

The Role of High Productivity Freight Vehicles in Metropolitan Areas: The Australian Experience

Questions and Answers

1. How does industry react, if there can be changes in road management on such a micro level (local road management)?

R/ There is concern with local government for PBS vehicles on local roads. However, PBS vehicles are assigned to larger capacity roads and assessment tools have been developed to assist local government in selecting the appropriate roads for these vehicles. Also education on safety and infrastructure savings are part of the education process for local government. In Australia the winning over of local government helped get B-Trains (our B-Doubles) into much wider operations in the mid-1980s.

2. Looking at the slide on commodities are the figures based on tonnes or tonne-kms

R/ Detailed loading patterns for these vehicles was not available, so tonne-kms could not be calculated. The percentage split on commodities was based on the percentage of vehicles carrying each of the specific commodity types. We did get very general data on % forward loading and % backhaul loading by PBS truck type.

3. Germany is facing a situation where every state is acting according to local needs, requirements or political settings becomes critical especially after changes in political conditions. Australian picture of local road management looks even more disperse considering local decisions. Are there changes happening? or are they sticking to decisions made once?

R/ In 1990 Australia created a National Road Transport Commission which brought a degree of uniformity in road policy. This uniformity is critical for Provincial, State and local roads policy. However, States and local governments have their own engineers and there is still access debate for PBS vehicles. Two years ago it was also implemented a more operational entity called the National Heavy Vehicle Regulator. They have worked very closely with local governments to standardize access arrangements for PBS vehicles. This is working well but is not problem free. Suggestions from Question 1 are also useful.

4. How do we best get the 'message' out in the public that it is about 'more productivity and safety'. NOT just BIG TRUCKS?

R/ This education process is long and difficult. However, I would always start with limited PBS trials and publish the results. These trials would be for different commodities with a selection of PBS vehicles. Even trials to and from short distance railhead and to container ports and also doing line haul 'mid corridor connect' to rail hubs. Surely everyone would be interested in such trials.

5. Looking at accident rates, are advanced licenses (or additional years of experience) required to haul the HPV's? If so could that account for better safety performance?

R/ Yes this is true. By the time you can drive a PBS multi combination then you will need to have driven both heavy rigid vehicles or other single combinations for at least 4 to 5 years. Experience is also important. We have found generally, not for PBS vehicles, but across the board 66% of

major crashes happen were drivers have less than 19 years of experience. The good roads and the profitability of these vehicles is also adding to their safety outcomes.

6. Are these multi-unit, multi-axle units permitted in larger city downtown areas in traffic mix with heavy multi-modal activity?

R/ Perhaps around town areas on major urban arterial roads and major divided roads that service Ports, Railheads, and major Distribution Centers. Rarely these vehicles have general access. However, some rigid vehicles, not in combination, have general access as there are some seven axle single articulated combinations.

7. The accident rates presumably underestimate the benefits since the veh-kms will reduce with higher payloads so the accident rate per tonne-km will be even lower for the heavy vehicles?

R/ The Gross tonne-km rates for PBS vehicles will be lower as a loaded basket of PBS vehicles will be lighter than the equivalent loaded basket of conventional vehicles (e.g. one loaded Quad trailer combination is lighter than two B-Doubles). Also a basket of PBS vehicles with load X will operate with lower ESA kilometers than the basket of conventional vehicles also carrying load X. This is usually because the tare weight of the PBS vehicle is lighter than the sum of the conventional vehicles it replaces.

8. Have the bridge engineers been comfortably with the higher concentrated weight loads on bridges? Or have they revised design standards?

R/ Quite a lot of PBS vehicles are volumetric and at this stage in Australia PBS vehicles number less than 1% of the national heavy vehicle population. However, bridge engineers have voiced some concerns. Australia has not changed its bridge formula for a long time. It should, in light of new generations of vehicles. Also slower speeds can be adopted for some bridges but some bridge engineers suggest that damage will still occur unless speeds are about 5kph.

9. Major discussion is respect to railways - are big and huge trucks perform as competitors for freight trains?

R/ In Australia we also have the rail versus road debate. Road happily works with rail say if a new corridor hub is built. Rail is far more paranoid when new classes of vehicles are added to the national fleet. However, road versus rail is a matter for the customer to choose. 'Transit time elasticity' is very important for customers, not just price. Freight forwarders should offer road and rail combination corridor services for customers but invariably don't. It is usually a truck only or a rail only option.

As mentioned in Question 4 above a PBS trial inclusive of rail will at least get PBS vehicles into operation. Rail could hardly complain if they were part of a line haul corridor solution using road and rail for significant corridor sections performed by each mode, and also at the local level allowing PBS vehicles to deliver to rail hubs or pickups from a major rail hubs. This seems an obvious area for PBS trials where rail is also playing a part of the total customer solution.