

An aerial photograph of the Port of Brisbane, showing the city, the river, and the port facilities. The text is overlaid on the image.

# PORT OF BRISBANE RESPONSE TO THE ASSESSMENT OF THE PBS SCHEME

OCTOBER 2017

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## **Port of Brisbane Response to the Discussion Paper “Assessing the Effectiveness of the PBS Scheme”.**

The Port of Brisbane Pty Ltd (PBPL) welcomes the opportunity to comment on, and contribute to, the Discussion Paper “Assessing the Effectiveness of the PBS Scheme” dated August 2017. The Discussion Paper is a timely assessment of the PBS Scheme, because although the port has benefited from PBS vehicles, the process itself is complex, costly and often protracted.

PBPL comments on the Discussion Paper are set out below. The comments focus on:

- The benefits to the Port of Brisbane and its stakeholders resulting from the uptake of high productivity vehicles (HPVs) and PBS vehicles.
- The impact these vehicles have had on rail.
- PBS processes, particularly the cost and time required to get permits to access the road network.

### **Benefits of the PBS Scheme**

The Discussion Paper (DP) identifies a number of benefits of the PBS Scheme, namely, safety, productivity, and environment (through fuel savings and therefore emissions reductions).

PBPL's experience tends to validate these benefits, as explained below.

The Port of Brisbane controls about 25 kms of roads at the port, and exercises road manager responsibilities for access to these roads for heavy vehicles, including many PBS vehicles. Trucks and truck access are important to the Port's supply chains because the Port of Brisbane is a 'truck' port: it relies on trucks for the transport of 97% of its Import/Export (IMEX) cargo.

The port has benefited significantly from the efficiency and productivity of PBS vehicles, especially the 30m A double. The ability of the 30m 4TEU A double HPV to access the Port of Brisbane from as far away as Goondiwindi and Moree in Northern NSW has proved a major productivity gain for the transport of containerised grain and cotton to the Port of Brisbane for export, because an A double can transport two heavy 20 ft grain containers and two 40 ft heavy cotton containers, compared with previous vehicles (B doubles and semi-trailers), which are only able to carry one 20 ft grain container or one 40 ft cotton container. The A double is also used to transport bulk commodities to the port such as grain and cotton seed, and fertiliser (usually as a backload)

A Doubles have been approved access to the Gore Highway, the Cunningham Highway, the Warrego Highway, as well as the Ipswich, Logan, Gateway, and Port Motorways in order to get to the Port. They have been granted access to these roads and motorways because these roads have been upgraded to 4 lanes (two in each direction – except for the Cunningham Highway) and can safely accommodate a longer vehicle. This is the result of significant expenditure of funds on road infrastructure in South East Queensland (SEQ) over the last few years.

As a result, there are now about 150 A doubles which regularly visit the port.

The port is now heavily reliant on the 30m long 4 TEU A double, to transport containerised grain and cotton to the Port from Northern NSW and southern Qld. In 2017, the A double represents 10 % of container trucks travelling to and from the port, compared with 8% twelve months ago and 5% three years ago, and compared with 10% for the ubiquitous B double.

The Port has also benefited from the introduction of the 4TEU Super b double, which operates on Port roads at concessional masses of 109 and 117 tonnes. This vehicle was introduced to the Port about 16 years ago, mainly to reduce the number of vehicles required to transport heavy containerised cargo from the Port of Brisbane inter modal terminal (Brisbane Multi Modal Terminal - BMT) to the stevedores. However it rapidly expanded beyond this task and now is a familiar sight on port roads.

The Super b double was introduced to the port before the advent of the national PBS scheme, but it was assessed using similar pre-PBS standards, and a number of recent super b doubles have been designed and built to meet PBS standards (at non concessional masses). There are about 40 of these combinations at the port.

The A double and the super b double have contributed to reducing the number of trucks at the Port, which has reduced congestion and improved port efficiency. This has been aided by a noticeable improvement in the utilisation of A doubles from 2.12 TEUs per vehicle in 2014 to 2.53 TEUs per vehicle in 2017, a 19% increase.

Access to the port for HPVs and PBS vehicles has been enhanced by the upgraded Port of Brisbane Motorway. With its connection to the recently upgraded Gateway Motorway and the motorway network beyond, improved road transport linkages have allowed more PBS vehicles, particularly the 30m A double, to access the port as well as most of the major industrial areas in Brisbane and the port's hinterland.

Approximately 97% of the port's container trade is presently handled by road. Road transport within SEQ presently remains the most effective and cost efficient mode of transporting export and import containers to and from the port.

The Port of Brisbane Motorway (PoBM) is the key road corridor connecting the port to the National Highway system (see Figure 1). This recently completed road is motorway standard with two lanes in each direction, posted at 90km/hr. It connects the Gateway Motorway to Port Drive and also services a number of other adjacent industrial areas (see figure 1 below).

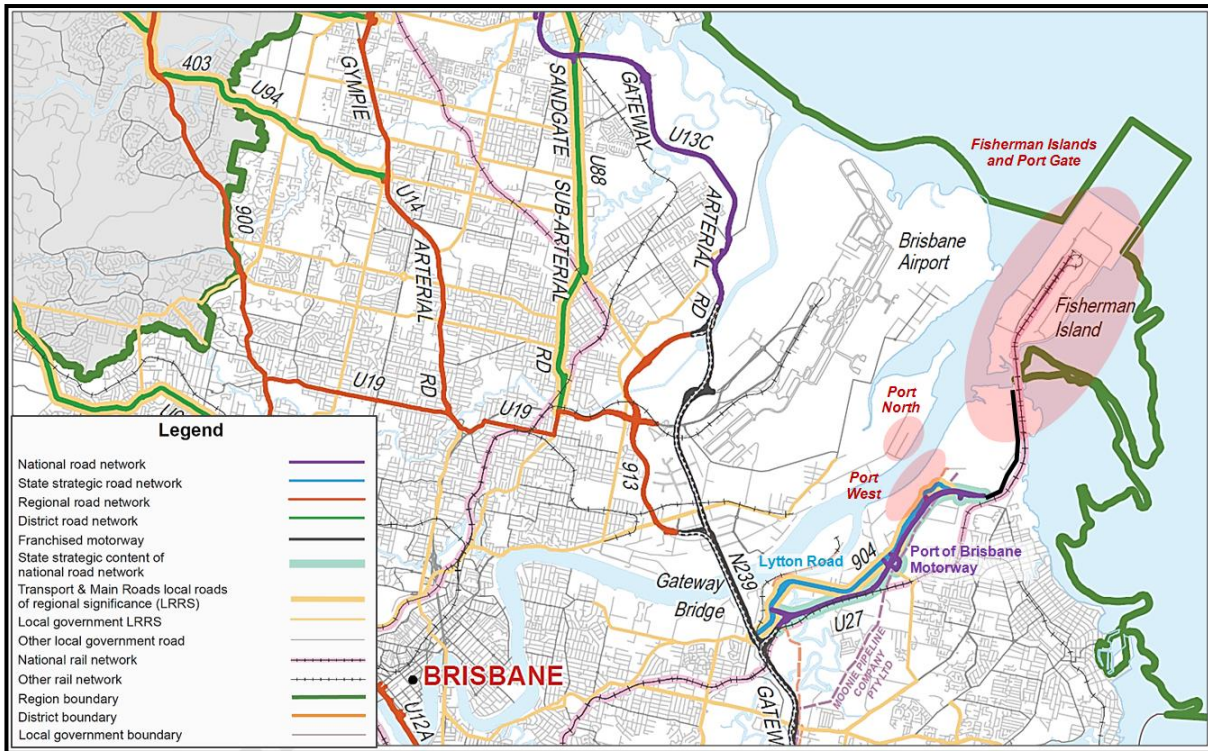


Figure 1 Local Transport System Interface

PBPL is presently linking the second stage of the PoBM to Fisherman Islands via the funding and management of a \$110M upgrade to Port Drive (see figure 2 below). This will provide a four lane motorway-standard connection, an overpass over a major roundabout, and a new bridge with capacity to accommodate the heaviest vehicles, including PBS vehicles. It is expected to be completed in mid-2018.





Figure 2: Port of Brisbane Pty Ltd's \$110 million Port Drive Upgrade.

This upgrade will provide quicker and more efficient access to the port for PBS vehicles, particularly A doubles and super b doubles.

### Impact on Rail

Whilst PBS vehicles, especially the A double, have improved the efficiency and productivity of the port's supply chains, particularly export supply chains, they have also made it much harder for rail to compete. As a result there has been a gradual reduction in rail's share of container trade, as indicated in the chart below.

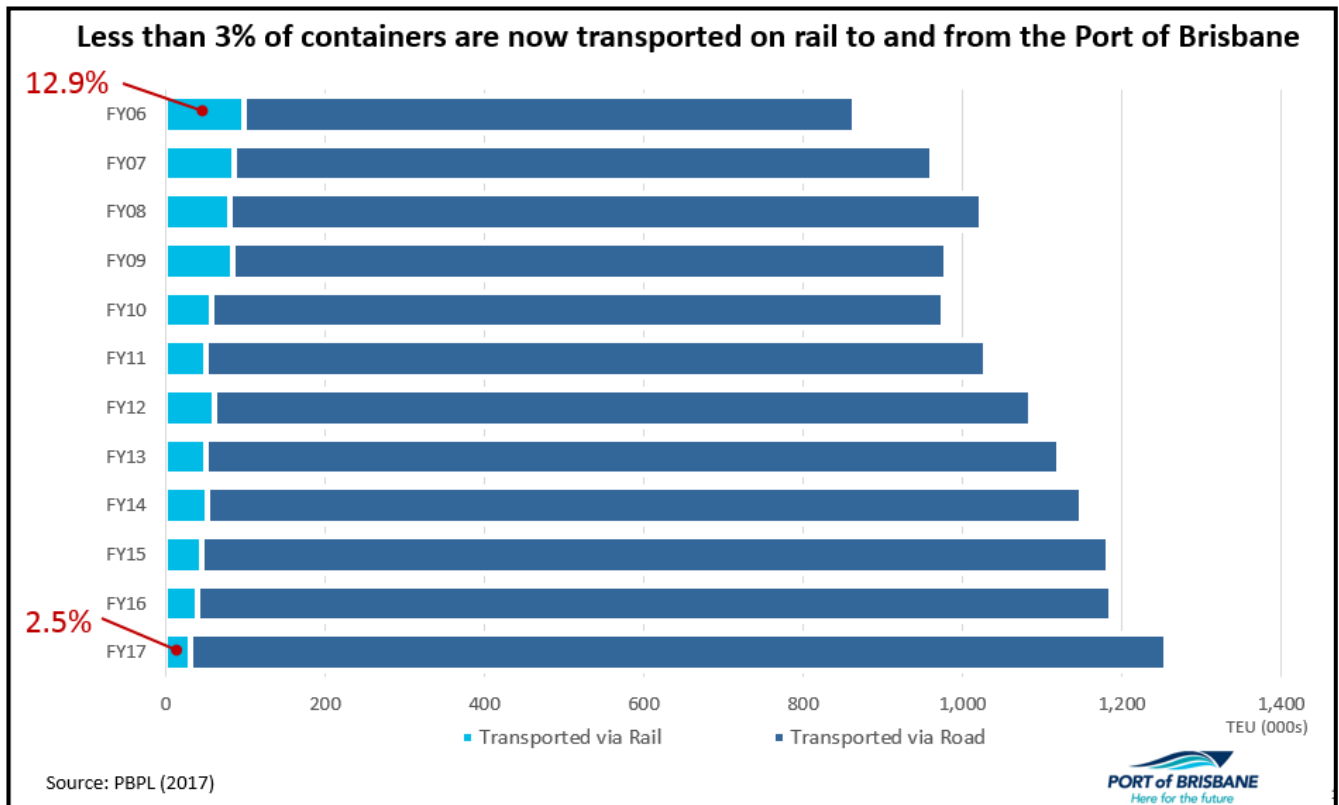


Figure 4: Continuing Low Rail Mode Share

Consequently, there are no export containers transported to the port by rail from the west eg, Toowoomba, Goondiwindi. The only containers transported by rail to the port come from North and Central Queensland on the North Coast Line.

The PBS A double cannot be blamed for this situation entirely, because there are issues specific to rail eg, lack of investment in rail infrastructure and lack of above rail competition, that have also contributed, and rail issues predate the introduction of the A double. Nevertheless there is little doubt that the advent of the A double has been a contributing factor. Cotton is a good example. Unlike containerised grain, which is mostly carried in 20 ft containers, the A double has no particular advantage over rail in terms of payload (number of bales) per 40 ft container, yet the advent of the A double, which can carry 2 x 40 ft containers, coincided with the demise of the last cotton train from Goondiwindi.

This situation is unsustainable in the long term, given the projected growth of trade through the port over the next 20 years and the growth of truck movements this will generate. This will be accompanied by increasing congestion in South East Queensland (SEQ), forecasts for which have been well articulated by BITRE.

Based on projections for container trade alone (see figure 13) considerable growth in truck movements to and from the port is expected over the next 20 – 25 years.

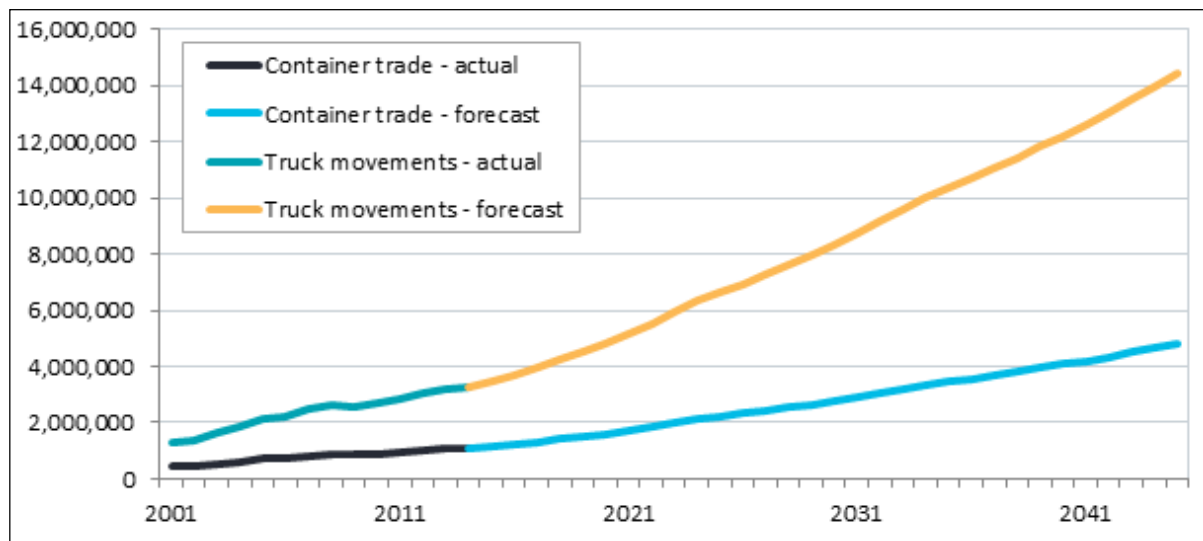


Figure 4: Projected Container Trade and Truck Movements at the Port of Brisbane

Notwithstanding improvements to regional road networks, changes in trucking technology and/or mode shifts to rail and coastal shipping, such growth is likely to result in very heavy road traffic congestion.

Up until now the impact on rail of HPVs appears not to be a consideration in assessing whether additional PBS access should be approved. This is especially relevant to line haul or semi line haul tasks over longer distances.

The DP notes that PBS Standards were originally developed to meet growing freight demands and were focussed on the medium and heavy long haul articulated vehicle segments. The experience at the port validates this, because all PBS vehicles which have been approved access to port roads are heavy vehicles ie, 42.5t semi-trailers or bigger.

The DP highlights the safety, productivity and environmental benefits of PBS vehicles. Safety-wise, this is a valid claim for super b doubles, as they have an impeccable safety record at the Port of Brisbane, albeit in a low speed environment. The situation regarding A doubles is not as clear: anecdotally their safety record on port roads is not apparently any better or worse than non PBS vehicles.

In terms of environmental benefits, the reduction in the number of trucks at the port has undoubtedly decreased emissions. Notwithstanding rail has a much better safety record than trucks and also produces far fewer emissions. Arguably this comparison should be included in any assessment of the safety and environmental benefits of PBS vehicles, particularly those competing more directly with rail.

Perhaps it is time for the PBS Scheme to refocus on light to medium vehicles, given the growth of this sector in response to the growth of ecommerce and on line shopping. Also more attention should be paid to the issues of access for HPVs to intermodal transport hubs, to facilitate greater use of rail and more efficient utilisation of trucks.

## **PBS Processes**

Despite the acknowledged benefits of PBS vehicles, the major issue with PBS vehicles and the PBS Scheme is the PBS process itself, in particular the time and costs involved in getting permits approved by NHVR and road managers for access to the network. This process is complex and time consuming, partly because all PBS vehicles require permits to access the road network.

PBPL's perspective on these issues has been informed by its experience as a road manager of port roads, feedback from operators at the quarterly meetings of the Port of Brisbane Landside Logistics Forum, and the issues raised at the Queensland Ministerial Freight Council Operational Industry Sub Committee (OISC).

The statistics provided in the DP concerning the times for issuing permits do not reflect the experience of operators at the port. They indicated at a workshop on 17 October 2017 that A double permits take much longer than the 24 days indicated in the DP. It was suggested that the figures in the DP were skewed by certain PBS vehicles eg, trucks and dogs, which are more numerous but do not experience the delays experienced by A double operators.

The major issue is the need for, and duration of, permits, which require each road manager to consent to access to its roads.

Apart from gazetting roads for PBS vehicles, or including them in a Notice, which negates the need for permits, one way of simplifying the process and reducing delays is to pre-approve access. This does not negate the need for permits, but does reduce the time required to get them.

In order to simplify the process and reduce its own workload, PBPL has pre-approved port roads for all PBS Level 1 and 2 vehicles. This is only part of the solution because PBS vehicles usually require access, not only to port roads, but also state controlled roads and local council roads, and therefore consent from their respective road managers.

As far as PBPL is aware no other roads have been pre-approved access for PBS vehicles in Queensland.

Other issues which impact on PBS processes are:

- The use of 'in principle approvals'. Their value is questionable because they can not to be relied upon to be converted to a permit (which has occurred). Also they tend to delay the permit process. Operators risk substantial losses by relying on them, and they should be discontinued. Transport and Main Roads (TMR) has indicated to the OISC they will be phased out.
- In Queensland some PBS vehicles (those seeking HML, or where the vehicle poses a risk to infrastructure) are required to have Intelligent Access Programme (IAP) and On Board Mass (OBM) capabilities eg, A doubles. This replicates existing GPS systems which many operators place in their vehicles, and is expensive: it costs between \$150 and \$190 per vehicle per month (for A Doubles), ignoring the capital cost of the equipment. These costs are usually passed on to customers, often exporters. Without any evidence of the value of IAP and OBM, it is difficult to determine if the benefits are worth the cost or if there is a cheaper alternative.
- Road managers currently have 28 days to consent to requests for access. This time should be reduced to say, 7 days, which would speed up the permit process.

- Most PBS permits are issued for 12 months, which is arguably too short, because the process to renew permits is similar to the initial application process. If permits for PBS vehicles continue to be required, more consideration should be given to increasing their duration. This issue has been raised continuously at OISC meetings and workshops.
- The issue which is often raised to explain permit delays for PBS vehicles is the requirement for bridge assessments. At the workshop on 17 October 2017 operators suggested that the data and restrictions on bridges be made publically available, similar to what VicRoads has done in Victoria, which would allow them to avoid seeking access to routes with bridges with restricted weight capacities. This would save them time and money.
- The standards set down for PBS vehicles seem to be in some cases quite arbitrary. For example an A double must be no longer than 30 metres long to get access to the level 2 network, irrespective of its performance. However if the vehicle is 30.5m long and otherwise meets all geometric and infrastructure performance standards, and the extra half metre provides substantial productivity gains, why should it be rejected? The PB suggests a review of the PBS framework and standards be conducted, with which PBPL concurs.

## Summary

The following is a summary of the key points/issues PBPL believes should be addressed to make the PBS Scheme more effective and relevant:

- The impact on rail should be considered in cases where PBS vehicles are directly competing with rail.
- A review of the PBS framework be undertaken.
- There is a need to reduce the complexity, time and effort required to get permits for PBS vehicles, as well as reducing the need for permits at all. Measures which could be taken to achieve this are:
  - Gazette roads or include them in a Notice.
  - Pre-approve roads for PBS access.
  - Increase the duration of permits where possible.
  - Discontinue 'in principle approvals'.
  - Publish bridge data.
  - Reduce the time allowed for road managers to consent to requests for access.
  - Provide evidence concerning the utility, costs and benefits of IAP and OBM.

Yours sincerely



Andrew Rankine

**Logistics Manager**