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THE PUBLIC LOGISTICS TERMINAL

WILL IT BE THE NEXT PPP INSTRUMENTALITY AND CAN IT CHANGE URBAN LOGISTICS IN AUSTRALIA?

Over the last five years in Japan, Germany, Monaco, Switzerland and Greece a radical urban logistics strategy has been trialed. It is called the ‘The Public Logistics Terminal’ (PLT) concept and it is being put into actuality in these and other countries. The implementation of the concept has ranged from being staggeringly successful to less than impressive. Could this concept work in any one of Australia’s major cities?

WHAT IS A PUBLIC LOGISTICS TERMINAL?

It is a terminal with features of a third party transport mode, a depot and distribution centre placed in a planned area of a major city. It has the planning right to operate into the future without rezoning restrictions. The terminal may be multi-modal, near an airport, rail terminal or even a sea port. The terminal may be a breakdown point for interstate incoming traffic or urban consolidation for outgoing freight cargo. It has enormous possibilities as an inter-modal entity. The terminal may offer short term storage to incoming/outgoing freight, cold storage, and local transport services contracted through the terminal. Shuttle services within the terminal may be either sub-contracted to the terminal management for a fixed period or run as part of the terminal owned offerings.

The Public Logistics Terminal is designed in such a way that its operational intrusiveness is minimal. This, as with the Japanese case, may mean very significant earth works to visibly minimise the intrusiveness of the terminal to surrounding residential dwellings. In some cases a ‘green field’ site may be chosen for the terminal and the residential environment is built up around the PLT site. Freight intrusiveness within cities is certainly an issue that all governments face and it is one of the main reasons for the initial concept of the PLT.

Freight intrusiveness is an emerging issue in Australia as it is in the major cities of the world. Be it Ingleburn to Katoomba, or the Melbourne beachfront through to Docklands, residents are beginning to object to heavy freight routes past their front door. This has been the case for many years in Europe and far heavier restrictions are already implemented in many European cities. In Australia urban transport depots may suffer from the ‘residential squeeze syndrome.’ Take an example of a depot that has been in existence for 40 years. It may well face the ‘squeeze’ scenario as its trucks address the ‘shrinkage’ problem. Which means that the 38 tonne truck has to shrink as the access road drops the truck tonnage level to 23 tonnes. In time this drops to 11 tonnes GVM and then it finally becomes 5 tonnes. Eventually the third generation residents complain that a truck curfew be imposed after 7.30pm or perhaps 9.30pm. Such an evolution of local regulation has now necessitated that that depot needs eight times more movements into the depot in a restricted time window. Eventually the transport operator moves the depot. In the meantime local retail prices have probably jumped 40%.

At the last EC Urban Logistics Summit in Paris, (the BESTUFS conference) Japan reported on the breathtaking success of the implementation of the PLT concept at Seki, near Nagoya. A major difficulty is how to distribute the profits of the PLT amongst the users. The independent and non-aligned nature of the terminal ownership has been an attracted use from small and medium companies using transport and other logistic services. This may mean a consortium of independent owners or even a governmental operator may be one of the key elements of the success of a PLT.
WHO SHOULD OWN OR OPERATE THE TERMINAL?

Ownership of the PLT poses an interesting question. If it is a public terminal, then surely federal, state or local government should invest the capital? Well perhaps. A consortium of PPP players might work exceptionally well but competitors of the private company, who may have won the tender management rights of the terminal, may certainly be inclined to not use the terminal. This is one reason that the more successful terminals have not been large logistics operators. In Japan Government ownership has worked well. Even in Australia it could be argued that some government transport instrumentalities did not have to be privatised to become efficient. However, in the current logistics environment, which is exceedingly different to that of a generation ago, a new independent government carrier/operator could be created if a partial consortium of independent carriers could not be made work successfully. Thessalonika, in its new Port and Public ‘Freight Centre’ is examining a consortium provider to work with the incumbent management and local government instrumentalities. Leiden in Holland, however, which was largely government run did not work.

WHO SHOULD RUN THE TRANSPORT SERVICES?

One of the important indirect issues that arises from the operation of a PLT is the decision as to how to offer terminal transport.

The options are:

- the incumbent terminal operator offers a contract for services, shuttle and local,
- a terminal investment consortium partner operates freight services into and out of the terminal,
- a governmental carrier who can provide supplementary services for terminal customers,
- the customers organise their own transport operator to perform pickup and drop offs, whether they be incoming or outgoing.

The provision of shuttle services within the terminal complex may be owned by the terminal operator or by the terminal transport operator. In Europe intra-terminal shuttle services have even used electric vehicles to minimise noise and emissions. This diverges from the commonly seen option where older diesel vehicles are used for local shuttle and re-positioning work.

The advantage of a common carrier is that significant benefits arise from higher capacity consolidation, especially from allowing small and medium customers to purchase services from that common carrier. In Australia the concept of a common is not embraced although it is a method whereby high urban freight growth rates can be somewhat eased.

To expect a common carrier to service two major rival retailers, oil companies, or manufacturers producing the same product may be somewhat fanciful but to allow 200 small manufacturers such an option may well be a different position.

UNFORSEEN OPPORTUNITIES

The PLT offers a great opportunity for long distance operators to offload and have their equipment turned about quickly. In fact, the terminal, because of its fringe city location, may attract a separate schedule of freight rates which are somewhat more streamlined than the current ‘grey’ notion of a Melbourne to Sydney rate, which may in fact mean Hastings to Gosford with some consignors.

Secondly, many transport companies, especially operating and based in a large city would greatly benefit from access to more than one terminal or depot. What is the optimum number of major depots a large or medium transport operator should contemplate using? The answer depends on the operation, although the answer if often ‘more than one and less than many,’ (the TL rule.) This problem was well researched in the Netherlands in the early to mid nineties for phone grocery ordering. The target question for phone groceries for home delivery logistics is the optimum number of grocery despatch depots per million city residents. The answer was greater than one single depot. The PLT concept may in fact provide access to a secondary city terminal by transport operators and even manufacturers who need to avail themselves of such a secondary depot for despatch of product to specific interstate locations, by taking advantage of potentially cheap re-positioning rates to the PLT to then integrate with interstate services.
RESEARCH IN AUSTRALIA ON THE PUBLIC LOGISTIC TERMINAL CONCEPT

Somerton in outer Melbourne was the concept focus of a PLT concept research task by the then Freight & Logistics Group at the Department of Civil and Environmental Engineering, University of Melbourne two years ago. This model looks at interstate terminal use linking to urban rigid transport for 500 customers sites, which include manufacturers and retailers and even other transport operators. The common carrier to the public logistics terminal, who operates their own freight task, will be able to perform both inbound and outbound operations to the 500 sites. The site requirements will service common carrier services with large variation. In some cases, where contracts currently exist, no common carrier services are modelled. The uptake of common carrier services will be examined to look at the total impact of this carrier against a not common carrier option. This will impact on countable urban truck trips.

CONCLUSION

The real life experiments that have been conducted in Europe and Japan are compelling for the Public Logistic Terminal concept to be examined in Australia. There are many solutions that the concept offers for easing some problems of future urban logistic fluidity. However, the model for ownership, transport operations, terminal placement and the regulatory protection to long term operations of the terminal are all critical elements for the success of the PLT implementation. Australia may well have learned a lot in the last five years by just observing. Now the next step is to trial the PLT using Public Private Partnership models. The PLT model offers a new log approach to land transport infrastructure and urban logistics and may provide a solution to the congestion that now exists in the metropolitan areas of Australia's cities.

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