

CONSTRUCTION ENGINEERING MASTERS DISSERTATION ABSTRACT

Public-private collaboration to address 'last mile' connectivity to ports in the UK

As part of global trade and supply chains, most freight ports rely on the connections to their hinterland to provide adequate transport capacity for the volumes they handle. 95% of trade (by weight) with the UK is done via shipping, which highlights the importance of ports as connection points to the rest of the world and their major contribution to the British economy.

In the UK 'last mile' port connectivity road and rail problems have been recently identified by the British Government and the port trade associations, as a key issue together with lack of investment on freight transport. The UK is a unique case globally where the most part of cargo handled in and out of the country is done by privately owned ports.

Public-private collaboration is a mechanism that has been used globally to finance and deliver infrastructure projects, including road and rail connections to ports. However, there is no evidence of this model being used to address 'last mile' port connectivity in the UK. This study aims to explore what a public-private collaboration mechanism would look like and what are the constraints and opportunities to use it for this purpose.

The author takes a causal approach where a potential framework for public private collaboration is produced based on the existing literature and then validated via qualitative research with a combination of surveys and targeted interviews with the relevant stakeholders (Government, port authorities and port operators, local authorities, combined authorities and local enterprise partnerships (LEPs)).

The results show that a public-private collaboration mechanism would be feasible, subject to certain conditions. The business case needs to be produced to work from the public service perspective and for the port as private business, overcoming the differences in the approach to investment between private ports and government directly or via government-controlled organisations.

At the moment, there is no major port in the UK where the freight transfer capacity is limited by the 'last mile' bottleneck. As a result, there has been no serious commercial driver which has forced the port owners to work with their relevant Local Authorities to produce radical solutions addressing this problem. However, this picture is changing and the projected increase in UK international freight volumes over coming years suggests that bottlenecks between the ports and their immediate hinterlands will become a major factor limiting future growth. Exploring the potential for developing public-private solutions to this problem is therefore timely.

The conclusions of this study should contribute to the existing literature about public-private collaboration projects and help governments and private ports to explore a feasible way to unlock investment to solve private ports connectivity.

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