COMMENTS ON THE PRODUCTIVITY COMMISSION DRAFT REPORT on TASMANIAN FREIGHT SUBSIDY ARRANGEMENTS

This paper presents comments on the Productivity Commission's draft report on Tasmanian Freight Subsidy Arrangements, and suggests some changes to the recommendations for the future operation of the Tasmanian Freight Equalisation Scheme.

Minimum payment regulation

In designing arrangements for the future operation of the Tasmanian Freight Equalisation Scheme, it might be worth considering the inclusion of "minimum payment" provisions in the regulations, similar to those recommended by the BTE in 1979 and the Inter-State Commission in 1985. In both cases, the recommended minimum payment provisions were adopted by the government and incorporated into the scheme.

For example, in its 1979 recalculation of southbound TFES rates, BTE recommended that, "After payment of TFES subsidy, shippers should pay at least $20 per tonne on consignments from Melbourne to Northern Tasmania and $29 per tonne on other routes." (BTE 1979, p.60.). Similar minimum payment provisions, albeit somewhat more detailed, were included in the ISC recommendations (ISC 1985, p.291.).

The minimum payment provision allowed the schedule of subsidy rates to be simplified, while at the same time ensuring that shippers met at least some of the cost of shipping their cargoes across Bass Strait, even if they benefited from much lower than average freight rates.

One of the reasons for adopting minimum payment provisions in the past was to ensure that the net cost of shipping cargo from Tasmania to points outside Victoria was not less than the cost of shipping similar consignments from Melbourne to the same place. This actually happened in the early years of the scheme, when it was found that the net cost of shipping cargoes from Tasmania to Perth was less than the land freight rate from Melbourne to Perth, even though the cargo was carried on Australian-flag ships. (Indeed, for high density commodities, the Tasmanian freight rate might have been the lower even before TFES subsidy.)

This reflects the fact that sea-transport becomes more competitive with land transport as route distance increases. Over long distances, sea is the cheaper mode, and the Melbourne-Perth route was getting close to the point of equality. It is noteworthy that sea was competitive with land transport on this route, even back in the 1970s, when coastal container freight was carried by high-cost, Australian-flag, vessels.

This might still be an issue to consider in setting future TFES regulations, because BTRE statistics show consignments sea-freight from Tasmania to West Australia totalled 394 thousand tonnes in 2003-04, probably equivalent to at least 20 thousand TEU. Since no

Australian-flag ships operate on this route, theses cargoes must have been carried on passing foreign flag vessels operating under CVPs or SVPs.

The Productivity Commission has unfortunately not published sea line-haul freight rates for any routes between Tasmania and the mainland but, in the past, foreign ships sailing from the east coast to Perth have often offered freight rates that were much lower than those charge by land transport over the same route, and indeed much lower than the rates that used be charged by Australian flag ships. The rates were low because they were calculated on a marginal cost basis.

If low rates are still offered by foreign ships on this route, the Productivity Commission should consider whether some form of minimum payment rule should be reintroduced. It seems possible that the minimum payment rules introduced by the ISC would have reduced at least some subsidy payments on WA cargoes, but the rules in force since the Nixon Review do not include any such safeguards,

If current sea services to W.A. are competitive with land freight rates, it might be found that there is no need for TFES assistance on some WA cargoes. Indeed, the current operations of the Freight Equalisation Scheme may be causing a distortion if they are giving shippers an incentive to consign cargoes to WA by direct sea service, rather than by rail via Melbourne.

The application of minimum payment provisions in the future would depend on other details of the scheme. As originally applied to southbound subsidy rates in 1979, the minimum payment rule applied to door-to-door freight rates, whereas the ISC minimums were designed for wharf-to-wharf rates. Indeed, the ISC scheme was designed to "force" claimants to provide details of their wharf-to-wharf freight rates. The adjustment factors, designed to convert door-to-door rates to a wharf-to-wharf basis, were set at a high level, so that it was in the claimant's interest to give details of the latter if possible.

Scope of the draft report

The Productivity Commission seems to have put a lot of effort into identifying the weaknesses of the Freight Equalisation Scheme and explaining why it should be terminated, but it has given less attention to the question of how the scheme should operate in the future if the government decides to retain it.

The Commission's criticisms of the scheme may be quite valid and correct, but the fact of the matter is that the subsidy has been in place for three decades with what appears to be strong support from both sides of politics, and it seems likely to remain in existence in some form for the foreseeable future.

Assuming the scheme will continue, the Commission should have investigated the possible concepts and methods for the future operation of its operation, and empirical

methods for the rates of subsidy. This should probably have included a review of the Nimmo and ISC methods, as well as the current scheme based on the Nixon Review. Last, there should have been more research into transport practices and freight rates across Bass Strait and on interstate mainland routes.

This is a matter of public interest. The Freight Equalisation Scheme is almost certain to remain a matter of public interest and debate for some time into the future, and the public is reliant on the Productivity Commission report to provide the basic information on which it can base its positions and opinions. Whatever the Commission recommends in its final report, if the Freight Equalisation Scheme remains in existence, Tasmanian shippers will continue to seek offsetting increases in subsidy rates whenever shipping freight rates go up, and the ensuing discussions will largely depend on the information and analysis published by Commission

The analysis of freight rates and transport practices in the draft report is not adequate, either for the Bass Strait trade or on mainland routes. Indeed, the Productivity Commission seems to have done less work in this area than any of the other organizations that have researched TFES matters, namely the Nimmo Commission, the ISC and the BTE.

In looking at Bass Strait freight rates, the Productivity Commission seems to have restricted itself mainly to a desktop analysis of the TFES database. As noted below in the section *Units of Measure*, the weakness of the TFES database is that it gives one aggregate measure of TFES shipments, counted as "TEUs", in which trailers are included with containers. The effect is almost certainly to increase the apparent average freight rate per container.

What the draft report does not show, is the freight rate paid by shippers for consigning cargoes by the most efficient means across Bass Strait, namely the freight rate per container for shipments of dry cargo, refrigerated commodities and livestock.

Nor does the draft report give details of exactly which cost items are counted in the " intermodal cost element", investigate its size, or demonstrate that similar costs are not faced by mainland shippers. Indeed, it is interesting, that most references to this item by claimants are rather vague.

The concept of the intermodal cost element may be based on a picture of transport some decades ago, when mainland shippers often loaded consignments direct into trucks by hand, while their Tasmanian counterparts were required to provide more packaging, and to load cargoes onto pallets. This is probably no longer the case, with palletisation of mainland consignments more common than it was in the past. Indeed, it is not uncommon for cargoes to be palletised for short distance movements within capital cities, for example, from a distribution centre to a supermarket.

In any case, it seems reasonable to assume mainland firms sending freight by rail or in LCL quantities would face the same "intermodal costs" –whatever they are - as Tasmanian shippers.

The examination of land transport prices on the mainland was also minimal, being limited to short references to published BTRE data. This index may be very good in showing the general movement trend in truck freight rates, but it is not sufficient for TFES purposes. (The BTRE figures seem to show that the difference between sea freight and land freight costs is trending down.)

Overall, there is a need for better data on Bass Strait and mainland freight rates for the types of cargo eligible for TFES subsidies. To meet this need, it would be necessary to carry out a collection of freight rate data from TFES claimants. This would enable the Productivity Commission to publish accurate estimates of freight rates paid while protecting confidentiality of claimants.

To be fair to the Productivity Commission, this dearth of data seems, at least partly, to reflect the opinion of the TFES claimants that freight rate information is commercially confidential, although this has the effect of withholding the figures from public comment. Nevertheless, the Freight Equalisation Scheme involves payment of tens of millions of public money, and the data should be available in full to the Productivity Commission, and also to the public in aggregate form.

The Productivity Commission has put forward a recommendation for adoption if the scheme is retained – namely a flat subsidy of $400 per TEU – but, as far as the reader can see, this figure was an arbitrary selection. The draft report examines the funding implications of the $400 per TEU, but does not explain the calculations or logic behind it.

As it stands, the draft report leaves TFES administrators " in the lurch", as did the Nimmo and Inter-State Commissions. In both cases, the respective Commissions published the general principles by which they calculated Tasmania's freight disadvantage, but not the empirical method they used to set subsidies. They then disappeared from the scene, leaving TFES administrators with the problem of how to recalculate subsidies in the future[1].

It is therefore suggested that the Productivity Commission publish further details of the concepts and methods by which it arrived at its recommendation of a TFES subsidy of $400 per TEU.

Publishing details of the concepts and methods would serve two purposes. First, it would give TFES stakeholders some idea of what to expect in future years and help to shape their expectations by indicating whether subsidy rates will be based on the Nimmo concept of freight equalisation (the difference between Tasmanian and mainland

[1] To be fair, the ISC probably thought it would have ongoing responsibility for TFES subsidy calculations, and did not expect to be abolished.

interstate freight rates), the ISC concept of the extra costs imposed by the Commonwealth, or something else. Many Tasmanian claimants seem to have the expectation (or hope) that TFES subsidies should be set so as to keep their net freight costs constant in nominal, terms and seek an increase in subsidy rates to offset every increase in freight costs. If this is not the case, the Productivity Commission should say so.

Second, publication of the Productivity Commission's concepts and methods would serve as a guide to the BTRE when it carries out the "confidential survey of shippers, shipping companies, freight forwarders" etc recommended by the Productivity Commission for 2012. (Although it is a pity that such a survey was not carried out for this report.) There would not be much point in the BTRE carrying out such a survey without advance guidance on exactly what data will be needed and how rates of subsidy should be set.

Units of measure

From an empirical point of view, the Productivity Commission's recommendation to implement a subsidy of $400 per TEU is a good, practical, idea, but there are some aspects that might need to be refined or clarified.

In particular, problems could arise from using the "TEU" as the unit of measure. The TEU was originally introduced as a statistical unit of measure in the international trade where the risk of error or ambiguity was low because nearly all of the trade comprised containers based on the original ISO specifications. Its use in TFES matters, however, could give rise to ambiguities, because the trade uses various types of international and domestic containers, and trailers of various lengths.

First, there is the question of how the recommended subsidy would be applied to trailers. Making the conversion on the basis of length or volume would give trailers a subsidy of about $800 per unit, a questionable result, given that trailers make less efficient use of space onboard ships. Counting each trailer as two TEUs would also mean that cargoes carried in trailers would get double the subsidy per tonne given to the same commodities in containers.

Second, it is likely that the Bass Strait trade uses several types of 6 metre containers with a range of weight and volume capacities, some based on the ISO standards and others of purely domestic design. If shipping lines charge different rates for these units, then it is likely that TFES claimants will seek higher subsidies to offset the higher costs. For example, a claimant seeking to maximise subsidy receipts might argue that, for TFES purposes, one TEU is actually a 6 metre container based on the original ISO specification (with cross-section measuring 8 foot by 8 foot), and that the newer units should actually be counted as 1.1 TEU, giving a 10 per cent increase in subsidy.

It is suggested that the Productivity Commission try to find out how wharf-to-wharf freight rates are calculated for 6 metre containers and, if necessary, clarify the application

of its recommendations. The simple approach would be to define all 6 metre boxes as one TEU for TFES purposes.

Third, there is the question of how the recommended new subsidy rates would be applied to LCL cargoes. In the past, shippers have based claims on the unit of measure that produced the greatest subsidy payment. As a generalisation, paying subsidies on the basis of weight is preferable because it is a less ambiguous unit of measure. Shippers making claims based on the volume of the cargo have sometimes counted unused, empty, space in the container, in addition to the volume of the cargo.

The potential problems outlined above could be circumvented by a slight modification to the Productivity Commission recommendations by paying a flat rate of subsidy ***per tonne***, rather than per TEU. It is suggested that the subsidy be calculated for the most efficient means of shipping cargoes across Bass Strait, that is by container. The same subsidy per tonne would then be paid to consignments in full container loads, trailers, and LCLs.

To set a TFES subsidy as a per tonne rate, the Productivity Commission would have to make some assumptions about the average load per container. Based on past experience, it would probably also be necessary to set a separate subsidy rate for designated high-density commodities, to avoid giving them too much subsidy. Special arrangements might also be necessary for livestock.

For example, if it is found that the average load per container is 20 tonnes for high density commodities and 12 tonnes for other cargoes, then a TFES subsidy of $400 per container would be approximately equivalent to $20 per tonne for high density cargoes and $33 per tonne for all other commodities. This would still give a subsidy of about $400 to each 6 metre container shipped across bass Strait, but the benefit to trailers would be lower, probably falling in the range of $400 to $600.

Price discrimination

The Productivity Commission may have overlooked one important factor in its analysis of freight rates by commodity presented in Table 3.4 of the draft report, namely *the type of cargo unit* in which consignments are shipped.

The Commission notes that the freight rates per TEU seem to vary according to commodity, and conjectures that this might be because shipping lines practise price discrimination, with higher rates being charged on the more valuable commodities.

Another, more likely, explanation, is that the average freight rates for certain commodities are higher than the overall average because a significant proportion of their tonnage is shipped in trailers rather than standard ISO containers. In the early years of the Scheme, trailers were often used for consignments of chilled or frozen food commodities and livestock.

Shipping lines charge higher freight rates on trailers because they do not make efficient use of ship space, with one trailer occupying the space of four standard 6.1m ISO containers but providing only a fraction of their cargo capacity. (In the recalculation of TFES subsidies carried out by BTE and ISC, the rates were therefore set so as to encourage the use of containers.)

Variations in freight rate according to the type of cargo unit might not be apparent from the TFES database if it measures all claims in terms of TEUs rather than the type of cargo unit actually used. This approach would disguise the fact that higher freight rates are charged on trailers.

Another contributing factor is that the commodities paying higher freight rates – fresh and frozen vegetables, fish and livestock – are all carried in specialised cargo units, that is, refrigerated trailers or containers. Transport operators often try to charge higher prices for these units because it is sometimes more difficult to get backloading cargo for them. All costs must be borne by the forward leg.

In some cases, transport operators face higher costs for carrying these commodities. With refrigerated containers, there is the cost of supplying electricity to the units in terminals and on-board ships, and additional labour costs incurred in connecting the units to electricity and, possibly, monitoring cargo temperatures while the unit is in transit. (Although monitoring might not be necessary on Bass Strait because it is a short service.)

Price discrimination is a practice that is probably widespread in international container shipping services but, until at least the mid 1980s, it was not adopted in the Bass Strait trade, at least not overtly. Although price discrimination can benefit shipping lines and the overall trade, opinion at that time was that it might be difficult to implement in the Bass Strait trade. Being a domestic trade, the number of commodities shipped is probably much greater than on an international route and, because much of the cargo is consigned via forwarders, it would be difficult for shipping lines to know exactly what is being shipped, its value, or what the market would bear in the way of freight rates.

There is another peculiarity of Tasmanian freight that would affect price discrimination in this trade. On most international routes, as a generalisation, the higher value commodities comprise manufactured goods with a high stowage factor. In the Tasmanian trade, however, some of the most valuable cargoes comprise high-density commodities, such as refined metal, commodities with a low stowage factor.

Road freight costs and freight density

The table in Box 3.1 of the draft report seems to show that the road transport costs of “heavy” goods exceed those of “light” goods.

If these terms are defined as high density and low-density commodities respectively, then it is not obvious that this is the case.

As a generalisation, the maximum payload of a truck depends on the stowage factor of the commodity being loaded. A truck can carry a maximum legal weight load of high-density commodities (which have a low stowage factor), but a less-then-maximum load of low-density commodities (with high stowage factors). If payload is plotted as a function of stowage factor, then it begins to fall above the point where the stowage factor increases above the point where a full legal weight payload occupies the maximum legal volume of the truck's cargo space.

If the cost of sending a truckload over any specific route is taken as a constant, this means that the freight rate per tonne for high-density cargoes is lower than for "light" commodities. Again, if the freight rate per tonne is plotted as a function of stowage factor, it is constant for deadweight cargoes up to the point at which the volume of the truck is fully occupied, after which the rate per tonne increases with increases in stowage factor.

This all sounds very complicated. What it all means is that the trucking costs for "light" goods would, if anything, be greater than those charged for "heavy' goods.

BTE 1979, *Tasmanian freight Equalisation Scheme Recommended rates of Assistance for Southbound Cargoes. Livestock. And Timber at 31 January 1979.* AGPS, Canberra.

BTRE 2006, *Australian Sea Freight 2003-2004, Information Paper 56,* Department of Transport and Regional Services, Canberra.

ISC 1985, *An Investigation of the Tasmanian Freight Equalisation Scheme. Vol. 1,* AGPS, Canberra.