </ul>	<ul style="list-style-type: none"> <li>You may be charged detention costs.</li> </ul> <p><i>Example:</i> an exporter could obtain a container for a ship which is sailing in 5 days, and after collecting the container, decide to transfer the booking to a ship sailing in 20 days time. This would likely result in detention costs, because the free time allowed by the shipping line is being exceeded.</p>



<ul style="list-style-type: none"> <li>• Ensure containers are packed so that the weight does not exceed the rated capacity of the container, and the weight is restrained properly and distributed evenly.</li> </ul>	<ul style="list-style-type: none"> <li>• There is an increased risk of an accident when the container is being handled and transported. The load shifting within the container, because of poor load restraint, is a particular risk.</li> <li>• It may be in breach of CoR legislation – you could be prosecuted.</li> <li>• The container may have to be repacked, at the exporters cost.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure PRAs are accurate and on time (common mistakes are: wrong terminal, wrong size of container, wrong prefix for the container number).</li> <li>• Ensure Customs requirements are met: <ul style="list-style-type: none"> <li>• The CRN if the cargo is an export consolidation,</li> <li>• The EDN, if the cargo was entered making an export declaration,</li> <li>• The Export Declaration exemption code, if the cargo was exempt from entry,</li> <li>• The Transhipment Number, if the cargo has been transhipped.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• No PRA, no delivery.</li> <li>• Trucks will be delayed (if not turned away) at the wharf gate, which could result in a ship being missed.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure the weight information on the PRA is accurate and unambiguous on whether the weight is a gross or a net weight.</li> <li>• Under expanded legislation expected to be introduced in 2008, it is understood that the PRA will effectively become the “Container Weight Declaration”.</li> </ul>	<ul style="list-style-type: none"> <li>• Expanded “Chain of Responsibility” legislation - expected to commence in 2008 - will introduce a new term and new provisions for a “Container Weight Declaration” (CWD), which must be completed whenever a container moves by road. The weight recorded on the CWD must include: <ul style="list-style-type: none"> <li>• The weight of the goods being transported in the container;</li> <li>• The weight of any packaging in the container; and</li> <li>• The weight of the container itself.</li> </ul> </li> </ul> <p>Each of the above weights need not be shown separately, but it must be clear that the gross weight recorded is the sum of the three amounts.</p> <ul style="list-style-type: none"> <li>• For further guidance on the new CWD, see the “Guide to Container Weight Declarations”, which can be accessed from the Port of Brisbane Corporation website: <a href="http://www.portbris.com.au">www.portbris.com.au</a>.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure the container is packed and able to be picked up by your wharf carrier and delivered to the stevedore well before the ship ‘cut off’ time.</li> <li>• Ensure carriers are able to book slots as early as possible, to ensure one is available before the ‘cut off’ time for the ship.</li> </ul>	<ul style="list-style-type: none"> <li>• For last minute bookings, you run the risk of not being able to book a slot before the ship ‘cuts off’, and having to wait for the next available ship.</li> <li>• Avoids the risk of a ‘late receipt’ fee.</li> </ul>
<ul style="list-style-type: none"> <li>• Preferably, arrange for your wharf carrier to deliver export containers to the stevedores at night or on the weekend, by using an interim or ‘staging’ facility to hold the container during the day (see below for further explanation).</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces the risk of the ship cut off time being missed.</li> <li>• Avoids the risk of a ‘late receipt’ fee.</li> </ul>
<b>What Shipping Lines need to do</b>	<b>What might happen if you don't</b>
<ul style="list-style-type: none"> <li>• Ensure there is no confusion between container booking and release numbers (some shipping lines use the same number, some do not).</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces the risk of a delay imposed on the wharf carrier when he arrives at the container park to pick up the container.</li> </ul>
<ul style="list-style-type: none"> <li>• Send container release details to the container park and the wharf carrier (if known) as well as to the freight forwarder. The container park is the most important recipient of this information.</li> </ul>	<p>This ensures the wharf carrier is not turned away or delayed at the container park because of confusion over container release details.</p>



What Wharf Carriers need to do	What might happen if you don't
<ul style="list-style-type: none"> <li>Do not appear at the stevedore gate without a PRA or before the PRA has been sent.</li> <li>Ensure the PRA is accurate.</li> </ul>	<ul style="list-style-type: none"> <li>The stevedore will not be able to accept delivery of the container.</li> <li>Depending on how close it is to the ship cut off time, the container may have to wait for the next ship.</li> </ul>
<ul style="list-style-type: none"> <li>If there are enough containers, arrange an after hours 'bulk run' delivery of containers.</li> </ul>	<ul style="list-style-type: none"> <li>Assists in ensuring that containers will be delivered before the ship 'cut off' time.</li> </ul>

### Benefits and costs of using 'Interim' or 'Staging' depots (\$ Figures as at December 2007)

The delivery of import and export containers direct to and from the stevedore to the importer or freight forwarder or from the exporter for unpacking has traditionally been the preferred method and timing of delivery. However a number of changes within the sea freight supply chain have occurred over the last few years to render direct delivery of import and export containers at times unreliable and more costly. They are:

- The receipt and delivery of containers at the wharves is gradually moving towards 24/7 operations. Shipping schedules and ship load/unload operations are now effectively 24/7, and truck receipts and deliveries are increasingly occurring after hours as well.
- The growth of container trade and the increasing constraints on the capacity of the stevedores to handle all container receipts and deliveries during daylight hours, have at times resulted in congestion and delays, and additional costs to importers and exporters.

The landside logistics chain still largely operates on a normal business hours, five day per week basis. Most logistics facilities eg. distribution centres and warehouses, are not open after hours. Import containers received from the stevedores after hours need to be stored overnight or on the weekend before delivery the next working day. Exports work in reverse. As a result 'interim' or 'staging' facilities have been developed by wharf carriers and/or Container Freight Station (CFS) operators to accommodate these changes.

#### Costs and Benefits

It is estimated that it costs somewhere in the range of \$130 - \$200 more to use an interim or staging facility in conjunction with after hour slots, than it does to have a 40ft import container delivered direct to an unpack location using 'day time' slots. These costs will vary depending on the location of the interim or staging facility, its charges, the vehicle being used, and the length of time the container is being stored before delivery.

The additional charges are due to the costs of overnight storage, lifts within the depot, and the higher costs of using labour after hours.

However for direct deliveries which do not involve a staging facility, there are additional charges that may be incurred when the Port is busy or capacity is otherwise constrained. These additional charges are difficult to predict and arise for the following reasons:

- Demurrage.** Demurrage will likely be incurred when the truck turn time exceeds two hours, at a rate, which in the range of \$60 - \$100 per hour (for a semi trailer or B double). The normal truck turn time - as measured by the stevedores from gate to gate - is 30 to 45 minutes, however demurrage is usually charged on total truck turn time, including any waiting or queuing time outside the gate.
- Penalties for a 'late slot' or a 'missed slot'.** Normally DP World applies a penalty if a truck is late for its booked slot, even if it is caused by earlier delays or road congestion. DP World will also normally apply a penalty if a truck misses a booked slot and the slot has not previously been cancelled. The penalty is typically about \$100, but the amount does vary between the stevedores. Patrick will consider mitigating circumstances in determining whether or not to apply a penalty.
- Wharf Storage.** Storage charges apply when a container is not picked up within the first three storage-free days (Saturday and most public holidays are considered to be working days, and are included as storage-free days). The charge varies between stevedores, but the fee for one day's storage, including a yard handling fee, ranges between \$114 and \$122 per TEU, depending on the stevedore.

The potential cost of delays can outweigh the additional costs of using 'interim' or 'staging' depots. However the cost benefit of using 'interim depots' in conjunction with after hours receipt or delivery will depend, amongst other things, on the time of the year, and whether the container unpack location is accessible after hours.

The additional costs of direct delivery can also be increased by communication or paperwork inefficiencies which can lead to delays eg. late delivery of paperwork, late advice of container details etc.



Apart from the potential savings on 'delay' or 'congestion' costs, there are a number of other benefits of utilising after hours slots in conjunction with 'staging' arrangements:

- A more predictable delivery time. Containers staged through an 'interim' depot allow specific delivery windows to be met, because the only external incident which can cause a delay is road congestion and/or a breakdown. This ensures that labour hired to unpack the container is not wasted, and equipment such as cranes hired to lift containers is not delayed (for example, a one hour delay could cost an additional \$50 in labour alone - 2 people x 1 hour x \$25 per hour - \$50).
- Carriers are much less exposed to potential fees for 'no shows' or 'late slots' and importers are thus much less exposed to demurrage and detention charges.
- There is greater opportunity for containers to be received or delivered in bulk as a 'bulk run' ie. 30 or 40 containers at a time.

