

GOING FOR GOLD: DELIVERING EXCELLENT TRANSPORT FOR LONDON'S 2012 OLYMPIC GAMES

EVIDENCE SUBMITTED BY SEA AND WATER

Introduction

Sea and Water is the national body - sponsored by the UK water-freight industry and the Department for Transport- charged with encouraging freight off the roads and onto the environmentally friendly and sustainable modes of shortsea, coastal and inland shipping. Its diverse membership covers all aspects of the UK water-freight industry including ports, navigation authorities, carriers and the related services. This paper sets out the potential to use water to service the construction, operational and legacy phases of the Olympic 2012 site in east London and has been compiled by Sea and Water's Inland Shipping Committee and its Shortsea and Coastal Committee.

Background

The 2012 Olympic site is to be built in east London adjacent to a network of rivers known as the Bow Back Rivers which are directly connected via Bow Creek to the River Thames and the Port of London. This network provides a valuable opportunity to move spoil, building material, waste and other cargoes by water direct to and from the Olympic site. Moving freight by sustainable modes is in line with government policy and the London Plan and will assist London with its stated aim of delivering a "green" and sustainable Olympic Games.

The potential for water-freight

Up-to-date estimates predict that the following will need to be moved to and from the Olympic site during the initial build phase:

- Around 1 million cubic metres of spoil
- Between 3,000 and 6,000 tonnes of aggregate each day, possibly with more at peak times.

In addition, there will be a need to ship steel and other cargoes together with large, preformed structures (abnormal loads) to the site.

Once built, there will be continuing potential for water to move freight in and waste out. And when the games are over there will be further development

which will also require bulk commodities and other cargoes to be moved to and from the site.

It is widely accepted that water transport is ideally suited to move large volumes of low value cargoes in a sustainable way and we believe that water should be used as a major part of the transport solution with other modes providing additional capacity as required, particularly at peak times. We are concerned that the road network alone will not be able to handle the large quantities of material required to service the site.

The Olympic site and its waterways

The attached plan shows the Olympic site and its waterway network. The Olympic Village will be built adjacent to the Old River Lea and the Waterworks River – these rivers are connected by the Prescott Channel to Bow Creek and then to the River Thames. Since the majority of building material required will arrive in London by ship, these rivers provide the quickest and most economical route for onward movement by barge direct to the site. The water route is also the only mode which currently has spare capacity.

However, this route is tidal which restricts the times that the river is available for safe navigation and consequently the amount of material which could be moved by barge. To overcome this restriction, it is suggested that the Bow Back Rivers are impounded at the southern end of the Prescott Channel (see plan). This would maintain the water levels in the river and allow laden barges to be moved around the Olympic site on a 24 hour basis. It would also allow more material to be delivered to the site at peak times.

Impounding the river involves constructing a double lock which would cost between £10-13 million and take around 20 months to complete – which includes allowing for a truncated planning process.

If the river is not impounded, or while the lock is being built, smaller freight barges could still serve the site from terminals on the River Thames using Bow Locks, the River Lea and the existing waterways. This would be sufficient to allow a proportion of the material required to be supplied.

Our preferred solution would be to impound the river to allow larger barges to deliver cargo to the site at all times of the day and night. However, as an alternative solution, or as an option to be used whilst the lock is being constructed, smaller barges could still deliver significant quantities of material to the site using the Bow Locks and the tidal river.

Water transport is sustainable and available with ample capacity to serve the Olympic site as a major element of the overall transport solution. We believe that our two solutions are workable and practicable and either one would allow significant amounts of material to be moved to and from the Olympic site.

Environmental impact

Although there are some ecological and hydrological factors which need full investigation we believe that the effects of impounding the waterway would be minimal. The rich tidal habitats, including more than 99% of the mudflats and 100% of the reed beds are below the proposed site of the lock and would be unaffected. Similarly, there would be no adverse impact on flood conveyancing.

Naturally, there would be even less environmental impact if water transport was used without impounding.

Advantages of using the river to service the Olympic site

- Would ensure that sufficient quantities of material arrive directly on site and in good time. It is doubtful that exclusive use of road transport could cope with the likely demand over a build phase which will last a number of years.
- Could remove between 150 and 350 lorries from London's congested road network each day throughout the development phase.
- Would reduce the environmental impact of freight transport and help deliver a "green" Games.
- Initial, but admittedly broad, estimates suggest that delivery by barge could realistically be cheaper than by road.
- Although Impounding the Prescott Channel isn't absolutely necessary to use the water option, it would create a visually attractive waterway running through the heart of the Olympic site. Otherwise, at most states of the tide, the river would not be a pleasant feature.
- Impounding would also create a waterway capable of being used for freight and leisure purposes as the legacy phase of the Olympic Games develops over the next 10-15 years.
- The use of water-freight in such a high profile project would assist with the furtherance of the inland shipping industry throughout the UK.

What needs to be done?

The majority of industry actors do not need to be convinced of the relevance of water-freight in this context. But there is an urgent need for the key decision makers, including government, to coordinate effort and make this happen.

Two conditions are vital for water-transport to play its full part in this project. First, contracts must stipulate a requirement to move material by water and site plans must allow for delivery by water. Second, the necessary concrete batching facilities for construction must be located close to the waterways to minimise road haulage on site and the costs associated with that. Whilst the water mode is a viable option with or without impounding the Prescott Channel, if this is the favoured option then the process to impound must be progressed quickly.

Conclusion

Over 50% of all aggregates sold in London arrive by water and are unloaded at wharves on the River Thames. It makes commercial and environmental sense to ship this and other material by water direct to the Olympic site.

The Bow Back Rivers have been used to move freight for centuries but, sadly, nothing of note since the Second World War. With some coordinated planning and a little investment from government these rivers could, once again, move significant quantities of freight to deliver a sustainable transport solution to service the Olympic 2012 site and the development which will follow.