

South London Freight Consolidation Centre Feasibility Study

Executive Summary

Prepared by



on behalf of:



Version 3
December 2007

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Final Report

Prepared by



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Project Number	N/07/341
Version	3
Date	December 2007
File location	C:\Alan's Documents\SLFQP\ Consolidation
Last edited	31 st December 2007
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Executive Summary

This report presents the outcomes of a feasibility study that set out to develop an urban freight consolidation strategy for South London.

Freight consolidation involves grouping individual consignments or part-loads that are destined for the same locality at a consolidation centre so that a smaller number of full loads are transported to their destination.

By using this principle, individual companies have been successful in reducing distribution costs by consolidating consignments through regional or national distribution centres. However, this consolidation has tended to focus primarily on minimising the long distance 'trunking' mileage within an individual supply chain, and depending on the volume of goods destined for any one location, the content of a single full load that leaves the distribution centre may still be destined for a range of locations in neighbouring towns. Urban freight consolidation takes freight consolidation one step further by adding an additional stage into the supply chain so that part loads destined for a common location are consolidated leading to a lower number of consolidated loads delivered to the target area.

The main aims of the study were to:

- Assess the barriers to the development and efficient operation of one or more freight consolidation centres in South London, through consultation and analysis of the potential demand;
- Assess the benefits that will encourage businesses to sign up to receiving their goods through a consolidation centre;
- Develop an implementation pathway to setting up one or more trials to obtain practical operating experience of freight consolidation in South London.

Subsidiary aims were to:

- Establish the degree to which freight consolidation could support activities in sectors of the economy, other than retail;
- Assess the potential impact of future policy initiatives, such as the low emission zone and road charging on goods deliveries, on the case for consolidation centres.

The information used to achieve these objectives was obtained from a number of different sources, including:

- Previous research conducted by South London Freight Quality partnership into retail delivery operations in South London;
- A review of the operations of existing freight consolidation centres in the UK and elsewhere together with a wider review of relevant research and current developments elsewhere;
- Consultation with strategic stakeholders and local stakeholders regarding their attitudes to freight consolidation;
- Desk research into the potential size of the market for freight consolidation operations.

A review of existing consolidation centre operations, both in the UK and in continental Europe revealed significant potential to reduce goods vehicle trips and associated emissions from those vehicles which operate in urban areas delivering part loads to discrete locations. There is also strong evidence that intercepting vehicles that are fully loaded and destined for

a particular location, which is typical of the distribution practices of the largest businesses, brings no benefit and would merely result in additional costs. However, even for these businesses, where direct deliveries are made from specific suppliers that do not pass through in-house distribution centres then these may benefit from using urban consolidation centres.

Many of the existing consolidation centres have been established with the aid of some form of public sector financial support, and in some cases continue to receive a level of ongoing support. In such cases it is presumed that the supporting authority sees some value in return for the support through meeting local objectives such as reduced congestion, intrusion, emission or noise in the urban area. It has been stressed that this sort of support from public sector sources is extremely unlikely to be forthcoming in South London, so placing greater emphasis on the establishment of a commercial business case.

Consultation with strategic stakeholders suggests that there is significant interest in the concept of urban freight consolidation, as shown by a proliferation of studies on the subject in recent months. However, doubts remain regarding the business case for its implementation, both at the strategic and operational levels. One of the objectives of this study has been to investigate the business case. However, the information necessary to establish this is largely the property of commercial organisations and has not been widely forthcoming. In particular, further information is required to incorporate the potential savings that could result from changes in working practices at store level, which appear to be considered separately from distribution costs in many businesses.

Nevertheless, it has been established that the business case is likely to be dependent upon a range of specific factors that vary for each individual supply chain, so that a generic study approach would mask the key determinants for each business approached to participate. It seems likely that there is a particular sector of the retail market that could benefit from using freight consolidation centre in South London. This sector could be described as 'mid-tier' retailers with a large enough throughput to warrant a form of regional or national distribution structure, but with a throughput for individual stores that is not large enough to fill a single goods vehicle for an individual store or a particular town or tightly defined location.

Although the business case will be a key factor in businesses deciding to use an urban consolidation centre as part of their supply chains, another significant factor will focus around psychological and institutional barriers – in other words there will be an element of resistance to change which would need to be overcome gradually by working with early adopters to prove the concept, develop the business case, show that the consolidation centre can, at minimum replicate, if not better, existing relationships at the point of delivery and develop integrated systems that allow track and trace to current service levels.

The location and development of arrangements for urban freight consolidation centres will require case by case consideration to ensure that locations are logical in terms of intercepting goods on or close to their existing routes so offering optimum routing solutions. Where possible, consolidation centres should provide opportunities to link in with alternative modes to offer maximum possibility of full supply chain efficiency.

There are already many private sector delivery systems that could effectively deliver a freight consolidation centre service within their existing operations. This route appears to offer the bonus of minimising set-up costs and not further duplicating existing urban delivery movements. Hopefully this would result in a financial structure that is less demanding on

public support whilst efforts are made to demonstrate the benefits of using a freight consolidation centre and recruit participants. This approach is already being trialled to serve Norwich, and so we recommend that links with that trial and the lessons learned, both positive and negative, are continued to help inform the future development of freight consolidation in South London. Because of this we recommend that this feasibility study report is made available to private sector organisations that are likely to consider providing freight consolidation services either as part of their existing operations or through a small element of expansion.

Whilst TfL has a strategic role in supporting improvements in efficiency in the use of London's road network, it appears clear that the individual Boroughs, businesses and transport operators have a specific role to play in the implementation of specific freight consolidation schemes in South London. The most promising immediate prospects for freight consolidation in South London appear to be around the axis of Sutton, Croydon and Bromley, given the existence of a major entry route on the Sutton Croydon border, a significant market within the three Boroughs, and a concentration of existing distribution facilities with potential to incorporate freight consolidation services as part of their existing operations. In this context stores in locations where constraints on deliveries are most severe will probably benefit most from the use of urban freight consolidation centres. Therefore we recommend that this area becomes the focus for the future development of freight consolidation in South London.

Because we anticipate the uptake of urban freight consolidation services to require significant effort and initially be limited to a fairly tightly defined business profile it seems likely that anything more than a single consolidation point aimed at businesses in the defined target area of Sutton, Croydon and Bromley is likely to be over optimistic and uneconomic. Should such a project gain momentum with the benefit of private sector investment and drive then expansion and ultimately a wider geographic spread covered by other consolidation centres would remain as a possibility.

South London FQP will provide support to any operators that express an interest in following up the study recommendations by facilitating discussions with our Borough partners or whatever other action is appropriate within its remit. To help this approach we intend to facilitate a local conference and workshop on the topic early in 2008.

As future changes in the restrictions on the movement of goods vehicles within urban areas occur, their impact on freight distribution operational patterns in London should be monitored to establish if they make uptake of urban freight consolidation more likely through changes in the cost balance between current and alternative practices (i.e. urban freight consolidation). The degree to which restrictions could or should be introduced to improve efficiency will be a matter for ongoing debate for the public authorities in London in the context of the London Freight Plan.

Whilst working on this feasibility study it has become clear that interest in freight consolidation is inextricably linked to other ways that businesses and operators are investigating to avoid operating within the heavy congestion that typifies London's road network by day. This linkage particularly relates to night-time deliveries and efforts to exploit this type of synergy should be made wherever possible.

Finally, the ongoing national interest suggests that some form of nationally-led open access, transparent experiment to establish the full business case would be beneficial. A nationally-

led open book and open access (publicly funded) trial (not necessarily in South London) where the operational costs are entirely visible to all potentially interested parties so that the detailed financial aspects of operation can be clearly ascertained.

Acknowledgements

South London FQP wishes to acknowledge the financial contribution made by the following organisations which made this report possible:

Transport for London Freight Unit
Transport for London Travel Demand Unit
SELTRANS



We also acknowledge the important contributions made by:

Ian Wainwright, TfL
Alan Lucking, SELTRANS
Clive Woodhead, P.F. Whitehead Ltd
Ian Foster, DHL Exel Supply Chain
Paul Curtis, London Borough of Bromley
Clive Simmonds, London Borough of Croydon
Nick Gallop, Intermodality