

Business Activity Harmonisation Study

BAHS



Managing the Mismatch Options for Discussion

BAHS Stage Two Report

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Further copies of this report can be obtained from the VFLC Secretariat by telephoning (03) 9655 6457, or downloaded from the VFLC website www.vflc.com.au.

1 EXECUTIVE SUMMARY

This report represents the output from Stage 2 of the BAHS project. This stage involved taking the issues identified in Stage 1 and working with industry to draft solutions for further refinement and prioritising at the BAHS National Plenary. The Plenary event will provide additional input from the experiences of other states, ports, companies and regulators working at a national level. This viewpoint is a necessary perspective to add to our deliberations on what solutions may be the most feasible to implement both in Melbourne and elsewhere.

The solutions detailed in this document are not comprehensive nor tested on a broader audience beyond workshop and consultation participants. It is now our task to broaden the input to these solutions, to focus on those which industry agrees will deliver efficiencies at a reasonable cost.

It is expected that a suite of solutions will deliver smaller, incremental change. Others will be significant and broader in impact and require a larger effort to bring about change. Together, supply chain partners must determine the worth of these solutions to their individual business and the overall supply chain in which they participate.

Industry response to Stage 2 of the BAHS project has been very positive with all sectors of the sea freight supply chain being well represented.

As in Stage 1, the approach in Stage 2 placed strong emphasis on unlocking the knowledge and expertise that exists within the industry to identify ideas and solutions that have potential to assist supply chain efficiency through the port of Melbourne.

One of the encouraging aspects of BAHS to date has been the recognition by people with different interests that they need to better understand the overall supply chain and work together on solutions that create efficiencies that may sometimes be outside individual interests.

The workshops, held at the Port Education Centre in Port Melbourne, provided an excellent location and forum for the various and disparate views.

Stage 1 clearly identified many of the issues that are impacting on sea freight supply chains, some large, and some relatively minor. A number of key themes emerged that formed the focus of the Stage 2 workshops.

- **Mismatch of hours**
- **Wharf interface**
- **Empty container management**
- **Education / understanding**
- **Shipping lines' pivotal role**
- **Commercial relationships**
- **Information Technology / communication**

Ideas and potential solutions were drawn from each point of the supply chain.

Items were discussed in workshops, face to face meetings and focus group sessions involving industry experts and the outcomes are summarised in this document.

Clearly the development and implementation of improvements will require importers and exporters to become better educated on how their supply chains actually operate and how they can work with service partners on managing change.

Companies that are gaining efficiencies tend to be those that are taking this collaborative rather than combative approach.

2 ABOUT BAHS

The Business Activity Harmonisation Study is a joint project of the:

- Victorian Freight & Logistics Council's Freight Intermodal Efficiency Group
- Transport, Distribution and Logistics Industry Round Table
- Victorian Department of Innovation, Industry and Regional Development
- Victorian Department of Infrastructure

The purpose of the project is to investigate the mismatch of operating hours along Victoria's sea freight container logistics chain and to assist industry to coordinate its logistic chain activity.

Previous attempts to understand inefficiencies in sea freight chains included:

1992 'Warehouse to Wharf' - Report from the House of Representatives Standing Committee on Transport, Communications and Infrastructure titled *'Efficiency of the Interface between Seaports and Land Transport'*

1997 Pascoe Report into the operating hours of container parks

The need for this 2005 study was prompted by changing business requirements at different points of the supply chain, a commitment to supply chain excellence, and forecasts of an increased freight task in Victoria and Australia over the next fifteen years.

The project is divided into four stages:

Stage 1: Identifying issues and gaining deeper cross industry understanding.

Stage 2: Identifying & developing creative solutions in line with Stage 1 findings.

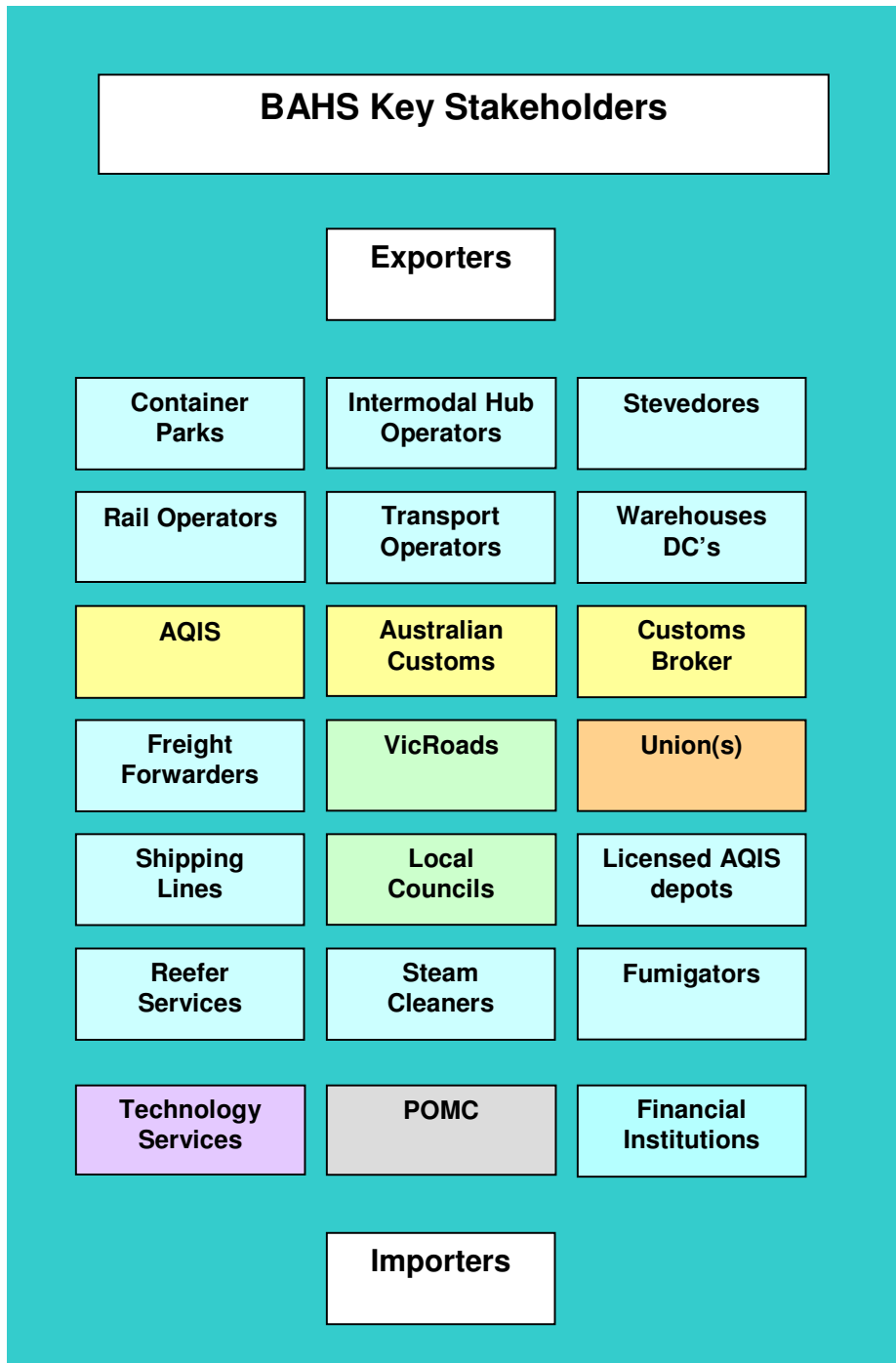
Stage 3: Drawing together industry and government to consider the proposed solutions in the national context. The outcomes of Stages 1 and 2 will be brought together in a plenary for review and viability testing.

Stage 4: Preparing an implementation program at State and Federal levels.

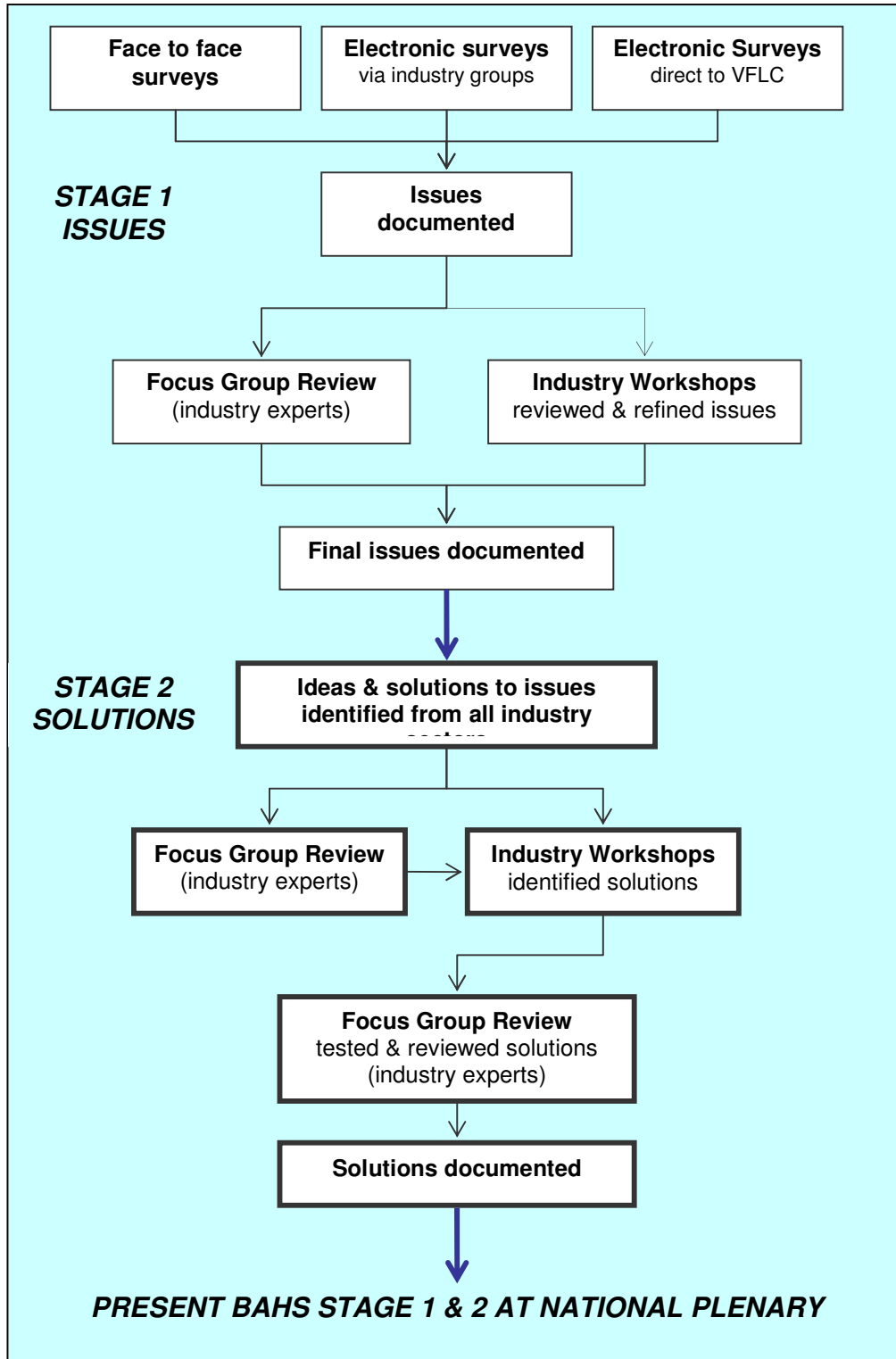
Recommendations will be documented for the Australian Freight Councils Network (AFCN), Victorian Freight and Logistics Council (VFLC), Victorian Supply Chain Consultative Group (VSCCG), Australian Logistics Council (ALC) and the Integrated Logistics Network (ILN) to submit to industry and .

3 THE STAKEHOLDERS

Key Stakeholders in the project include all participants in the sea freight supply chain from both a **Demand** (Importers & Exporters) and **Supply** (Service Providers) perspective.



4 BAHS METHODOLOGY STAGES 1 AND 2



5 EMERGING THEMES

Stage one clearly identified many of the issues that are impacting on sea freight supply chains. A number of key themes emerged that formed the focus of Stage Two workshops and industry discussions.

Container management

The management of empty containers, empty container park operating hours and empty container park performance are central to any improvement strategies.

Mismatch of hours with wharf interface

Shipping schedules are effectively 24/7 and drive landside logistics. In most cases the landside chain faces impediments to efficiencies that will not be fixed by simply realigning operating hours. Industry response has clearly identified that changes to operating hours is only a part of a number of key elements that need to be addressed to move toward optimisation of the port.

Education

Lack of broad understanding across the port supply chain was identified as a major impediment to efficiency by most participants attending the workshops.

While there is ample expertise within individual stakeholder groups there appears to be a relatively poor understanding of how the overall sea freight supply chain interacts and operates.

International supply chains are seen as complex, particularly in comparison to domestic logistics.

Shipping lines' pivotal role

Aside from driving landside logistics via shipping schedules, shipping lines hold commercial relationships with importers, exporters, stevedores and container parks.

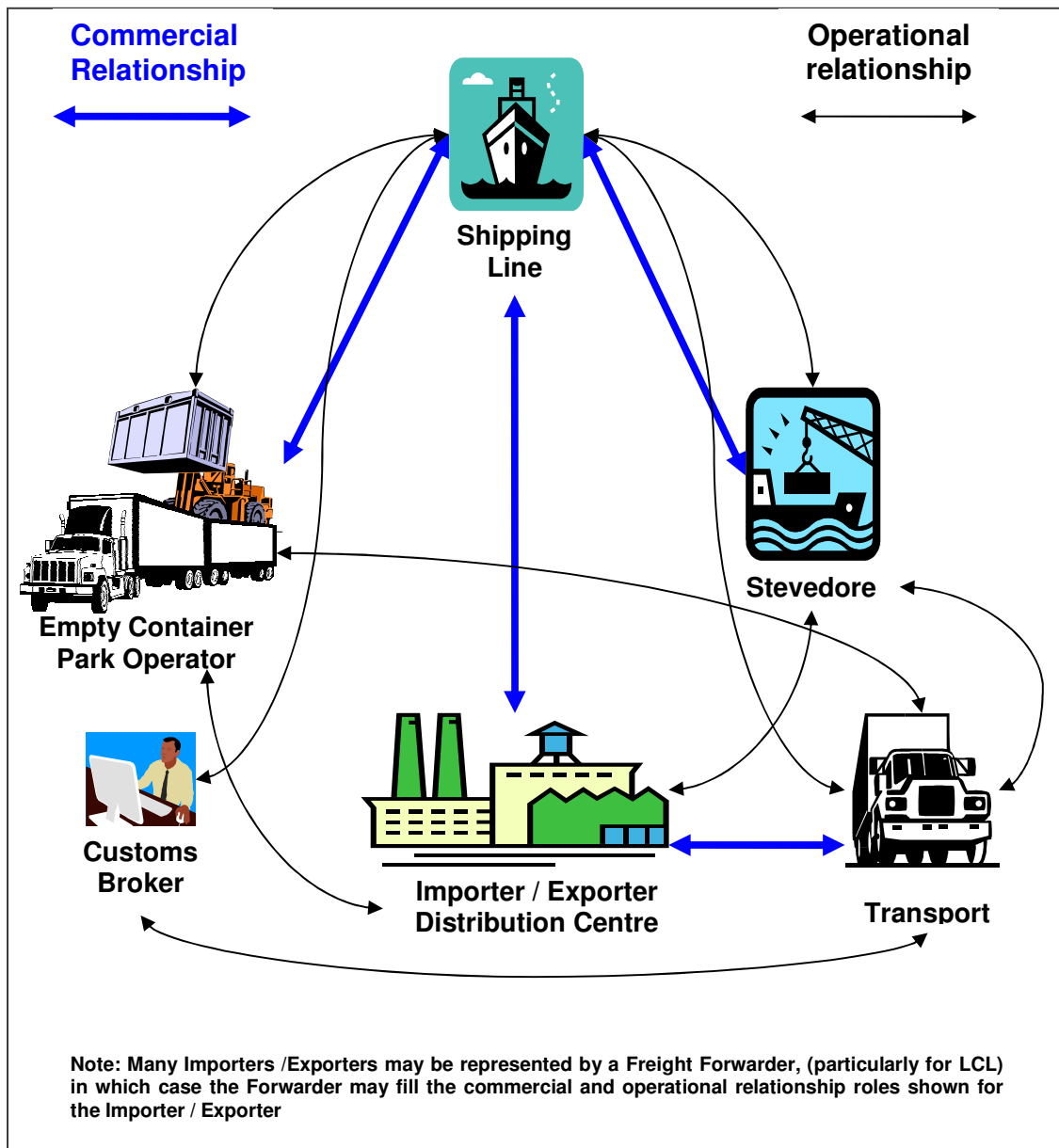
Information Technology / communication

Supply chain visibility, transparency of information and the adoption of common standards were highlighted across the board as being a fundamental component to delivering efficiency gains for the industry.

Commercial relationships

Historically, one of the barriers in establishing change has been the fact that the commercial relationships that exist do not necessarily align with the operational relationships.

Many of the problems that exist in the landside logistics that create bottlenecks, are between parties that have a direct operational relationship but have no commercial relationship or responsibility. This can hinder the business incentive to change.



6 STAGE TWO SOLUTIONS WORKSHOPS

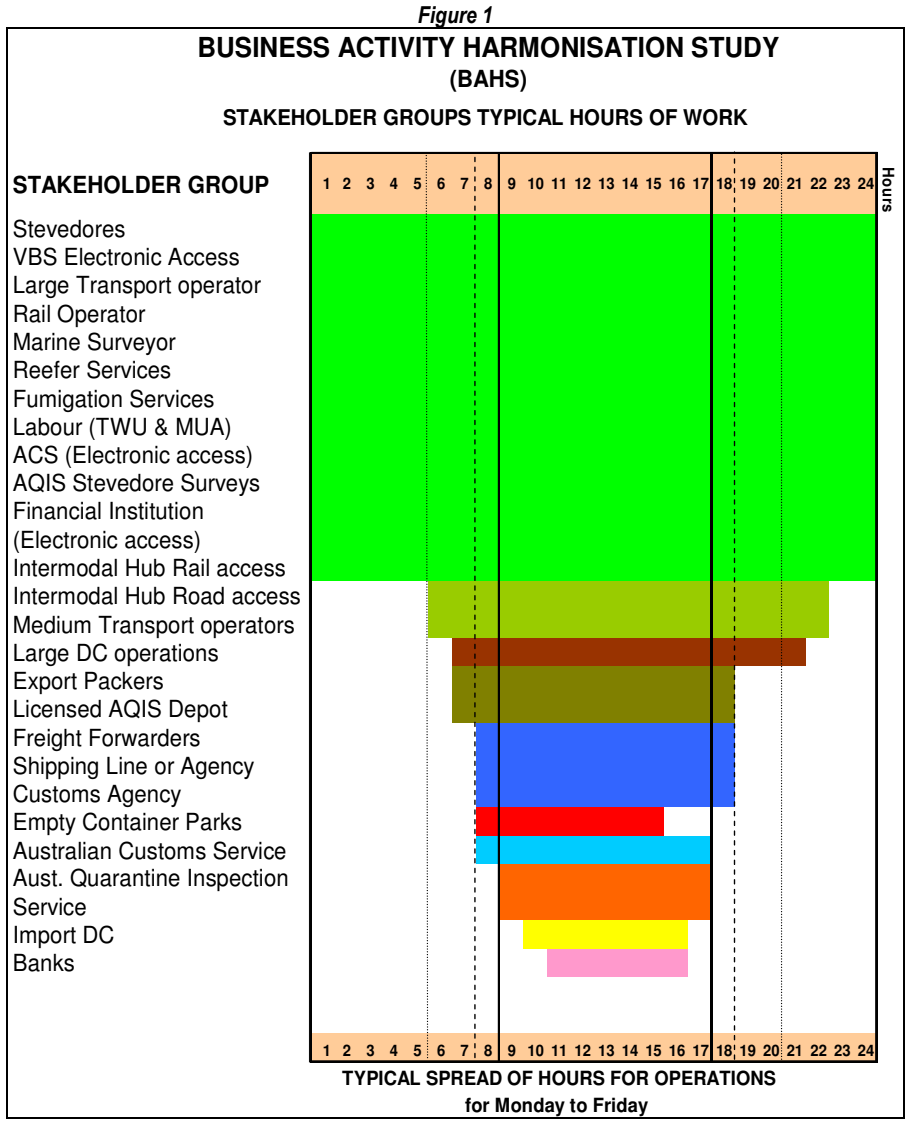
A wide range of supply chain participants took part in a series of consultations and workshops to develop the solutions contained in this document. The following is a cross-section of participants which indicates the range of inputs.

Phil Saunders Murray Goulburn Cooperative	Craig Kinzett Heinz Australia	Chris Furnell TWU – Victoria
Pat Macri Coles Myer	Dave Bolton Ararat Export Meats	Ivo Scapin South Pacific Tyres
Chris Ryan P&O Nedloyd	Glenn Santos CP Ships	Peter Templer VicTrack
Don Forsdyke Port of Melbourne Corporation	Zoran Kostadinovski CBFCA	Noel Kelly Puma Aust
Daryl Crump AQIS	Jan Court SCA Hygiene Aust	Greg Gilbert Australian Customs Service
David Muir Westgate Ports	Neil Chambers Victorian Transport Association	Peter Kosmina 1 Stop
Alan Stevens Patrick Port Services	Peter Taylor VicRoads	Kate Allport Pro Kinetics
Brian Mueller Mainfreight	Adam Holland P&O Ports	Keith Finkelde bREX
Gary Chalmers Chalmers Industries	Paul Fleiszig AB Oxford Cold Stores	Meredith Adams MOL
Georgie Johnson Coynes Freight	Barry Keogh Eltrad	Phil Constantine Josies Transport
Andrew Smith Interport	Don OBrien Patrick Portlink	Craig Lyttle Reefer Mgt Services

Greg Ross Container Fumigation Services	Andy Morris Patrick Port Services	Alan White Port of Melbourne Corporation
Phillip Porter Australian Paper	Mick Stanic Victorian Container Mgt	Rose Elphick VFLC
Jude d'Cruz PGA	Greg Vincent Kubota Tractor Aust	John Begley Begley Hobba Manton
Geoff Purcell Amtcor Logistics	Rob Peyerl CRT Group	Bill Green Austrak
Samantha Taylor DOI	Adrian Booth Extra Transport	Russell Burke WCBM
Robert Coode Murray Goulburn Cooperative	Tim Steel Patrick	Rob Connelly Extra Transport
Greg Winstanley Patrick Stevedoring	Roy Rodrigous JPC/Patrick	David Dickson CC Containers
Andrew Ferguson Internet Commerce	Dick Laidlaw HLB Chemtrans	Peter Cox Patrick Port Services
Vince Crisante P&O Nedloyd	Troy Aitken DIIRD	Brad Leonard Pro Kinetics
Paul Blake Chalmers Ind	Nolan Fernandez Pacific National	Chris Curtin Murray Goulburn Cooperative
Hermione Parsons DIIRD	Damien Ryan Patrick Stevedoring	Peter Van Duyn Patrick
Jeff Roberts Roberts Transport	Brendon Considine Secon Carriers	Sam Rajendran Coynes Freight Mgt
Ian McMillan TDT Vic	Paul Curmi K & S Freighters	Jan Zimpel Heidelberg Graphic Equip
Dianne King Eagle Globe	Cpt Peter Bosman George & Sims	Garry Molloy Pacific National

7 OVERVIEW

The fundamental mismatch of hours was illustrated in BAHS Stage 1 Report.



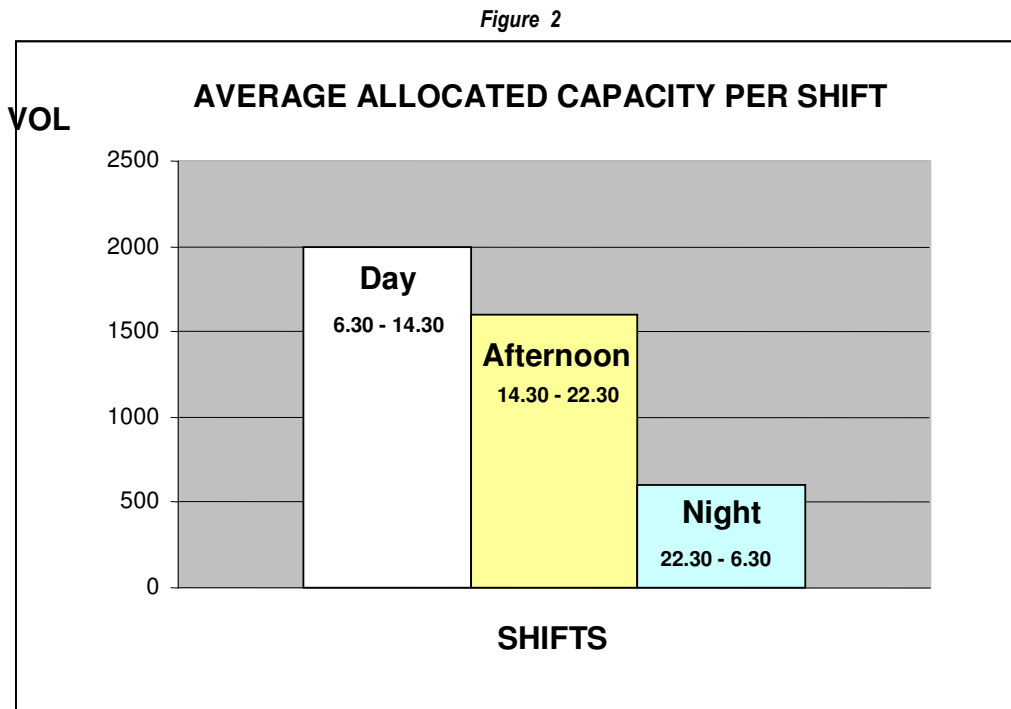
Stevedores are driven by asset utilisation and their capacity to provide services to meet shipping demands that reflect 24 hour operations, however, relatively few key interface logistics operations currently match the 24/7 spread of hours. (transport, distribution centres, packing /unpack operations, empty container parks, ancillary service providers etc).

Each participant in the sea freight supply chain is driven by their own imperatives, mostly commercially based, which in isolation mitigate against change until it is forced upon them.

The issues surrounding the logic for operating hours vary widely from industry sector and from individual enterprises.

Currently stevedores allocate equipment and labour to meet their planned operations which largely reflect the lower take up of slots on the night shift.

Figure 2 shows the current average daily allocation of capacity for road slots made to carriers at East & West Swanson Dock.



Most carriers, distribution centre operators and service operators indicated a preparedness to extend hours on the basis that

- A) Empty containers issues can be managed (can be sourced /de-hired /staged efficiently); and,
- B) Costs are recovered either up front or via efficiency improvements.

Historically service providers have been unable to convince importers /exporters that they should pay for the extra costs associated with extended hours as they operate in a highly competitive and disaggregated market and customers simply will not pay while they have options.

In a broader context this raises the issue of whether a service provider can demonstrate the value they provide against the market rate for services. If the gap between the market rate and accepted value is too large the customer will not pay.

In a sector such as road transport the immaturity and commercial naiveté of some carriers coupled with the customer's lack of understanding (and therefore acceptance) of the real issues (how things work) has combined to keep pricing low. The focus remains on a unit rate instead of how the task can be made more efficient.

In the case of warehousing /pack, unpack /DC operations, management claim they are unable to obtain sufficiently skilled labour, and even if they could supply labour, customers will not pay. They also relate many of their issues to the competitiveness of the marketplace.

A simple view put forward by a number of DC and transport operators is that stevedores have no problem with supply of shift labour because they pay a premium that their clients have no alternative but to pay.

Empty container park operators cite similar issues; however it is clear that in this sector (empty container parks) players believe crunch time is now approaching.

8 EMPTY CONTAINER MANAGEMENT

Factors impacting empty container park sector include -

- Industry storage capacity
- Industry gate activity capacity
- Intermodal hub(s) development
- Lack of container park industry information & coordination
- Efficiency impediments to empty container management
- Container booking & release numbers
- Equipment hand over agreements
- Transport delays /queues in peak periods as a result of short notice issues
- General congestion
- Container park depot equipment failure (forklift breakdowns /delays)
- Confirmation of container release details prior to pick up
- Pre-arrangement of multiple container pick up /de-hire arrangements
- Older communication technology from shipping lines
- Shipping lines container surveys(s)
- Depot operations (truck to container vs. container to truck)
- General errors caused by carriers' poor understanding of container park operations
- Container availability
- Container repair approvals
- Container visibility
- Variance in shipping lines current systems

'The management of empty containers, empty container park operating hours and empty container park performance are central to any improvement strategies'

(Focus Group, BAHS Stage 1)

While the study has looked closely at this critical interface, a number of issues overlapped into work being undertaken in Victoria by a joint working party of the Victorian Freight and Logistics Council and Shipping Australia Ltd.

Solutions to issues are detailed in this report. It is worth noting in the case of the container parks sector there are some broader issues which will directly impact on the efficiency of all parties in the port of Melbourne currently and in future as volumes grow and container availability hours at port terminals expand.

In Victoria, the container park industry has suffered a decline in profitability over the past decade. Rationalisation has occurred and operators claim they have struggled to achieve reasonable returns for some time due to a number of commercial factors.

8.1 Factors impacting on the empty container park sector

A range of factors in isolation or combination impact on the park operations, including –

- Below cost recovery for survey, lifts, off hires /on hires, relocation of sale containers, repair lifts and other service demands
- Reduction in revenue for container storage where many lines do not pay storage until after 30 days. (a reflection of competition when over supply existed)
- Labour rates (repairs) have been static over a long period.
- Dilution of repairs business to overseas depots
- Penalties on repair estimate variances
- Poor coordination of bulk runs by stevedores
- Investment in equipment and increased repair & maintenance costs. In many cases depots no longer operate truck to container. Due to OH&S requirements it is now container to truck resulting in increased fork travel time.

Table 1 shows the significant change to average depot throughput following rationalisation over the past decade.

Table 1

Year	No. of empty container parks	Port of Melb throughput	Average depot throughput
1995	28	900,000	32,142
2005	12	1,460,000	121,666

Industry estimates indicate current storage capacity in depots to be around 48,600 TEU with average daily gate capacity estimated at around 4,650 TEU.

Table 2 details the approximate split for Melbourne's depots.

Table 2

Operator	Operating storage Capacity TEU	* Daily gate throughput capacity TEU
Depot 1	2,900	350
Depot 2	4,500	700
Depot 3	9,000	1,000
Depot 4	7,500	600
Depot 5	3,000	400
Depot 6	7,000	450
Depot 7	2,000	350
Depot 8	3,700	180
Depot 9	2,000	140
Depot 10	4,500	300
Depot 11	1,700	160
Depot 12	800	20
Total	48,600	4,650

** Note: gate capacity reflects current operating hours which varies between operators*

Industry storage capacity

Despite increased volume through the port, investment in either expansion to current facilities or in new green field sites to meet forecast growth is viewed by many existing players as doubtful. This is due to physical constraints (e.g. availability of appropriately zoned land) and not commercially viable given current returns.

Industry gate activity capacity

Tables 3 and 4 indicate the impending capacity constraints on existing container parks.

Table 3 shows an annual throughput of 1.46m international TEUs, (note: Melbourne's total TEU of 1.9 million includes some domestic traffic and volume that does not flow through empty container parks) which indicates some surplus capacity. Table 4 shows a shortfall of capacity as volumes increase in line with current forecasts.

Table 3: Estimated storage and gate capacity – Current

	TEU Dwell Days	TEU Dwell %	Depots monthly Holding Capacity	Depots monthly Holding Task	Depot Daily Gate Capacity	Depot Daily Gate Task	Depot Surplus
Customer	9	26.5%	74,000	72,000	4,650	4,880	2,000
Depot	22	61.7%					
Terminal	3	8.8%					
Transit	1	3.0%					
Total	34	100.0%					

Table 4: Estimated storage and gate capacity – Assuming 7% growth

	TEU Dwell Days	TEU Dwell %	Depots monthly Holding Capacity	Depots monthly Holding Task	Depot Daily Gate Capacity	Depot Daily Gate Task	Depot Surplus
Customer	9	26.5%	74,000	77,040	4,650	5,222	(3,040)
Depot	22	61.7%					
Terminal	3	8.8%					
Transit	1	3.0%					
Total	34	100.0%					

There are many variables to consider, such as future increased capacity, improved practices, provision for peaks, triangulation, container turn times, number of working days and the total port throughput. An extension of existing hours in the short term appears inevitable.

This will require the sector to address the impediments highlighted in the BAHS process and other forums including labour, equipment and system constraints.

The most pressing issue for the efficient management of empty containers is the container parks short term ability to cope with volumes.

Pressure on container parks to extend hours will be exacerbated when; inevitably, Sunday becomes a normal receipt day at the wharf.

8.2 Empty container park capacity constraints

Solution(s)

- **Short term – Extension of hours from existing parks**

In the absence of alternatives there will be no option but to extend hours. Given current trends, forecasts and the tabled industry data, the issue is not whether parks extend hours, but a matter of when and how the park operators handle issues such as investment, labour, communications etc. Capacity turnaround can be improved by altering ‘in-gate’ procedures to allow for container handovers to be stamped – ‘subject to damage report’ rather than full inspection.

This initiative must be supported by transport operators, pack /unpack operations and other service providers.

- **Medium Term – Extension of existing container parks where practicable and introduction of new facilities on or adjacent to intermodal hubs with access to rail**

This solution requires planning and zoning policy support from the Port of Melbourne Corporation (PoMC) and state government to ensure that infrastructure initiatives are developed under a broader strategic plan.

While the development of intermodal hubs is viewed as a progressive move to increase rail interface into the port, indications to date suggest the P&O facility in Somerton will be focused on intermodal operations and only provide limited empty container facilities.

Given issues associated with rail track access, matching container flow requirements etc it may take several years for proposed intermodal hubs to reach the scale required to achieve efficiencies. Operators are expected to focus on value-add activities that generate better returns than empty container parks. Therefore the issue of zoning will remain an integral element to any solution.

Industry believes that there will be a continued need for some empty container parks to be located close to the port, however, it was recognised that land prices in inner areas would not sustain container park operations given current returns.

The PoMC's policy on land and tenant issues is not visible to industry. Government will need to address the issue of planning and zoning land for this requirement so the industry can get on with development.

- **Long Term – Expansion of Empty Container Parks on or adjacent to intermodal hubs established.**

Once again zoning must support growth and development should be built around a sound long term strategic approach that ensures efficiencies are gained from scale.

8.3 Capacity of container parks

Solution(s)

- Empty container parks need to be included in PoMC land use policy and need to be identified as strategic to the import /export process.
- PoMC or government to consider short term assistance /land cost subsidy to empty park operators recognising the importance of this sector to port efficiency. Contribution should consider support to a program of extending hours and or support for development of off port location(s).
- Future empty park locations needs to be assessed on industry needs to ensure they are developed in the right location(s) with long term expansion capacity including planning /zoning /residential buffers etc.
- Government /PoMC to consider a levy to all import and export containers to fund container parks after hours operations in the short term.
- Shipping lines introduce a charge to all import and export containers to fund container parks after hours operations in the short term.
- Empty parks not aligned to large carriers should look to partner with major carriers to assist in planning & productivity capabilities.

8.4 Intermodal Hub(s) development

Development of intermodal hubs with empty container park facilities on or adjacent to hub sites has been identified as a potential solution to addressing capacity and wharf interface problems. However, as indicated above there is no definitive plan or timeline on specific hub developments.

The view was expressed that the PoMC and government need to provide clearer policy and planning strategies to encourage developments that meet the port's overall supply chain efficiency objectives.

Solution(s)

- Government /PoMC to place levy on all import and export containers to create funding to assist the development of Inland Ports /Intermodal Hubs.
- Funding to be used to subsidise rail and transfer costs to achieve the scale and volume of containers to /from Inland Ports required to achieve relative efficiencies. This approach recognises the need to increase the capacity of the port and to assist government and industry's aim of achieving 30% on rail.

8.5 Impediments to the efficiency of container park operation

Lack of container park industry information & coordination

There is a lack of definitive data & information for container parks.

Coordination of specific information flows is important to assist management of peak periods and provide necessary information for strategic planning.

Solution(s)

- Container park operators in Victoria to re introduce an industry association that can coordinate information flows, data collection and assist efficiency initiatives in conjunction with others in the supply chain.

Container booking & release numbers

Transport companies may quote incorrect booking numbers as a result of confusion over reference numbers. Shipping lines issue a booking number and later a release number.

Exporters may be unclear on the process and provide carriers with the wrong reference number.

Solution(s)

- Container parks require a standard shipping line booking number/release number procedure. One suggestion is for use of the same number with a prefix eg: B123; R123.
- SAL to review shipping line(s) process and,
 - a) Establish one clear reference
 - b) Educate exporters
 - c) Incorporate into container visibility solutions

Equipment hand over agreements

Transport companies arrive without import container '**Hand Over**' **agreement documentation**, particularly where containers are staged and delivered separately (especially in the case of side loader delivery).

Solution(s)

- Shipping lines to pre-advise container depots of all containers by vessel and voyage to assist prompt de-hire
- Carriers need to be educated to ensure the hand over paperwork is correct
- Non compliance penalty to be introduced by empty container parks to encourage accuracy

Transport delays /queues in peak periods as a result of short notice issues

Solution(s)

- Install cameras at container parks, stevedores & rail interfaces with web based access
- Extension to main arterial points via Smart Freight Initiative to be considered.

Congestion

Solution(s)

- Introduce time slot system to empty container parks
- Shipping lines consider flexibility in empty return locations due to park capacity, i.e.: change traditional arrangements to enable boxes to be de-hired at multiple empty park locations.
- Consider pooling all empty containers into empty container parks
- Triangulation – this initiative is viewed as limited, however, efficiency opportunities can be achieved via hubs & localised operations

Container park's depot equipment failure (forklift breakdowns /delays)

Solution(s)

- Parks to introduce notification of delays on line to all parties, initially through email advice.

Confirmation of container release details prior to pick up

Solution(s)

- Carriers need to be educated to ensure release numbers are pre advised and correct, or
- Non compliance penalty to be introduced by empty container parks to force inefficiency and cost where it belongs in the chain.

Pre-arrangement of multiple container pick up /de-hire arrangements

Transport companies and container parks are wasting resources through ad hoc arrival of vehicles. For volume movements, pre-notification assists transport productivity (no. of vehicles) and enables container park resource planning.

Solution(s)

- Carriers to adopt procedure for pre advice

Communication technology from shipping lines

Many shipping lines are still not using electronic data interface (EDI) to send releases and of around 42 shipping companies regularly operating through the Port of Melbourne **some 40% are still using manual /fax advice for bookings.**

Solution(s)

- SAL to address the communications issue with it's members
- Empty parks to charge appropriate rate /additional administrative costs associated with old technology, errors and delays

Shipping lines request container surveys(s) prior to vehicle departure

Solution(s)

- All shipping lines to accept common practice of stamping D/O "Subject to Damage Report" to allow carrier to depart promptly and for detailed container inspection to be carried out without delaying carrier.

Depot operations staff location (truck to container versus container to truck)

Solution(s)

- A common operational flow policy to be adopted for all empty container parks to ensure standard 'best practice' approach' including OH & S
- Smoko breaks included to be staggered to eliminate breaks in productivity

General errors caused by carriers' poor understanding of park operations

Solution(s)

- Container parks to develop a simple induction program to transport company staff similar to rail terminals approach. VTA can assist in this process

Container availability

The impact of poor forecasting results in insufficient working stocks being available when required. Shipping lines need approx. 6 - 8 week notice to ensure stock will be available, i.e. to enable reposition from interstate /overseas.

Shipping lines rely on the return of import containers promptly to enable supply of stock for exports. Shipping lines advise that demurrage charges are used to discourage customers from holding equipment outside of contractual arrangements rather than as a revenue source.

Vessel delays compound the logistics cycle i.e. delayed availability of imports mean delayed availability for exports.

Customers book cargo with more than one shipping line and do not confirm cancellation until very late in the receival program.

Scheduled collections /de hires not completed i.e. transport arranges schedule with depot but fails to show.

To date attitudes (aside from a few players) are governed by individual businesses' interest without regard for the whole. This results in a number of buffers /layers of safety that add cost to all.

Cost increase if exporters are unable to provide reasonable forecasts, over book or double book slots with shipping lines, or importers fail to meet scheduled de-hires Shipping lines are forced to transfer equipment and or have additional stock on hire which adds to cost and in peak times results in shortages that cause missed orders.

Solution(s)

- Industry associations must establish an educative process to increase importers and exporter's knowledge /awareness of the impact and costs of these issues.
- Improved visibility of container location between shipping company advice and container park arrival via system connections
- Exporters to be discouraged from booking the same cargo with multiple shipping companies which consumes capacity and wastes resources via penalties for cancellation.
- If exporters/importers are not deterred, shipping lines could introduce a booking fee
- Import container demurrage could be adjusted to encourage reduced import container cycle times through a fairer system. The system should have the capacity to recognise delays created externally via ACS & AQIS & VBS impediments which should be built into overall calculations of base charges. Higher rates should apply to businesses who can control delays but continue to return boxes late.
- Ensure regional exporters get release numbers early to enable pressure free cycle time.

Container repair approvals

Repair approvals can be delayed by shipping lines, creating inefficiencies in both dwell time and containers become buried, requiring extra lifts /handling.

Solution(s)

- Shipping lines to improve repair approval processes and agree key performance indicators (KPIs) with empty container park operators
- Container parks introduce cost recovery program to reflect actual costs.

Container Visibility

The issue of container visibility is associated with managing the random process of empty container releases and empty de hires by container parks, transport companies and shipping lines.

Container parks have little control over vehicle flow in and out of their facilities. During peak periods any inefficiencies tend to cause truck queues, delays and equipment being unavailable.

Solution(s)

- Introduce an IT interface that could provide visibility of available stock to transport companies, exporters and relevant parties.

The industry needs complete visibility of the process, i.e.:

- Vessel ETA,
- Availability date
- Time up
- Return depot
- In gate / out gate at depot
- Container detention clock
- Booking number /release number with quantity by size /type

Options for development may include Smart Freight, Tradegate, 1 Stop or others but must be driven as minimum cost /industry solution model.

Issues associated with this concept include -

- Depot stocks are confidential commercial arrangements between shipping lines and depots;
- Allowing external operators to view depot stocks could intensify uncontrolled releases and create greater levels of congestion at depots,
- Viewing of limited depot stocks could result in customers trying to pick up empties too early, reducing stock required for vessels cutting off.

Variance in shipping lines current systems

The process of transmission of data varies between shipping lines. Some lines transmit release numbers in batches by fax or email which contributes to the administrative burden, delays and confusion experienced at depots.

Solution(s)

- Lines to transmit real time data direct into the parks systems via EDI

8.6 Container Park solution(s) require a collaborative approach

SAL Ltd, exporters and container parks may be encouraged to design and implement a standard procedure for booking numbers and release numbers to replace existing arrangements (to be built into the system).

Transport operators provide daily information to shipping lines as to what import /export stocks they hold

Transport operators advise depots prior to collection of empty to confirm booking details & container availability (if depot is made aware of expected pick ups / de hire 24hrs prior they can improve planning resource levels)

Large volume collections /de hires transport operators to prearrange time with depot and pay a fee for after hours depot service similar to shipping lines. Costs will be offset by productivity /turn around.

Empty container parks implement VBS timeslot procedure for import de hires to control current random returns.

9 WHARF INTERFACE

A range of wharf interface activities and issues have been identified where solutions may be applied. These include –

- Australian Quarantine and Inspection Service (AQIS) hours
- Australian Customs Service (ACS)
- Customs agents and Freight forwarders not available after 1700 hours
- Shipping line offices availability
- Day shift slots scarcity
- VBS timeslot incentives
- Vehicle productivity
- Mass limits
- Wharf container bulk runs
- Container storage days on wharf
- Shipping container demurrage
- Transit container storage / staging
- Increased afternoon & night shift operations
- Export cut offs
- Container weights
- Commercial arrangements – wharf interface
- Delivery order (DO) accuracy
- Changing environment for Importers

9.1 Australian Quarantine and Inspection Service (AQIS) hours

One of the flow-on benefits of BAHS is that it has provided stakeholders with a forum for people to discuss issues with other businesses that interact operationally but who may not have a direct commercial relationship.

In one workshop session, the AQIS officer was able to provide an immediate solution for the problem associated with AQIS wash inspections.

The issue is that once containers are directed to a wash facility after hours they will sit until an AQIS officer completes inspection. AQIS was able to advise that trials have been completed and a process of accreditation commenced. This is a case where the solution was already available, but not implemented due to a lack of awareness in the industry.

This enables the three existing Melbourne facilities to inspect containers after hours which will avoid delays and costs built into the system.

Current AQIS Hours

- Front counter documentation clearances, (Mon - Fri) 08.00 to 17.00
- In house inspections (Mon - Fri) 08.00 to 17.00 or by appointment
- Centralised appointments 07.30 to 17.00
- Field operations - inspections (Mon - Fri) 07.30 to 16.00 or by appointment
- Seaports inspections (Mon - Fri) 07.30 to 16.30 or by appointment
- Staffed depots - inspections (Mon - Fri) 07.00 to 15.30
- Gas inspections & break-bulk inspections. 07.00 to 15.30
- On wharf inspecting containers as they leave the wharf 24/5

Industry needs to be able to clarify and resolve 'holds' on cargo after hours. During daytime shifts holds are usually queried with customs brokers who resolve reasons for holds (steam clean direction, shipping line documentation delays etc) however in after hours carriers can not contact brokers or AQIS for direction.

Solution(s)

- AQIS need to open longer hours to meet the needs of port operations (this requirement applies to both AQIS office and field operations)
- AQIS officers available to inspect rail containers after hours to avoid the need to stack / re-handle and delay to transit time
- AQIS help desk required to enable after hours operational enquiries (preferably located in port vicinity).

9.2 Australian Customs Service (ACS)

In the BAHS workshops the ACS representative was very helpful in detailing the key reasons for ACS holds on cargo.

ACS investigations demonstrate that a significant percentage of delays to clearance relate to procedural issues, which are controllable within individual organisations' supply chains. For example, incorrect and / or late documents cause delays to clearance which can be caused by:

1. Late arrival of documents from overseas
2. Incorrect or inadequate information on the Bill of Lading
3. Transhipments - Australian agent unsure of final vessel after transhipment
4. Internal systems problems - reporting cargo as close to the 48hr limit as possible leaves little time to correct errors.

Solution(s)

- Awareness - industry needs to understand the reasons for holds related to non-security issues.
- Businesses need to address internal processes

Containers are delayed via ACS X-ray facility

Solution(s)

- X-ray facility to run 24/7
- Quota system needs to be reviewed
- ACS help desk required to enable after hours enquiries

9.3 Customs Agents and Freight Forwarders not available after 1700 hours

Solution(s)

- Customs agents and freight forwarders will need to provide accessibility after hours as container parks, AQIS and ACS move to match waterfront extended hours operations.

9.4 Shipping Line offices availability

Solution(s)

- Shipping lines to provide after hours access to respond to operational issues at container parks and transport interfaces

9.5 Day shift slots scarcity

Solution(s)

- Transparency is required in how the VBS system works, (slot allocation by vessel /import /export). Reporting can remain confidential with Stevedores /1 Stop providing transparency of the VBS system to an independent body, i.e., PoMC. PoMC needs only to be satisfied that the system is fair and equitable and serves the needs of the carriers on behalf of importers and exporters
- The PoMC could then report back to the carriers industry body (VTA) that they are satisfied that the system is fair and equitable.
- Stevedores offer discounts for night time slots.
- Alternatively stevedores increase the cost for day time slots.

9.6 Vehicle Productivity

A number of importers / exporters' efficiency is reduced by the current limits on use of Super B Double vehicles in restriction zones.

Solution(s)

- VicRoads to allow greater use of Super B Doubles in selected areas and in off-peak times to increase wharf interface productivity.

Mass Limits

A number of importers / exporters could increase efficiency via increased mass limits to vehicles

Solution(s)

- VicRoads to increase mass limits to assist optimisation of loading.

9.7 Wharf Container Bulk Runs

Transport, container parks and stevedores are under optimising resources. Stevedores need to confirm planned capacity to carriers. Current systems are ad hoc. For example, a carrier has 48 containers to bulk run – (assumes 4 x B Double combinations completing 6 trips each from parks to wharf) but is delayed at the wharf due to insufficient straddle allocation and/or the terminal trying to juggle other bulk runs.

This results in delays that impact severely on carriers and container park operators (planned equipment & staff for 3 hours can be extended to 6 plus additional costs).

Solution(s)

- Stevedore & carriers to define expectation of bulk runs so service levels are achieved
- Stevedores to clarify equipment allocation commitment
- Stevedores should pay for non-performance

9.8 Container Storage Days on wharf

Solution(s)

- More carriers to develop cost efficient container staging processes.
- Isolate transport operations from wharf – send to off-wharf facilities (Philadelphia model)
- Development of inland ports

9.10 Shipping Container Demurrage

Containers delivered by side loader vehicles or where trailer drop – outs are utilised have been identified as a key cause of container demurrage.

Solution(s)

- Access to customer's site for out of hours container exchanges for side loader & trailer exchange. This enables fleet to work 24/7.
- Improved management of shipping container demurrage will be assisted by systems that provide visibility of steps within the chain – refer systems solutions for tracking containers.

9.11 Transit Container Storage /Staging

Solution(s)

- Develop staging process into a cost effective process with positive benefits to maximise 24 hour wharf access and deliver to customer efficiently.
- Ensure costs incurred are reflected in staging process rate.
- Educate importers / exporters that staging (where appropriate) provides them with flexibility of delivery and increased certainty of costs.

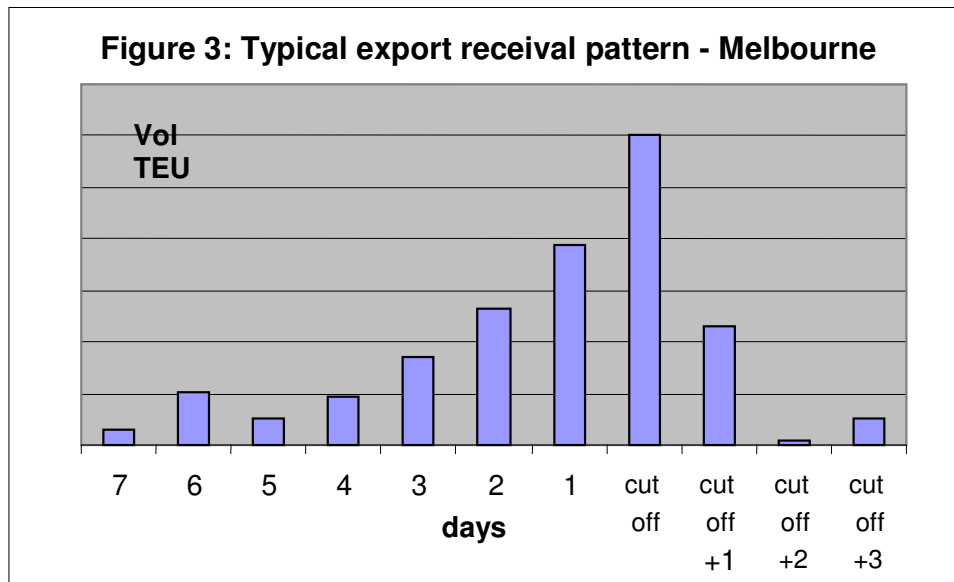
9.12 Increased afternoon & night shift operations at Pack /Unpack, DC's restricted by labour shortages, labour costs and or Customers preparedness to pay

Solution(s)

- Industry level plan to increase available labour
- Increase labour flexibility for night time container unloads for DC's.
- Review cost of labour (penalty rates) for shift work.
- Educate importers and exporters on 'the real costs' associated with port logistics and staging.

9.13 Export Cut offs

Peaks associated with last day container receivals create unnecessary pressures.



Note: Imports collection from the wharf is a reverse situation to exports, with demand to collect containers from the wharves as soon as possible, in order to avoid “time out” charges on empty containers returned to shipping line parks (usually 7 days allowed).

Solution(s)

- Analysis of export /import flows to understand the operational parameters.
- Better understanding required of importers and exporters to assess the impact on the stevedore slot allocation /usage.
- Education of exporters and their service providers to reduce peaks.

9.14 Container Weights

Shipping line's delivery orders may be inaccurate due to mis-declaration of weights on containers. This can result in delays while suitable equipment is rescheduled for the task, when it is discovered that a container is heavier than expected.

Solution(s)

- Delivery order to include gross weight
- Shipping lines to facilitate government agency education of customers on chain of responsibility
- Importers to educate suppliers

9.15 Commercial arrangements – wharf interface

Stevedores have direct operational relationships with transport operators but no commercial relationship or responsibility.

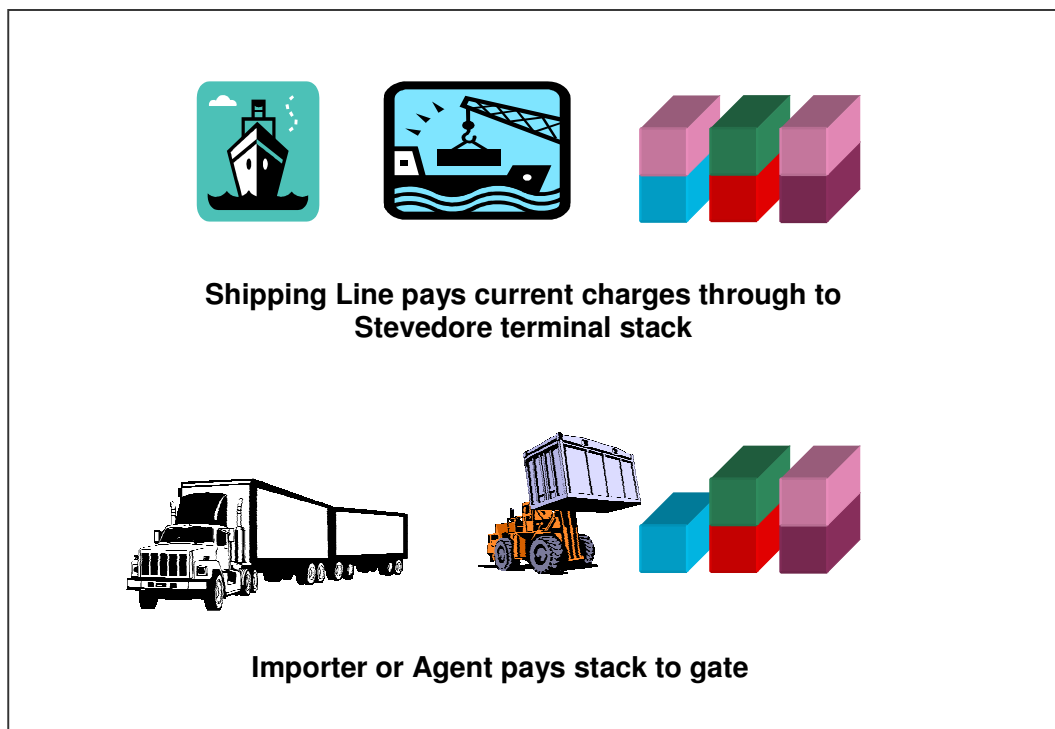
On wharf interface matters, there is limited incentive to address issues that do not assist the stevedore interests, despite carriers representing critical service & commercial links for importers and exporters.

Shipping lines have tended to abdicate responsibility unless they are directly impacted or transport operators can leverage off their relationship with importers and exporters.

Solution(s)

- Commercial arrangements between shipping lines and stevedores provide for lift on /lift off (cell to stack /vice versa) with separate commercial arrangements between importers/exporters and or their agents /carriers and stevedores for terminal services.

Figure 4: Example Imports



9.16 Delivery Order (DO) accuracy

The problems associated with inaccurate delivery orders often originate off-shore.

Solution(s)

- Education of suppliers on the importance of attention to detail
- PRA accuracy - again the importance of attention to detail (for example in one week there were 1310 amendments to PRAs at one terminal)

9.17 Changing environment for Importers

In many cases imports are driven by off-shore production runs that reduce unit costs of product but can increase inefficiency /costs placed on local supply chains.

With manufacturing consolidation in Asia, Australian businesses have reduced influence with suppliers. Import volume surges create bottlenecks. In some cases 'just in time' (JIT) is becoming obsolete.

Solution(s)

- Education on supply chain approaches for importers who don't recognise the opportunity of better managing import process off-shore.
- Hold imports overseas and feed to Australia where practicable.

9.18 Stevedore Capacity

Issues are being addressed within other forums

- Land availability
- Berth extension
- New equipment – rubber tyred gantries (RTG)
- Reduced dwell time
- Back loading / round tripping trucks
- Transit hubs & staging
- Intermodal hubs

10 SYSTEMS AND DOCUMENTATION

Solutions were proposed in the following areas –

- Shipping company delays to manifests
- Sea Cargo Automation (SCA) hold messaging
- Cargo Management Re-engineering (CMR) SCA holds
- SCA holds surprises
- Delivery order (DO) weights and measures errors.
- Shipping company's delivery order
- PRA accuracy (similar issue to DO)
- Non compliance on hazardous goods documentation
- Empty container park transparency
- Delivery order errors
- Shipping company transparency /visibility of containers
- IT development of industry applications

10.1 Shipping company delays to manifests

On-time reporting is a legal requirement. Late reporting is a serious concern to ACS.

Solution(s)

- Shipping lines /forwarders to implement awareness program for overseas offices.
- Increase cost penalty for late manifests.

10.2 Sea Cargo Automation (SCA) Issues

SCA hold messaging

Solution(s)

- Proactive message back to error creator.
- Ability to contact ACS after hours to assist in hold issues

New CMR System has less information re SCA holds with no information on what created the error, only yes or no

Solution(s)

- ACS requirements are very clear, however ACS needs to ensure they have input process in place to adjust to industry concerns /issues in the implementation phase.

SCA holds surprises

There are too many cases where the COMPILE system says goods are cleared, however the container still has a 'hold' according to the wharf systems.

Solution(s)

- Any change in status triggers an alert to carrier and responsible parties to address the problem.

To date the problem with SCA holds is carrier related rather than freight forwarder or customs broker related – i.e.: they know the problem but the carrier does not. It is expected that CMR will clear up a lot of the historical SCA issues.

10.3 Delivery order (DO) and pre-receival advice (PRA) Issues

Delivery order weights and measures errors

Solution(s)

- Awareness programs to overseas suppliers and shippers of chain of responsibility. (COR)
- Prescriptive measures for DO accuracy. Repeat offence = All import containers to have weigh bridge confirmation.

Shipping company's delivery order (DO)

Solution(s)

- All lines to provide electronic DO
- Review of electronic DO as they are PDF files. (creates another problem of multiple copies)
- Government legislate to mandate electronic DO facilitated by PoMC
- Stevedores to mandate electronic DO

PRA accuracy (similar issue to DO)

Solution(s)

- SAL to educate /train exporters to get it right first time

10.4 Non compliance on hazardous goods documentation

Solution(s)

- Sea freight to follow airfreight model. Accreditation processes to apply to enforce compliance.

10.5 Empty Container Park Transparency

Solution(s)

- refer empty container park 'Container Visibility' solutions

10.6 Delivery Order Errors

Solution(s)

- SAL to develop awareness and education program to eliminate the estimated 20% of documents that are incorrect or late causing cost and delays to downstream logistics. Program needs to address and include overseas suppliers.

10.7 Shipping company transparency /visibility of containers

Solution(s)

- Shipping companies own the equipment (containers) and they hold most of the information supplied by their supplier(s) – (stevedores, container parks etc) therefore shipping companies must provide through chain container tracking.

10.8 Development of Industry Applications

Solution(s) must include

- Standardisation of messaging
- Commonality of goals and expectations.

11 EDUCATION AND AWARENESS

Education and industry awareness was a cross-cutting issue throughout discussions with customers and their supply chain partners. This included

- The need for an education strategy for suppliers and customers
- Support for new entrants to the Industry
- Whole-of-chain awareness

Lack of broad understanding across the supply chain was identified as a major impediment to efficiency by most participants attending the workshops.

While there is ample expertise within individual stakeholder groups there appears to be a relatively poor understanding of how the overall sea freight supply chain interacts and operates.

This issue needs to be addressed at a number of levels:

Importers and exporters need education to understand the options available to them, in particular an increase in their understanding of the overall supply chain rather than the traditional focus on individual cost components.

Operators and service providers need to understand how they fit into the broader picture and what they can do in a collaborative sense with others in the supply chain to gain efficiencies.

Management and employees within the industry can benefit their businesses via increased understanding of the fundamentals of the sea freight supply chain.

Industry entrants are joining businesses with little understanding of the basics. Many in call centres, documentation roles, operational positions (and some management) are focused on specific tasks and do not understand the impact they have on others in the chain.

Tertiary and industry institutions need to better understand the industry's needs to ensure appropriate curriculum for supply chain, logistics, international trade, customs broking and related disciplines

Solution(s)

- Develop an industry education strategy. VFLC to consult with TDL Industry Round Table and relevant industry and government bodies to determine a suitable approach.

Stage 2 workshops included some training /educational professionals. The TDT Australia representative advised that the industry needs to consider whether it develops its own training and education programs or engages external partners. Aims need to be clearly defined:

Education includes:

- Training
- Qualification
- Awareness
- Engagement

Solution(s)

- The Port of Melbourne Corporation's Shipping and Logistics team recently provided a very effective port education day for the freight forwarding industry. The tour of the port and workshop at the Port Education Centre enabled industry people to view 'real world' operations close up and develop important knowledge in an excellent learning environment. The Port of Melbourne Corporation is encouraged to develop and implement an ongoing program that builds on this initiative.
- Victoria's \$16.6 billion transport, distribution and logistics sector is central to the State's productivity and competitiveness. The port of Melbourne is Australia's leading container port. Industry, government and the community must invest in the future of those assets.
- Government, industry and educational institutions need to consider the establishment of a College of International Supply Chain Excellence.

Industry needs to attract and retain new entrants

New entrants to the supply chain industry are decreasing and their stay in the industry is often short.

Solution(s)

- Offer basic training across all industry sectors (cadetships)
- Increase the profile of organisations such as My Freight Career's group training schemes
- Education facilities need experienced logistics people to enter the education system as second career/post early retirement.
- Industry promotion and career path development

Lack of industry forums at an operational level

BAHS has highlighted the lack of industry forums at an operational 'real world' level. Previously a Port Users Group met regularly to address issues and identify practical solutions in a collaborative environment.

Solution(s)

- Introduce an operationally-focused network group to provide on going expertise to port community issues.
- Cross industry participation in industry association conferences / forums. For example, CBFCA Conference importer participation will help educate and breakdown barriers.
- Port to increase awareness of sea freight supply chain issues via regular forums tackling port related issues (Port Education Centre)
- Increased media coverage of the importance of the port and sea freight industry to the Victorian economy.
- Educate the broader community on key issues - why intermodal hubs and infrastructure development are critical to accommodate growth for the State.
- PoMC to take a leadership role in the promotion of the port to the broader community message delivery not just trade facilitation.

12 NEXT STEPS

The Stage 3 BAHS National Plenary will provide refinement of solutions and assist participants to determine the initiatives that are a priority to pursue.

The selection of solutions depends on participants being able to identify those that will deliver the most cost efficient and operationally effective outcomes. There are a number of relatively small adjustments to operating procedures or documentation that offer speedy, low cost improvements to efficiency. Some adjustments will require a commercial analysis across entire supply chains to confirm viability.

Other solutions are systemic and require a combination of industry and government support to implement. Some are amenable to existing government-sponsored programs, or initiatives already underway within industry peak bodies.

There are potentially a number of solutions that are best implemented from a national platform and these will be referred via the Australian Logistics Council to coordinate with industry peak bodies and federal government agencies.

It is expected that during the Stage 4 of the project a Victorian solution set will be forged and a national implementation strategy canvassed with industry and regulatory bodies.

There continue to be opportunities for those new to the project to become involved, to contribute ideas and advice and to capture benefits from implementing the solutions proposed within individual businesses, across chains and between selected businesses and agencies.

The BAHS team encourages readers of this document to use the deep industry knowledge available within supply chains to challenge and enhance the solutions set out in this document.

13 GLOSSARY OF TERMS

ACS	Australian Customs Service
AQIS	Australian Quarantine Inspection Service
AFCN	Australian Freight Councils Network
ALC	Australian Logistics Council
CBFCA	Customs Brokers and Forwarders Council of Australia
CMR	Cargo Management Reengineering
COR	Chain of responsibility
DC	Distribution centre
DIIRD	Dept of Innovation, Industry and Regional Development
DO	Delivery order
DOI	Department of Infrastructure
IAEX	Institute of Australian Exporters
ILN	Integrated Logistics Network
ITS	Intelligent Transport Systems
JIT	Just in time
KPI	Key performance Indicators
PoMC	Port of Melbourne Corporation
PRA	Pre-receival advice provided to the stevedore
MUA	Maritime Union of Australia
RTG	Rubber tyred gantries
SAL	Shipping Australia Ltd.
SCA	Sea Cargo Automation
TWU	Transport Worker's Union
VBS	Vehicle booking system used to control access to port terminals through timeslot bookings by carriers
VECCI	Victorian Employers Chamber of Commerce and Industry
VFLC	Victorian Freight and Logistics Council
VSCCG	Victorian Supply Chain Consultative Group
VTA	Victorian Transport Association