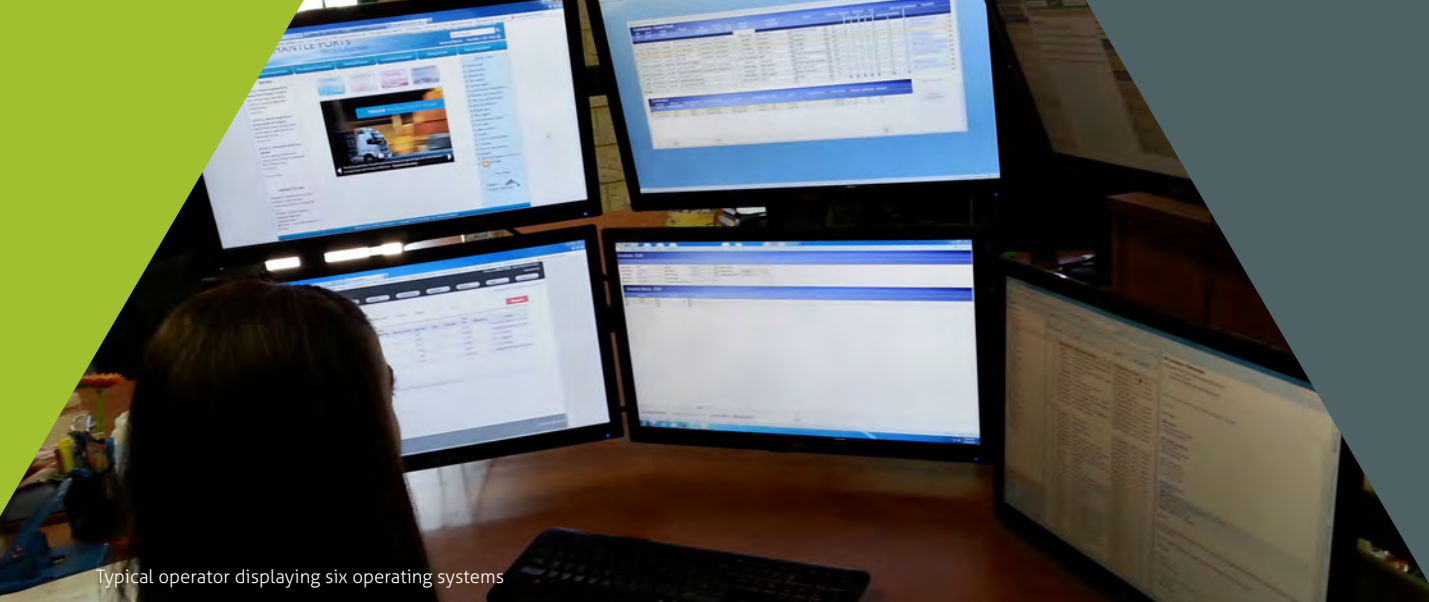




Port Community System (PCS) Summary - Concise Overview - November 2014





Typical operator displaying six operating systems

Problems faced by the Supply Chain

Those working in the import and export supply chain are constantly pointing out the difficulties they face in their businesses. What operator does not face:

- ▶ Uncertainties about arrival times, because information from overseas isn't available or you can't see where the truck is carrying your goods?
- ▶ Having staff re-entering the same information into different systems because the system providers have different rules and, to make things worse, the systems don't talk to one another?
- ▶ Different systems displaying different statuses because of information timing delays?
- ▶ Having to communicate with so many different companies, because each has their own little piece of the information "pie"?
- ▶ Constantly having to interrogate different screens regularly throughout the day and even night to help you and your clients' businesses and to stay ahead of the competition?

That's all inefficient!

How much time is wasted, how much cost is involved and how many opportunities are lost getting the information to do the job?

As trade grows, physical infrastructure, such as roads and port facilities cannot continue to grow without major investments and which government has the money to do this?

The alternative is to use what we have, in particular the information, smarter.

We've actually got some examples of it happening in certain parts of our industry in the past already.

- ▶ Think about what Customs' clearances use to be like.
- ▶ Think about the previous queues getting into terminals.

And yet, looking at the terminals' Vehicle Booking System (VBS), at the time it was introduced it was criticised; many saying it would never work. Now, no one can imagine working without it.

Yet, imagine where that 1-stop VBS would be today if their system did not talk directly to the customs' and terminals' systems. What if today the customs and terminal information needed to be entered separately, manually from multiple sources, including faxes and emails? The trucking system would grind to a halt.

Telephone companies, banks and IT companies resolved the issues of operating with one another years ago but the import/export supply chain continues to work with so many different screens and systems. There has to be a better way.

Why can't the information we're talking about be in one system, with it input just once but able to be used by many?

To help solve this issue affecting the entire supply chain in Australia, the Cargo Automation Development Fund, funded a study managed by CCIWA and undertaken by NICTA to look into the possibility of implementing a Port Community Systems (PCS) in Australia.

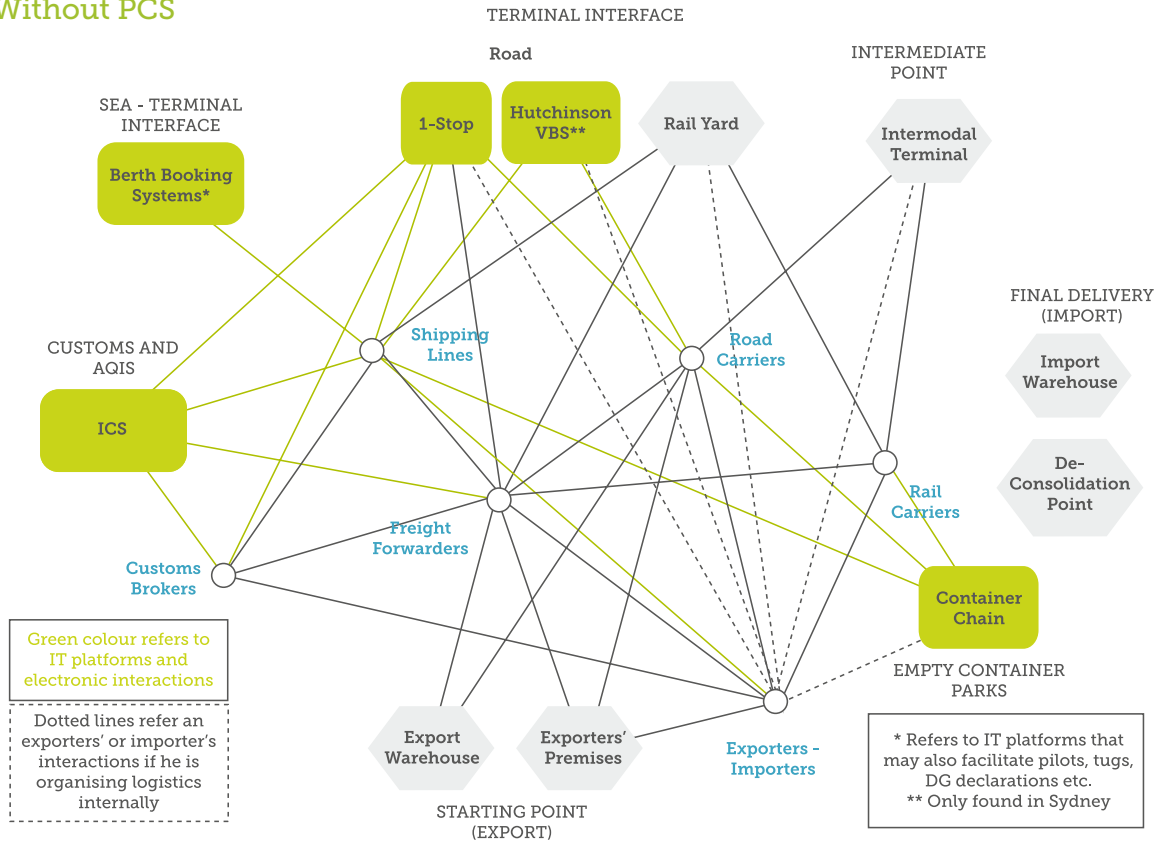
What's a PCS?

A PCS is a neutral and open computer system that allows supply chain participants to rapidly and securely exchange information after a single submission of data by the data owner (eg. a shipping line). It connects the multiple systems operated by the various organisations. Think of it as a central point containing a list of all the key data, such as container number, voyage number, receiver address, etc, which everyone in the chain enters into, constantly updating and improving the data on that container, which all the systems in the supply chain then use as their main source of information.

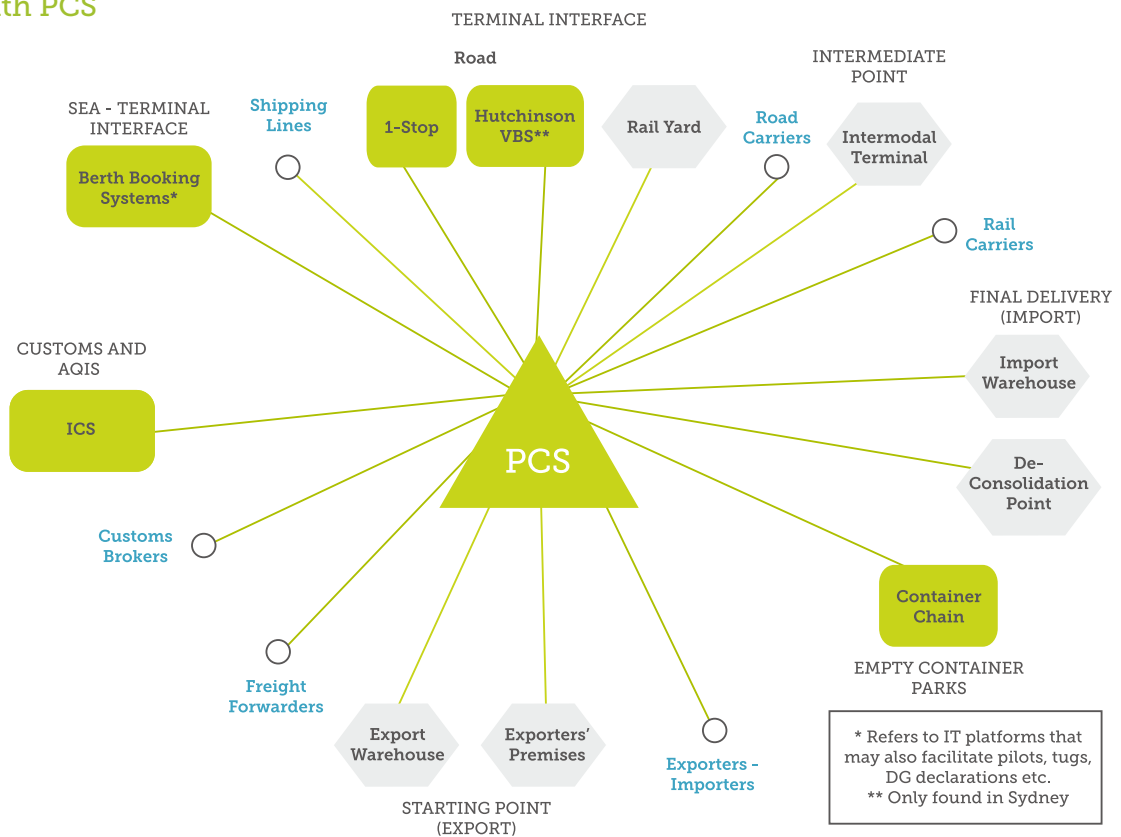
PCSs are already in operation in major ports around the world and have proved their worth in terms of operations efficiency and productivity improvement. The study specifically looked at the feasibility of such a system in Australia by consulting with all supply chain players nationwide (from importers and exporters to port authorities and Customs) to define the best model and gather support for such a system.



Without PCS



With PCS



Benefits

Consumers and businesses are becoming more sophisticated. The improvements in information availability in the internet age mean they are demanding timely answers to queries. Accurate, timely information is vital to business success.

Providing a container's status, at key points along the chain, varying from exporter through to destination, is available from a single screen using Port systems operating in a number of other countries. Why not in the Australian container industry? Getting that type of information, so simply, would have to be of great value to industry.

But let's just look at this for a moment, though. What we currently do have in this country is the real advantage of having nearly all the elements along the chain - original customs input, terminal information, vehicle bookings at terminals, transport information and empty container transaction notification and availability. No other country has all this.

Why isn't it all available in the one place?

What could you do with a PCS?

What if we had a PCS, where all the information was linked? You could see what was happening with your container, the whole way through, because all the information is confirmed and secure, in one place allowing you to plan ahead and respond more quickly to changes.

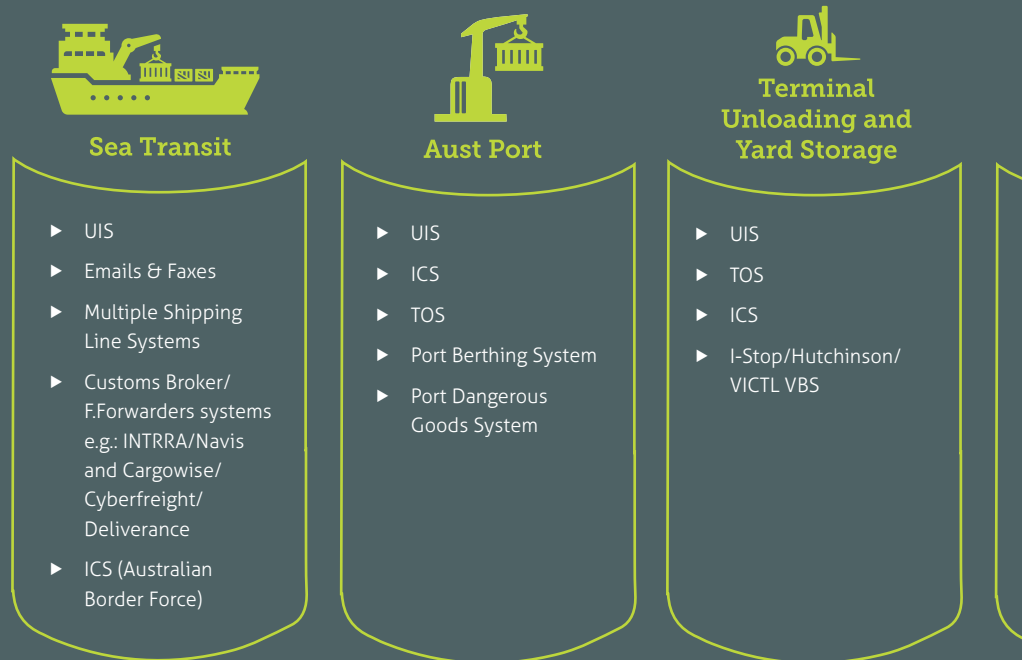
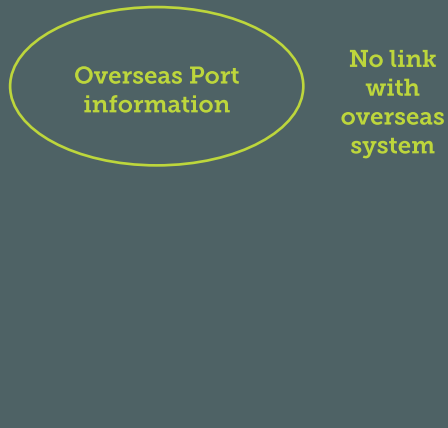
Imagine if:

- ▶ The system could provide updates and warnings that advise you, for example, that unless your container is picked up within the next two hours, or the storm in Straits of Malacca doesn't clear, the delivery you need won't be available when required, allowing you to act before it becomes a problem?
- ▶ You only have to input one reference number, like the container number, and all the other fields are automatically filled with the latest status of previously entered information? No more multiple screens; no more wasted time re-entering the same things and, occasionally, getting them wrong.
- ▶ Conflicting or incorrect inputs (e.g. a conflicting weight entry or an incorrect Customs code, etc.) are recognised and taken out so that you get a single, trustworthy source of data, improved as it goes along, utilised by all. What do you get? Everyone speaking the same language;
- ▶ Information was totally secure ("need to know"). All the information is there, but you only see what the owner of the information agrees you can see.
- ▶ It were set up so that repetitive actions, or those taking place once another is done, are automated, so that this document is sent or that payment is made, meaning your business can run 24/7 even when you're not there. Your choice.

All this can be achieved by adding to systems that already exist in Australia.

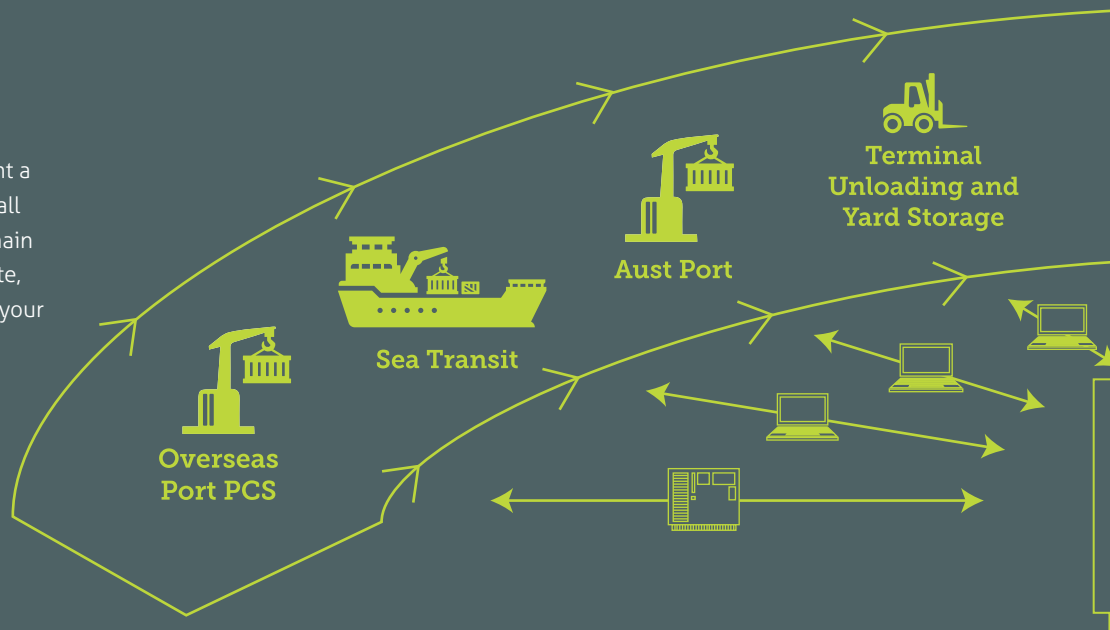
Current Import Process

The current import process is characterised by various loosely connected information systems. These information silos create barriers of communication between stages of the supply chain inevitably costing time and money. Now is the time to move towards a more streamlined process to eliminate the transfer of inaccurate data and make it easier for you to do business.

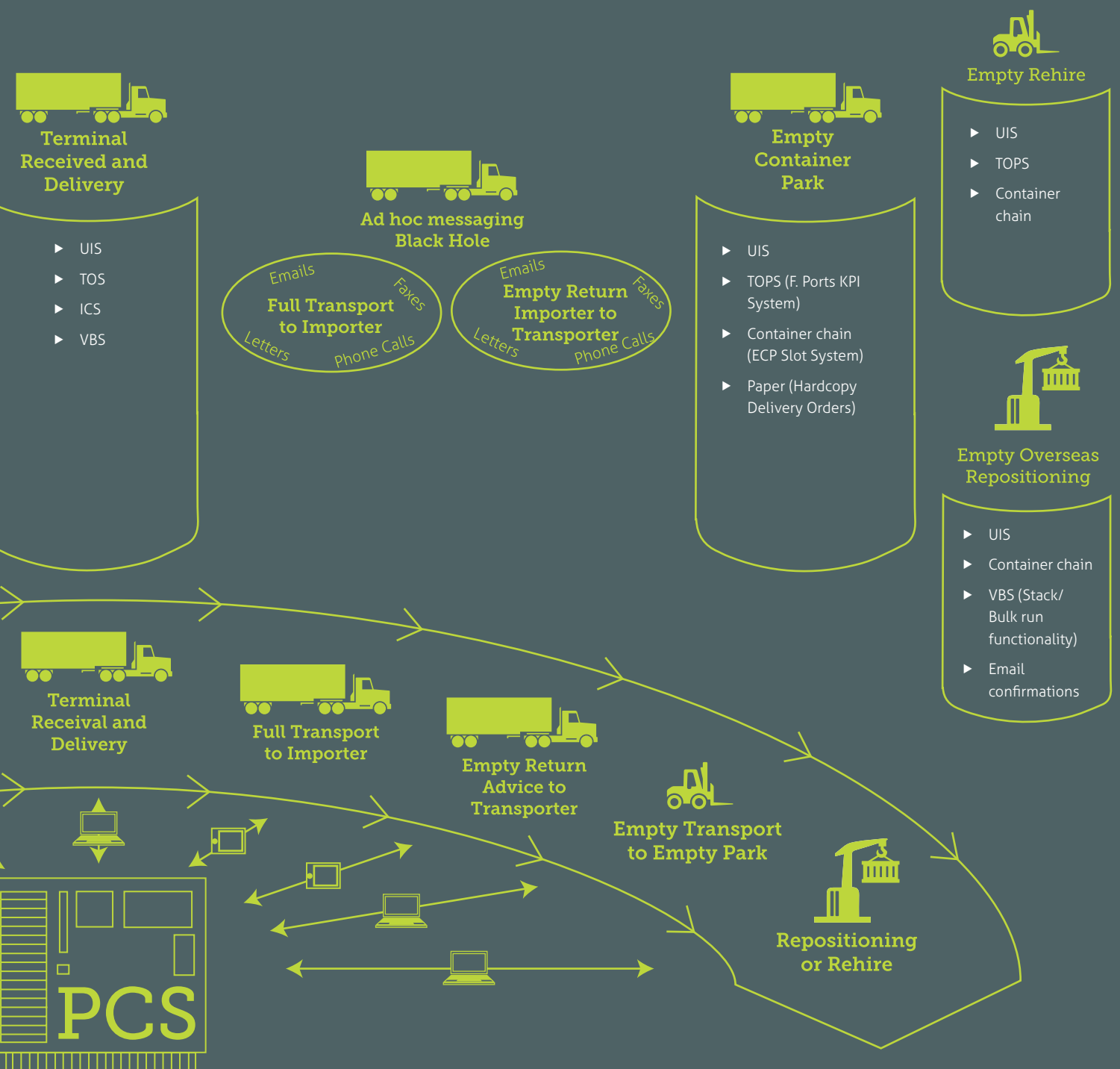


Future PCS

We have the opportunity to implement a PCS which provides a central hub for all data input across the whole supply chain ensuring you have access to immediate, complete and reliable information as your container progresses.



Key	
UIS:	Unique Invoicing System
TOS:	Terminal Operator System
ICS:	Integrated Cargo System
VBS:	Vehicle Booking System
VITCL:	Victoria International Container Terminal System Ltd
TOPS:	Terminal Operating Performance System




The existing systems aren't, as a result, redundant; their functionality is, in fact, enhanced. To simply put it, we are already 90% there; to finally bridge that gap would provide Australia with a PCS that would be the envy of the world.

There are a host of opportunities for each supply chain participant. We've put together some of the major things we would expect a fully integrated PCS to deliver for each major player.

This is what you could have:

Supply Chain Participant	Opportunity created by a PCS
Importers and Exporters	Increased reliability and certainty. Know where your freight is at any one time, in one system. What's its status? Is it cleared? Ready for delivery? All of this through one screen. No more disputes. You see what your freight forwarder/transport operator sees.
Shipping Lines	Improved asset management. Being able to look down the chain to see what's happening with the freight, using even the transport operator's own information, means better ship load planning for fulls and getting a better idea of when that empty's coming back to sell on to the next customer. No more second guessing. You deal with facts.
Department of Immigration and Border Protection	Streamlined and earlier processing. Know what has happened BEFORE the ship is even loaded overseas (by linking into foreign ports' PCSs) and AFTER the load left the dock (by having the full picture right through to receiver). A unique view along the WHOLE supply chain.
Port Authorities	Improved productivity. Paperless transactions. Arrival manifest information available from overseas, as soon as loaded. No re-entry of information (particularly DGs and transit cargo). All the information needed for incident response available in one place, immediately. The system checks cargo categories, identifying and even rectifying errors. Complete container movement data, with prediction function, to anticipate and tackle queues on roads before they happen. Trade facilitation through supply chain efficiency.
Terminal Operators	Better, timelier ship to shore and yard planning. Look into previous port's PCS to know what's actually been loaded, well before shipping line data is released. Complete vision of what's on a consortium vessel, regardless of line. Total overview of cargo contents (and history) in comprehensive detail allowing immediate response to incidents. Weight checks entered at overseas Ports available to assist with import Chain of Responsibility. Advance vision of transport operator activity, not just booked, but actual, in motion, pre-gate to provide far quicker truck turnaround and improved yard clearance rates.
Transport Operators	Better scheduling with less effort. One screen for all transactions, giving you an overview of everything. One entry of information; no more typos between systems. Alerts as actions happen. Actual, in-transit info from you allows the terminals and ECPs to better live plan your container, pre-arrival, to turn you around quicker when you get there. Linked systems allow slot matching between terminals and ECPs; no downtime because you couldn't get a matching slot at the ECP on leaving the terminal - your trucks keep rolling.
Freight Forwarders	Better communication. No more surprises. Access overseas PCSs to know who loaded, what, when; as it leaves - from one system. Alerts right from exporter to importer, tailored the way YOU want them, available from one system (eg. no need to look at each line's website for container de hires, no double handling of information).
Customs Brokers	Increased coordination of clearances through instant data exchange allowed by a PCS. No conflicting declarations. One entry into one system, reflected in all the other systems. Mistakes identified and rectified early.
Empty Container Parks	Improved productivity and congestion reduction through smart R&D management - priority, paperless, non-stop entry into parks. See what the transport operator is seeing, in their own system. Early/late arrivals immediately identified, with access authorised or denied. Transport companies better informed and more responsive.
Federal and State Governments and Transport Authorities	Facilitate trade through better planning and infrastructure utilisation. Elimination of three to twelve month delays waiting for waterside data. Instead near-real, verified, quality information to use for planning. Visibility into transport operators' activities means better use of infrastructure and thus infrastructure in the right places, utilised to the max.



We've heard it all before. What's new, what's different?

The study said "Australia is now in a position to 'leap frog' other port communities". It's true.

- ▶ We've got Containerchain to do for empty containers what 1-stop successfully does on the full container side of the chain. Nowhere in the world covers full and empty movements to the detail we do. This is happening now. This didn't exist a few years ago.
- ▶ The study said that, right now, Customs are looking at their systems to give them a better overview of what's happening. Why's that? Because Customs is no longer just "Customs". Things have changed. It's Border Protection now and that means they need more comprehensive information. That's only going to come if they have better links to the rest of the chain.
- ▶ Technology to cover transport operators' vehicles and site operations is now much more readily available, affordable and actually in use. Smart phones, tablets, GPS and the like are not that big a deal anymore;
- ▶ What's more, there are already key players, with systems now operating in our industry, working on packaging offers to link this technology with their own existing systems (and others) to provide new, transport focussed functions that never existed before.

So if nearly everywhere along the chain is covered, or could be, all we really need to do is to link these systems. In fact, some of these things won't really happen unless these systems are linked. That's where the PCS comes in.

What's more, we don't even have to think about just Australia. What if we could link into other PCSs in other countries to get advance information as soon as the container leaves the export port?

- ▶ "Single Window" developments in Europe (all PCSs talking to one another - expected June 2015) and elsewhere mean linking other PCSs (eg. Singapore) to fill the current information gaps from overseas is now not only possible, it's going to happen.
- ▶ You've got to have your own PCS to make this happen, but if you do, not only do you get to see exactly what's been happening here, you get to see what's happened prior to it even getting here. All from one screen. Enter the container number - there's the information, from origin.



So what will this look like?

We're all still working on it - what it's going to cost, who's going to run it, etc. What the study did find, after talking to 177 different companies in the business, was that basically they thought that:

- ▶ It shouldn't really be run by one party (neutrally operated - preferably public-private group);
- ▶ It should work with the existing systems, sitting in the middle, linking them all;
- ▶ You only input the data once and it is used by all the other systems;
- ▶ It's able to use the same language as all the other systems (e.g. "exported", "landed", "delivered", etc. means exactly the same regardless of what system you're working with - no interpretation issues).
- ▶ If someone else enters something wrong, the system identifies this;
- ▶ You shouldn't need special software to get into it (available anytime, anywhere);
- ▶ It should be able to legally carry out transactions (e.g. electronic signatures, etc.).

What happens next?

The next step to get us closer to a PCS in Australia is to define the final format and structure of an Australian PCS. To do that, further work with all the potential stakeholders of a PCS will have to be done. Once the structure of a PCS is finally agreed upon and agreements are reached in terms of participation, then the construction of a test pilot software is the next step. CCIWA would again drive this next phase of the study and funding will be needed to perform this task.

For more information or comments regarding this, please contact Philippe Pierson, Senior International Trade Development Officer, International Trade Services on (08) 9365 7789 or email him at Philippe.Pierson@cciwa.com.



