



11 September 2017

RE: JSCNCET Investigation into the Australian Antarctic Territory

Background

TasPorts is a Tasmanian Government owned company responsible for the management, operation and development of ten Tasmanian ports, including the port of Hobart.

In the port of Hobart, TasPorts provides crucial logistical and gateway infrastructure for the future success of Hobart as a Tasmanian Antarctic gateway. This infrastructure enables many Tasmanian economic benefits that include, but are not limited to, trade, tourism, defence capability, maritime safety, and support of maritime search and rescue.

It provides full port services for Antarctic research and supply vessels in Hobart. Vessel operators have access to pilotage, towage, fuel provisioning, stevedoring, secure expedition storage facilities, cold storage, quarantine and maintenance. Registered bond facilities are available onsite close to the quayside.

Tasmania is a logistically attractive Antarctic gateway due its proximity to the Eastern Antarctic region where the national programs of Australia, Belarus, China, France, India, Italy, Japan, Korea, New Zealand, Russia and USA have established, or are building, stations.

Vessels chartered by the Australian Antarctic Division (AAD) have used Hobart as their home port since the AAD relocated its headquarters from Melbourne to Kingston Tasmania in 1981. Similarly, the L' Institut Polaire Français Paul-Emile Victor (IPEV)'s vessel, *L'Astrolabe* has routinely sailed south from Hobart and laid up in the port during the off-season.

Other national Antarctic program ships, Antarctic cruise vessels and Southern Ocean fisheries patrols – more than 170 since 2007 –use Hobart's port facilities. Hobart also offers a network of service providers/contractors with experience and expertise in supporting Antarctic- related activities, including the supply of waterside workers, victuals, fuel, engineering services, as well as plant and machinery.

It has been estimated that port calls by Antarctic vessels yield \$1-1.5 million benefit to the State of Tasmania per visit. The increased use of the port of Hobart by Antarctic ships (as opposed to ports in New Zealand and South Africa) is likely to be contingent on infrastructure and supply chain improvements being made.

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Operational and lay-up berth availability

Antarctic vessels generally require working berths between October and April, and places to lay-up, preferably alongside a quay line, during the off-season (April to September).

TasPorts has undertaken seabed levelling works and quay line modifications to enable more flexible use of the working berths at Macquarie Point (Wharves 1-4). This work aims to balance the competing needs of cruise ships, cargo ships and Antarctic vessels, within the limitations imposed by the unpredictability of port calls for the latter since these are often linked to the need to navigate unpredictable sea ice conditions in transit to and from Antarctica.

In conjunction with AAD, TasPorts created a dedicated Antarctic facility housing AAD's Cargo and Biosecurity Centre at Macquarie Wharf 2. This facility is elaborated upon later in this paper. TasPorts is now investigating the potential development of an Antarctic logistics precinct at Macquarie Wharves 5 & 6 in order to accommodate AAD's new icebreaker vessel (which is currently due to be delivered in April 2020) and other potential international Antarctic and Research proponents. TasPorts is undertaking a study to provide a detailed understanding of the future Antarctic precinct requirements in Hobart and of how the precinct development should be implemented. This will include AAD's Antarctic logistics operations transitioning from their current location at Macquarie Wharf 2 to the new logistics precinct at Macquarie Point Wharves 5 & 6. The new icebreaker will then be able to undertake both cargo operations and off-season lay-up at the same berth.

Access to shore power

Growing community expectations and regulatory changes are likely to make it unacceptable in future for vessels to burn fossil fuels while berthed at Hobart Port for extended periods. Even though scrubber technology may be incorporated into new ship builds, access to shore power during layup periods is an important expectation for port users in terms of convenience and financial benefit.

Unlike those at Princes Wharves, the proposed lay-up facilities at Macquarie Point Wharves 5 and 6 do not currently have the level of shore power required, and the AAD is in discussion with TasPorts about options for its provision.

Facilities for cargo packing and consolidation

Under Australian law, Antarctica is classed as an 'overseas' destination. Consequently cargo moving to/from Antarctica is subject to import/export regulations. Furthermore, National Antarctic programs, as well as the tourism and other non-government activities authorised by Antarctic Treaty Parties, are obliged under the 1991 Madrid Protocol on Environmental Protection to the Antarctic Treaty to prevent non-native species introductions to the Antarctic. Under the Protocol, potential impacts of non-native species are viewed as high risk since they could impact in particular on the biodiversity and research values of the ice-free areas that comprise less than 1 per cent of the continent. They could also introduce disease to

Antarctica's wildlife. Equally, operators of vessels travelling to Macquarie Island are required to ensure that this World Heritage Area remains free of rodents following a recent Tasmanian and Australian Government seven-year, \$25 million investment to eradicate introduced mammals on the Island.

To meet these requirements, cargo must be packed in biosecure facilities and staged in areas where it will be protected from re-contamination by seeds, bird faeces etc. prior to loading. The Cargo and Biosecurity Centre (CBC) developed at Macquarie 2 Wharf by TasPorts and the AAD is a Quarantine Approved Premises that satisfies requirements for bonded storage. This facility has gone a long way towards addressing Antarctic non-native species introduction requirements but a significant problem still exists in staging cargo between CBC and vessel, when cargo is handed over by the AAD to the stevedores. This can sometimes result in it being left uncovered for significant periods of time on the wharf apron where the risk of re-contamination is enhanced. Furthermore, the enhanced cargo capacity of Australia's new icebreaker may require greater wharf space for cargo staging. TasPorts is including this requirement in its investigation into the development of an Antarctic logistics precinct at Macquarie Wharves 5 & 6.

Fuel supply to vessels

Antarctic vessels may load more than 1 million litres of bunkers and/or 1 million litres of station-required fuel each voyage. This need is mostly met by organising pilotage, tugs etc. for vessels to leave their quayside berths to relocate to the Self's Point fuel terminal and bunkering facility 5 km up river north of the Tasman Bridge. Once berthed at Self's Point, vessels are unable to load stores or continue cargo operations.

Vehicular traffic from Hobart to the eastern shore, airport etc. is stopped as ships moving to Self's Point pass under the Tasman Bridge. Vessel movements under the bridge also have to be organised to avoid peak hour traffic (0700-0915 and 1600-1830) when passage under the bridge is prohibited. Access to Self's Point is also delayed when tankers are at the berth. Furthermore, some Antarctic vessels, particularly those operated by the US, are too large to be permitted to pass under the bridge.

The requirement for vessels to visit Self's Point for refuelling has long been considered one of the major safety risks for Hobart port operations and TasPorts has explored various possible solutions to the problem. Extending a fuel line from Self's Point to Macquarie Point is prohibitively expensive: over \$50 million.

A less-costly solution would be acquisition of a fuel barge to take on fuel at Self's Point and then refuel vessels while they are berthed at Macquarie Point. The cost of such a barge would be in the order of \$6-8 million.

TasPorts has recently been investigating fuel barge options, and has found that a barge is an operationally viable option, but their projections of demand would not deliver a sufficient return to make this viable as a commercial investment for the organisation.

SUMMARY

In the absence of adequate port and refuelling capabilities in Hobart, efforts to attract other nations to stage their Antarctic activities out of Tasmania are unlikely to succeed. The continuing improvement of the Macquarie Point port facilities is therefore critically important.

There is the possibility that future demand from Antarctic and other vessels might increase beyond the optimum level that can be supported by the existing wharf facilities, and this situation will need to be addressed, or else Hobart's continuing role as a gateway for Antarctic shipping will be under threat.

The exciting work being undertaken at the port of Hobart will strengthen Tasmania's competitiveness as a preferred Antarctic Gateway.